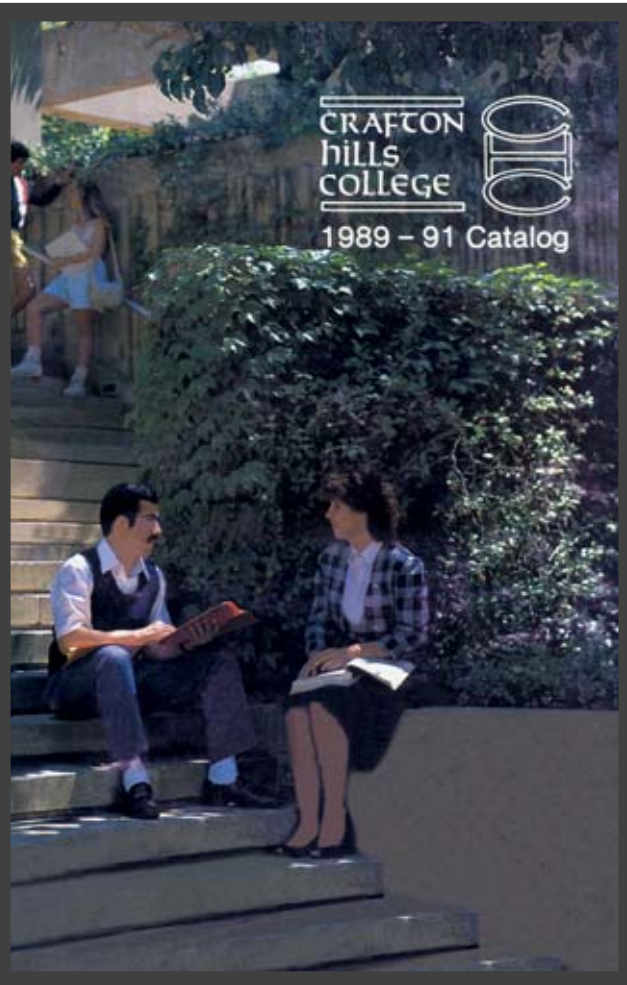




Crafton Hills College

1989-1991 Catalog

CollegeSource

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The purpose of this catalog is to provide information about Crafton Hills College, its philosophy, objectives, program and course descriptions. While every reasonable effort has been made to ensure its accuracy, the catalog should not be considered an irrevocable contract between the student and the college.

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CRAFTON HILLS COLLEGE

A Public Community College in California

Catalog 1989–91

Accredited by the Western Association of Schools and Colleges

**SAN BERNARDINO
COMMUNITY COLLEGE
DISTRICT**

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TABLE OF CONTENTS

Administration	2
Crafton Hills College Foundation	4
Section I GENERAL INFORMATION	7
About the College	7
Admissions Procedures	9
Student Services	15
Student Activities	17
Instructional Programs and Services	18
Policies and Regulations	21
Graduation Requirements	27
Section II COURSE DESCRIPTIONS	31
Section III TRANSFER AND ASSOCIATE DEGREE PROGRAMS	91
Section IV OCCUPATIONAL CERTIFICATE PROGRAMS	103
Section V TRANSFER INSTITUTIONS - GENERAL REQUIREMENTS	117
California State University and Colleges	117
University of California	119
Private Colleges and Universities	121
Faculty	123
Index	131

CRAFTON HILLS COLLEGE FOUNDATION

The Crafton Hills College Foundation is a tax-exempt organization to receive gifts of both real and personal property as a basis for extending educational opportunities to students via scholarships, grants, loans, and other types of assistance.

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SECTION I

GENERAL INFORMATION

ABOUT THE COLLEGE

Located on 513 acres in the Crafton Hills, the College is situated on a hilltop and is a quiet blend of functional buildings and attractive landscape. The atmosphere of the College is one of serenity - right for reflection, for growth for learning.

In addition to student-centered classes and an able counseling and career guidance staff, Crafton Hills College provides a variety of cultural, social, and recreational opportunities. Orchestra, choir, jazz groups, theatre, and a varied lecture series add diversity to the student's experience at Crafton Hills College. Student activities are available to those who are interested. The campus is proud of its six-hole golf course. An adiaagnostic wellness lab, exercise room, and a jogging trail attract fitness buffs. Students may participate in inter-collegiate athletics through San Bernardino Valley College while enrolled at Crafton Hills College.

Crafton Hills College is above all a place for learning and personal growth. People of all ages, interests and backgrounds take advantage of course offerings from early morning through late evening. The College has established a reputation for quality and a willingness to respond quickly and reasonably to community needs.

BACKGROUND

Crafton Hills College is one of two public community colleges serving the San Bernardino Community College District. The other is San Bernardino Valley College. Both are tax-supported, coeducational institutions governed by a locally elected Board of Trustees acting through a district Chancellor and the President of each college.

In the fall of 1972, classes were held for the first time at Crafton Hills College. The campus buildings and grounds provide an environment essential to support a comprehensive community college.

The area from which the College generally attracts students includes Bear Valley, Colton, Redlands, Rialto, Rim of the World, San Bernardino, and Yucaipa. However, students also come from all over California, out-of-state, and from foreign countries. And the students are as diverse as the areas they represent.

Some students come to the College directly from high school and pursue full-time transfer or occupational programs. Others study part time to prepare for return to work or to improve their chances for advancement. Some arrive with superior academic backgrounds, some in need of considerable remedial aid. The average age is twenty-seven. More than half the students are females. Some students stay to complete a program; others prepare for eventual transfer to four-year colleges and universities or to go to work.

Students choose Crafton Hills College because of its setting, its dedicated faculty, its interesting courses, and its variety of educational training opportunities.

EDUCATIONAL PHILOSOPHY

Crafton Hills College is dedicated to the worth and dignity of each individual and attempts to provide an environment for personal interaction and achievement. Crafton Hills College accepts its responsibility as an equal partner in the system of higher education in California.

The College strives to provide equal opportunities for an education commensurate with individual abilities, interests, goals, and needs. Our conviction reflects, encourages, and promotes the ideals of American life, free and critical thinking, qualitative accomplishment through the maintenance of high but fair standards, mutual exchange between community and college, cultivation of ethical values and attitudes toward our society. Responsible leadership seeks responsive expression through a strong faculty, integrating learning experiences and skills with insight and understanding of knowledge as a whole.

OBJECTIVES AND FUNCTIONS

The principal objective of Crafton Hills College is to facilitate students' learning so that they can attain realistic goals, commensurate with their needs and abilities. The primary means for achieving this goal is the educational program of the College; all other functions of the College are justified insofar as they support learning. While the result of some learning is intangible, most learning is indicated by a change in the attitude and behavior of the learner. Some changes represent new departures for the student; others are simply further refinements and developments of skills, viewpoints, and knowledge.

The College provides a variety of courses and programs designed to reach the institution's basic goal. As students pursue their programs of study, they should strive toward an understanding of their scientific and cultural heritage, the ability to define and solve problems on the basis of relevant facts and reasonable alternatives, the identification of a preferred pattern of living and a means of achieving it, occupational and professional proficiency, mental and physical health, the ability to interact effectively with other people intellectually, socially, and physically, the acceptance of responsibility for themselves, an awareness of the usefulness and desirability of further learning.

In pursuit of the goals stated above, the College offers course work and assistance to students in the following broad areas:

1. Lower division curricula for transfer to senior universities, applicable toward the baccalaureate degree;
2. Occupational programs for entry into specific vocations and further training for increased occupational effectiveness while pursuing a vocation;
3. General education which provides a fundamental learning foundation and stimulates intellectual curiosity;
4. Continuing education for citizens in the community who may desire further preparation in general education, or in a vocational field;
5. Remedial programs in fundamental skills for increased effectiveness in pursuing the basic objectives of the College;
6. Advising and counseling for educational, occupational, and personal planning and
7. Community services which encourage the residents of the community to use college resources for cultural and recreational activities.

ADMISSIONS PROCEDURES

ELIGIBILITY

Admission to Crafton Hills College is open to you if you meet any one of the following requirements:

1. Are eighteen years of age or older and can benefit from instruction offered by the College.
2. Are a high school graduate.
3. Have a G.E.D. (General Education Development) Certificate.
4. Have a California High School Proficiency Certificate.

HIGH SCHOOL STUDENTS

Crafton Hills College will admit special part-time high school students capable of profiting from the college instructional programs. To be eligible, a special part-time student must be in either grade 11 or 12, or a student who has completed the tenth grade and wants to attend a summer session, and whose admission is recommended by the high school principal (ECS 76000)

Special part-time high school students are expected to conform to both the high school and college calendars for attendance days. In assuming regular college student status, students will be expected to provide their own instructional supplies, texts, and transportation.

High school students will receive college credit for all classes completed. Grade reports are not mailed; they must be picked up in person at the College Records Office.

K - 10th GRADE STUDENTS

Students in grades K through 10 may enroll in college-level courses provided they meet the following conditions for admissions and there is available classroom space:

1. May be admitted and enrolled for advanced scholastic or vocational course work upon written certification of the principal of the school the student attends, or attended, and parental consent (ECS 48800).
2. The Special Student Attendance Form, the student transcript or cumulative grade record, and the College Application for Admission form are all required for EACH SEMESTER of attendance.

Students are expected to conform to the calendars of both the college and their school of attendance. Students will be expected to provide their own instructional supplies, texts, and transportation.

K-10th grade students will receive college credit for all classes completed. Grade reports are not mailed; they must be picked up in person at the College Records Office.

HOW TO APPLY

First-time applicants to Crafton Hills College should follow these steps:

1. Obtain, fill out, and turn in an official application form.
2. Make a registration/advisement appointment and an appointment to take the Computerized Placement Tests (CPI) at the Admissions and Records Office.
3. Submit official transcripts if you want credit for courses taken at another college or if you are applying for veterans' benefits.
4. Take placement examinations if appropriate. Placement examinations are required for entrance into the Paramedic Program and the Respiratory Care Program. An English placement examination is required if you want to take English 101. A placement examination is also required if you want to take a computer science course higher than level 101.

TRANSFER STUDENTS

Students who transfer from other accredited colleges and want credit for courses taken there must submit official transcripts to the Admissions and Records Office at Crafton Hills College. Transcripts will be evaluated by the College Registrar according to the scholastic standards policy of the San Bernardino Community College District.

CALIFORNIA RESIDENCY

A District residence, non-District residence, or non-residence classification shall be made for each student at the time an application for admission is accepted and whenever a student has not been in attendance for more than one semester. The residence determination date is that day immediately preceding the opening day instruction of the semester, or other session as set by the Board of Trustees. A student previously classified as a nonresident may be classified as of any residence determination date.

DETERMINATION OF RESIDENCE

- A. Adults - every person who is married, or who is 18 years of age or older, on the residence determination date, may determine his or her own residence.
- B. Minor - those persons under 18 years of age may establish residence in accordance with the following:
 - 1. Married minors may establish their own residence.
 - 2. The residence of the father during his life, and after his death the residence of the mother, while she remains unmarried, is the residence of the unmarried minor child
 - 3. If the parents are separated permanently, the residence of the minor is the residence of the parent with whom he/she lives.
 - 4. If both parents are deceased, and there is no court-appointed guardian, the minor may establish his/her own residence.
 - 5. A student who remains in the state after his/her parents, who had legal residence in California, have established elsewhere, shall be entitled to retain resident classification until he/she has attained the age of majority and has resided in the state the minimum time necessary to become a resident so long as continuous attendance is maintained at the institution.
 - 6. A student may combine his/her time as a resident minor with his/her time as a resident adult to establish the one year necessary for California resident classification.

EXCEPTIONS TO RESIDENCE DETERMINATION

- A. A student who is a member of the armed forces of the United States, on active duty stationed in this state, except a member of the armed forces assigned for educational purposes, shall be entitled to resident classification until he/she has resided in the state the minimum time necessary to become a resident.
- B. A student who is a natural or adopted child, stepchild or spouse and who is a dependent of a member of the armed forces of the United States stationed in this state on active duty, shall be entitled to resident classification until the student has resided in the state the minimum time necessary to become a resident, as long as continuous attendance is maintained at an institution. Should the member of the armed forces of the United States be thereafter transferred on military orders directly to a place outside the United States, where the member continues to serve in the armed forces of the United States, the student shall not lose the resident classification until he/she has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.
- C. A student who is an adult alien will be entitled to resident classification if lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States provided that he/she has had residence in the state for more than one year after such admission prior to the residence determination date for the term for which he or she proposed to attend an institution.
- D. A student who is a minor alien will be entitled to resident classification if both he/she and his/her parents have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the United States, provided that the parent has had residence in the state for more than one year after such admission, prior to the residence determination date for the term for which he or she proposes to attend an institution.

- E. A student who is an apprentice, as defined in Section 3077 of the Labor Code, will be entitled to resident classification for school attendance.
- F. A student holding a valid credential authorizing service in a public school and employed in a certificated full-time position by a community college district, will be given residence classification.
- G. A student who is a full-time employee of an educational institution of higher learning, or whose parent or spouse is a full-time employee, will be entitled to resident classification until he/she has resided in the state the minimum time necessary to become a resident.
- H. A student who (1) has not been an adult resident of California for more than one year and (2) is the dependent child of a California resident who has had residence in California for more than one year prior to the residence determination date, shall be entitled to resident classification. This exception shall continue until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution (ECS 68076)

FINANCIAL INDEPENDENCE

The California Legislature has passed an amendment to California Education Code Section 68044, effective July 1, 1981, which requires consideration of the factor of financial independence for students classified as nonresidents seeking reclassification as residents. This is in addition to the other existing requirements necessary for a residence classification.

In order to establish financial independence, a student seeking reclassification must meet the following criteria for the current and immediately preceding three calendar years:

1. That the student has not been claimed as an exemption for state and federal tax purposes by his or her nonresident parents;
2. That the student has not received more than \$800 from his or her nonresident parents; and
3. That the student has not lived in the home of his or her nonresident parents for more than six weeks in any given year.

Failure to satisfy all of the financial independence criteria for the entire period will not necessarily result in a denial of residence status if the durational requirement is met and a showing of intent is sufficiently strong. Financial independence is of greater significance for the current and immediately preceding calendar year. Failure to satisfy all three of the financial independence criteria for the current and immediately preceding calendar year will normally result in a determination of nonresidence. Only if such a student can demonstrate that there exists (1) no indication of continuing residence in another state, or (2) if the student is dependent on a California resident, could such a student be reclassified as a resident. Financial independence, or want of it, for the second and third calendar years immediately preceding the year in which reclassification is requested will be considered together with all other relevant factors in determining intent, with no special weight attached to the financial independence factor.

Students must petition in person at the Admissions Office for a change of classification from nonresident to resident status. Students should be prepared to provide appropriate written documentation in support of their request for reclassification status.

RESIDENCE CLASSIFICATION APPEAL

Any student, following a final decision on residence classification by the college, may make written appeal to the Admissions Office within fourteen calendar days.

COSTS

See class schedule for fees and other costs. If you are not a legal resident of California, you must pay the current non-resident tuition fees.

RESIDENCE DETERMINATION

Students shall be required to present evidence of physical presence in California, intent to make California their home for other than a temporary purpose, and, if the student was classified as a nonresident in the preceding term, financial independence. To accomplish this, the following individual information will be used to establish personal identification and intent to be a California resident at the time applications are accepted

1. California Driver's license, current and valid.
2. Voter registration receipt.
3. Evidence of submitting California income tax forms.
4. California bank statements (checking and/or savings).
5. Rent or lease receipts for the past six months.
6. Immigration and Naturalization Service "green card or Immigration and Naturalization I-94 in passport; check date of issuance.
7. High school or other college transcripts/grade forms.
8. Military service orders for active military personnel
9. Military dependents - complete the California Residence Classification for Active Military Personnel form; attached to the application.
10. Federal income tax forms with California as the home address.
11. Licensing from California for professional practice.
12. Active membership in service or social clubs.

NO ONE FACTOR IS DECISIVE

Intent to become a resident may be determined by complying with at least two of the conditions listed above. Physical presence within the state solely for educational purposes does not constitute establishing California residence, regardless of the length of that presence. The one-year residence period which a person must meet to be classified as a resident does not begin until the person is both present in California and has manifested clear intent to become a California resident

INTERNATIONAL STUDENTS

Crafton Hills College is approved by the Immigration and Naturalization Service to admit non-immigrant F-1 Visa international students. The number of such students permitted to enroll may be limited at the discretion of the President of the College.

In order to be considered for admission, all applicable materials must be submitted by the following deadlines:

July 1	for	Fall Semester
December 1	for	Spring Semester
April 15	for	Summer Session

Required materials:

1. A completed application form.
Note: An application form may be obtained by writing to
Admissions and Records Office
Crafton Hills College
11711 Sand Canyon Road
Yucaipa, California 92399
U.S.A.
2. TOEFL Test Score (not required of students from a country where the native language is English). A minimum score of 450 is required. Note: Copies of the TOEFL Bulletin of Information for Candidates are available at most American embassies. The application to take the TOEFL test must be received by the Educational Testing Service at least four weeks before the testing date.
3. Official transcripts of all previous secondary school and college work, including an English translation. A letter of reference from each past school, verifying character, background, and ability, must accompany the transcripts.
4. A non-refundable application fee of \$25.00 in the form of a check or money order made payable to Crafton Hills College.
5. Official documentation of birthdate. No international students under eighteen years of age will be admitted.
6. A recent photograph. Photocopies are not acceptable.
7. Verification of a recent chest X-ray or skin test which indicates a negative tuberculosis test
Note: X-ray or skin test must be done in the United States. The results must be on file with the college before the student may attend classes.
8. An affidavit of financial support.
9. When all requirements have been met, a letter of acceptance will be mailed. An 1-20 will be mailed upon receipt of the first semester's fees in American dollars in the form of a check. (Note: the check must clear the bank before the 1-20 is issued.)

The following rules apply to international students at Crafton Hills College:

1. You must be in the local area no later than August 15 for Fall Semester and January 15 for Spring Semester.
2. You are responsible for finding your own housing in nearby communities. The College does not have living facilities on campus.
3. You must report to the Student Services office at the College when you arrive in the area. The counseling and registration procedure will be explained at that time.
4. You must pay all required tuition fees at the time of registration.
5. You may attend Crafton Hills College for a maximum of five semesters. You must take twelve or more units each semester.

STUDENT SERVICES

A team of committed student services professionals will assist you to achieve your educational and training goals. Listed below are descriptions of services now available.

COUNSELING

The College offers you a complete counseling service. If you are having problems deciding on a career or planning your program of study, check with the counselors. In addition to being highly trained, they have access to a wide assortment of resources such as achievement, aptitude, and interest tests and professionally prepared career guidance materials. Any information you share with a counselor will be confidential.

ORIENTATION

Each semester, a required orientation course for new day students is offered. In it you will learn about all aspects of the college community and you will be guided and encouraged to accept responsibility for your academic and career decisions. Most importantly, you should leave the course with positive feelings about college life.

CAREER PLANNING AND JOB PLACEMENT

The Counseling and Career Center provides a career planning and job placement service. Through this service you can participate in career exploration and learn how to conduct a job search, including application preparation, resume' writing, and interviewing techniques. You will be assisted by trained personnel who are knowledgeable about current labor market information.

FINANCIAL AID

If you need financial aid, check with the Financial Aids Office. Many students receive help through direct grants, loans, and on-campus jobs.

To find out about your eligibility for financial aid, you must fill out a California Student Aid Application and submit it to the College Scholarship Service for evaluation. Financial aid personnel will help you with the form. Make an appointment to do this as soon as you have decided to attend Crafton Hills College.

Listed below are some sources of financial aid.

- Pell Grant
- Bureau of Indian Affairs Grant (BIA)
- College Opportunity Grant (COG)
- College Work Study (CWS)
- Extended Opportunity Program (EOP)
- California Government Student Loan (CGSL)
- National Direct Student Loans (NDSL)
- Supplemental Educational Opportunity Grant (SEOG)
- Board of Governors Grant (BOGG)

FEE WAIVERS

Since financial aid opportunities and regulations change periodically, you should check with the Financial Aids Office each semester, regardless of how successful you were in obtaining aid in the past

VETERANS' SERVICES

The College is fully approved to educate and train veterans under federal and state laws and enactments. To receive veterans' benefits, however, you must be certified by the College to the Veterans Administration. Compliance with regulations demands that certain materials be submitted to the Office of Admissions before you can be certified. They are:

1. Official transcripts from all high schools and colleges you have attended;
2. A completed application for admission;
3. A copy of your latest DD-214 for initial enrollment;
4. A Veterans Enrollment Form signed by a Crafton Hills College counselor indicating that you have received help in developing your career plans and program of study.

Please attend to these matters as soon as possible, as it often takes six to eight weeks for the Veterans Administration to process your request.

HOUSING

Crafton Hills College has no dormitories and therefore cannot assume responsibility for student residence. However, you can get information regarding housing accommodations through the Counseling and Career Center.

HEALTH SERVICES CENTER

Student Health Services contributes to the well being and educational aims of the students through health-oriented activities and services. A primary function is to assist the student to maintain health. The student learner who is at a higher level of health or wellness is better able to pursue his/her potential. Health is not limited to the absence of disease, but is a dynamic balance with physical, emotional and social health elements. Illnesses, injury and stress hinder the energy and attention that a student has to focus on learning, study and class attendance. Through supportive health services it is possible to assist and further the educational experience.

Services provided by college nurses include Health Intervention (emergency care, student insurance), Health Counseling Mental Health Counseling, Health Education and Health Promotional Activities.

STUDENT GRIEVANCE PROCEDURE

If you feel you have been treated unfairly, you have a right to complain. To ensure that your grievance receives a reasonable hearing, the College has established certain procedures. Consult with the Student Services Office, Room SS 306, for details.

DISABLED STUDENT SERVICES

If you are disabled and want help, get in touch with the people at the Disabled Student Services Center. They are committed to providing aid to those with physical, communication, or learning problems so that the disabled may be integrated into the mainstream of the College.

Support services are provided as appropriate. Examples are priority registration, special parking, tram service, notetakers, interpreters for the deaf, and tutors. In addition, specialized counseling, career and program guidance, and community liaison activities are available.

EXTENDED OPPORTUNITIES PROGRAMS AND SERVICES (EOPS)

The Extended Opportunity Program and Services is a state funded program designed to assist in the admissions process of historically disadvantaged, low-income students. The aim of the program is to provide the necessary encouragement, support, and assistance to develop or redirect the abilities of these students to the fullest, so they may be able to undertake and complete the challenges of a higher education.

Supportive services include tutoring, personal and academic counseling, and financial aid assistance to cover the cost of books and other college related expenditures. Crafton Hills College admits, without examination, the graduate of any high school and also any student who has not graduated from high school, but who is at least eighteen years of age and can benefit from instruction. Students whose annual family income is less than \$17,000 for a family of four are eligible for E.O.P.S.

To apply for the program, just write the E.O.P.S. office, Crafton Hills College, 11711 Sand Canyon Road, Yucaipa, California 92399, or telephone (714) 794-2161, extension 215.

STUDENT ACTIVITIES

ASSOCIATED STUDENT BODY

The Associated Student Body is recognized by the San Bernardino Community College District Board of Trustees and the administration of Crafton Hills College as the official student organization; membership is open to all students. Many of the student activities and special programs on campus are services provided through the sale of Associated Student Body cards. Consult with the Student Services Office, Room SS 306, for details.

GOVERNMENT

The governing body of the Associated Student Body is the Student Central Council. The Council supervises all student activities and budgets student funds. Officers are elected for one year terms.

ATHLETICS

Crafton Hills College does not offer a program of intercollegiate athletics. However, Crafton Hills College students may participate in the athletic program at San Bernardino Valley College just as if they were enrolled at San Bernardino Valley.

INSTRUCTIONAL PROGRAMS AND SERVICES

Crafton Hills College offers a wide variety of instructional programs and services to the community.

TRANSFER PROGRAMS

You can take a program of lower division studies at Crafton Hills College which will qualify you for junior standing at most four-year colleges and universities in the United States. Since the specific requirements of different institutions vary so widely, however, you should become familiar with the requirements of the particular program at the four-year college of your choice and plan your Crafton Hills program to meet those requirements. See Section III, Transfer and Associate Degree Programs, and Section V, Transfer Institutions - General Requirements, for more specific information.

OCCUPATIONAL PROGRAMS

Crafton Hills College offers you a variety of occupational programs. Some of these programs lead to associate degrees; others lead to certificates of achievement; and some offer a choice of degree or certificate, depending on the level of expertise attained. For listings and descriptions of specific programs, see Section III, Transfer and Associate Degree Programs, and Section IV, Occupational Certificate Programs.

GENERAL EDUCATION

Crafton Hills College faculty and administration believe that one important service the College can provide to citizens of the community is the opportunity to gain a general education. The rich variety of courses offered at Crafton Hills College provides this opportunity for you to obtain a broad educational background regardless of your special interests.

CONTINUING EDUCATION

The Continuing Education Program at Crafton Hills College offers classes during the evening hours and on Saturdays. Evening hours and Saturdays make it possible for people who cannot attend classes during the day to pursue their educational goals, whether to prepare for transfer to a four-year institution, prepare for a specific occupation, work towards an associate degree, or engage in studies which offer personal development and enrichment.

The Continuing Education Program is an integral part of the total College offering. Therefore, many College courses are offered day and evening. However, the curriculum of

the Continuing Education Program does not in each case duplicate that of the Day College. A different philosophy and different procedures are employed when appropriate to meet the special needs of continuing education students.

DEVELOPMENTAL EDUCATION

Crafton Hills College offers students the opportunity to upgrade their skills through programs in the Learning Resource Center and through special classes in English and mathematics. If you need to improve your skills in reading, writing, and/or arithmetic, you should, with the help of a counselor, plan a program of skills improvements.

COMMUNITY SERVICES

The Community Services Office provides special interest short courses, lecture series, tours abroad and seminars to members of the community.

INSTRUCTIONAL BROADCASTING SERVICES/TELEVISION

Crafton Hills College regularly participates in the San Bernardino Community College District Instructional Broadcasting Services (IBS). Each semester and summer session, selected courses are offered for credit via Instructional Television. Students enroll in these IBS courses at normal registration times or through special available mail-in procedures, attend on-campus orientation meetings, discussion sessions, and special lectures. They also participate in on-campus examinations, but the majority of the course activity is engaged in at home, in the office, or wherever students find it convenient to view the television lectures which are the key component of each of these courses. Students base their study in these courses on textbooks and specially prepared study guides to complement the TV lectures.

The District's public television station, KVCR-TV, Channel 24, is the primary broadcast outlet for these courses. However, many are also seen at special times on commercial and public broadcasting channels from Los Angeles. Anyone wanting additional information about upcoming courses or specific details about current offerings is invited to telephone the Office of Instructional Broadcasting Services at (714) 888-6511 or (714) 825-3104, Extension 1131.

CULTURAL ACTIVITIES

The music and theatre departments at Crafton Hills College produce various cultural events throughout the year in addition to those provided by Community Services. There are programs of choral music, programs of instrumental music, and a series of plays, all presented in the Performing Arts Center of Crafton Hills College and all open to the public. In the summer, the Crafton Hills College theatre and music departments collaborate with the Friends of Prospect Park to produce The Redlands Theatre Festival, a series of plays in the spectacular Prospect Park open air theatre in Redlands.

WORK EXPERIENCE EDUCATION

Any student attending Crafton Hills College who is employed is eligible for Work Experience credit. The basic requirement is that you work 10 hours per week if paid or 8

hours per week if a volunteer and take at least 7 units a semester, including Work Experience.

The concept of issuing college credit for work experience is based on the premise that you will find your work an educational experience with well defined objectives. To be effective, it must be approached cooperatively and with enthusiasm by the student, his/her employer, and the Work Experience coordinator.

There are two classifications of work experience education at Crafton Hills College. They are Occupational Work Experience and General Work Experience. In Occupational Work Experience you earn up to four units per semester for a maximum of sixteen units. You must have taken or be enrolled in one occupational course related to your work. In General Work Experience you may earn up to three units a semester, with a maximum of six, and need not be enrolled in a related course.

To participate, during the first week of the semester you must do two things. You must meet with the Work Experience coordinator and already have, or find a job. (While the coordinator will assist you, locating a job is primarily your responsibility.)

Work experience education is now offered in most occupational areas. Where available, course descriptions may be found after 098 and 099 course numbers.

SUPPORT SERVICES

In order to help you achieve a satisfying educational experience, Crafton Hills College provides a number of support services.

The Library: Located at the center of the campus, the Library supports the teaching program of the college with more than 51,000 volumes plus 6,900 bound periodicals.

Library cards are free to Crafton Hills College students and to residents of the community. Inland Empire Academic Libraries Cooperative Library Cards are also available free to Crafton Hills College students who may need to use the resources of other academic libraries in the area; these cards allow students easy access to twenty other libraries throughout the Southland.

The Learning Resource Center: Various types of services are provided for students and faculty members through the Learning Resource Center, located on the second floor of the Library building. Classes in reading and study skills are held in this facility; tutorial services are provided here; and the language laboratory is housed in the Center. In addition, the Learning Resource Center houses, maintains, and distributes audiovisual equipment, copies audio tapes for students and faculty, and provides tapes of TV courses for students to watch.

Students with special needs are encouraged to meet with the Director of the Learning Resource Center to discuss the desirability of setting up a remedial program.

The Bookstore: Textbooks and supplies are sold at the College Bookstore. For most of the academic year the Bookstore is open 7:45 am.-6:30 pm. Monday-Thursday and 7:45 am-4:00 p.m. Friday. However, at the beginning of each academic term the Bookstore also maintains additional hours for a short period of time. Check with the Switchboard for specific hours.

POLICIES AND REGULATIONS

Any community that runs smoothly establishes and enforces policies and regulations to guide the behavior of its members. The College has decided that the rules detailed below will enhance the opportunity of pursuing an educational program satisfactory to all or most faculty and students.

OPEN CLASSES

If you have been officially admitted to Crafton Hills College, you are eligible to enroll in any class for which you meet either the prerequisites or corequisites or both. Of course, only so many persons can fit into classrooms and laboratories, so class sizes are limited and enrollment is generally on a first come, first served basis.

NONDISCRIMINATION

Crafton Hills College is committed to the achievement of equal educational opportunity. Decisions relating to your admission to the College, to student financing and student employment, or to participation in any college function will not be influenced by your race, religion, sex, age, disability, or national origin. If you believe that you have been the object of illegal discrimination, you may file a complaint for the purpose of correcting the improper treatment which you allege. The designated coordinator at Crafton Hills College for compliance with Section 504 of the Rehabilitation Act of 1973 for the Handicapped, as amended, and for compliance with Title D(prohibiting sex descrimination in schools and colleges, is the Assistant Dean for Student Services in Room SS-306, ext. 213. Refer to Student Grievance Procedures.

CREDIT FOR MILITARY EXPERIENCE

If you have served on active duty with the Armed Forces for at least one year, you are eligible to receive up to six units of CR grades. Additional credit for military schools and college-level examinations may be earned in accordance with the recommendations of the American Council on Education Inquire at the Counseling Center for full details.

UNITS OF CREDIT

Work at Crafton Hills College is measured in units of credit. In general to earn one unit of credit you attend a lecture class that meets one hour a week; a laboratory class that meets two or three hours a week; or clinic, field, or work experience for five hours a week

An exception to this rule is credit by examination. You earn credit by examination by demonstrating in a test situation a mastery of a particular area.

UNIT LIMITATIONS

To be considered a full-time student, you must carry a minimum of twelve (12) units.

If you are a regular full-time student, you are restricted to a maximum of eighteen (18) units each semester.

If you attend evenings only, you are restricted to nine (9) units each semester.

During the summer session, you are restricted to one (1) unit for each week of instruction. For example, in the six-week session, you may carry up to six units.

If you wish an overload that is, units in excess of the maximum, you must receive approval from a college counselor prior to registering for classes. Contact the Counseling Center for exceptions to this policy.

STUDENT CLASSIFICATION

You are classified according to the number of units successfully completed. If you have completed fewer than thirty units, you are considered a freshman; thirty or more, a sophomore. If you have completed more than sixty units, you are classified as a special student.

CREDIT/NO CREDIT

If you wish to be graded in any class on a Credit/No Credit basis, you must so indicate by the end of the 5th week or in the case of Summer Session or short-term course(s), no later than the end of the first 30% of the term. If you have received a "CR" grade for a course, you may, upon showing adequate justification and need for a change and upon the completion of an appropriate examination, have the "CR" grade changed to a letter grade by the instructor of record. If the instructor of record is no longer available, the change of grade may be made by the appropriate Dean.

You may take up to fifteen (15) units of Credit ("CR") courses to apply toward graduation requirements.

No course in your major or required by your major may be taken for Credit ("CR"); that is, subjects in your major must be taken for a letter grade basis. However, if you have completed courses for Credit ("CR") and subsequently declared a major in that course of study, the rule may be waived.

Units from Credit/No Credit courses will apply toward graduation, but are not included in the grade point average.

INCOMPLETES

You must make up an "I" (Incomplete) no later than one year following the end of the academic term in which it was assigned. The condition for removal of the "I" and the grade to be assigned in lieu of its removal shall be stated by the instructor in a written record. The procedure for handling the notification of an Incomplete is as follows:

The Records Office will provide the instructor a form in triplicate. On this form the instructor will state what the student must do to complete the course and what grade the student will receive if left incomplete. The Records Office will notify the student of the Incomplete and keep a copy of the form on file. The instructor will keep a copy of the form on file.

WITHDRAWAL FROM CLASSES OR FROM THE COLLEGE

If you withdraw prior to the end of the 3rd week (or 30% of a term, whichever is sooner), no entry will be made on your record.

If you withdraw between the first and second census periods, no record need be made if there are extenuating circumstances. If there are no extenuating circumstances, the non-evaluative "W" is recorded on your transcript to indicate "Withdrawal"

If you withdraw or are dropped from a course before the end of the 14th week of a semester or before 75% of a Summer Session or short-term class has been completed, you will receive no evaluative grade. The letter "W" will be recorded on your transcript, indicating "Withdrawal."

This symbol carries no evaluation of your work, but is a clerical notation that you were enrolled in the course and withdrew or dropped without grade or unit credit. However, "Ws" are used in the probation and dismissal procedures.

After the 14th week: If you continue any course for which you are enrolled after the 14th week of the semester or after 75% of a Summer Session or short-term class has been completed, you will receive a grade in the class from your instructor, other than a "W," according to the grading system of the college.

CREDIT BY EXAMINATION

Currently enrolled students submitting evidence of extensive background and/or experience in a subject area and feeling that their knowledge of the area is equivalent to the course content of a currently approved course may make application for course credit by examination. To apply, you must have completed twelve (12) or more units at the College where the application is made or be a permanent employee of the San Bernardino Community College District and must submit to the Instruction Office a fully completed and signed application for Credit by Examination for each course requested. Approval of a full-time instructor is required. Applications may be secured in the Admissions and Records Office.

Credit by examination for foreign language courses will be granted only to students who take the next higher language course while in residence, and only with the approval of the appropriate foreign language instructor.

Students over 18 years of age will be charged a fee in accordance with Board Policy 6050.

Upon approval of the application by the Dean of Instruction and payment of any necessary fees, approval will be forwarded to appropriate instructors to administer examinations and submit grades. Grades will be consistent with the grading system established by the College and will be submitted to the Admissions and Records Office by the end of the semester or summer session in which the examination is completed.

The student's academic record shall be clearly annotated to reflect that credit was earned by examination.

CONCURRENT ENROLLMENT

If you are a Crafton Hills College student, you may take courses at San Bernardino Valley College during the same semester.

EXAMINATIONS

You are expected to take all examinations given in the courses in which you are enrolled and you may not be excused from the required examinations of any course, including final examinations. If you are deliberately absent from an examination, you forfeit the right to make up the examination unless you have prior permission from the instructor.

CLASS ATTENDANCE

You are expected to attend classes regularly and on time. If you are ill or must miss a particular class, you should notify the instructor as soon as possible, but in no case later than the first day you return to school. An instructor may drop you from a course for unexcused absences. Reinstatement is up to that instructor.

GRADE CHANGES

Instructors are the only ones who can assign grades, and the grades given are final except in cases where mistakes, fraud, bad faith, or incompetency can be proved.

GRADING SYSTEM

The evaluative and non-evaluative grading symbols and their meanings are as follows:

Evaluative		Grade	Points
Symbols	Definition		
A	Excellent	4	
B	Good	3	
C	Satisfactory	2	
D	Passing. less than satisfactory	1	
F	Failing	0	
CR	Credit (at least satisfactory)	0	
NC	No Credit (less than satisfactory)	0	
Non-Evaluative		Comments	
Symbols	Definition		
I	Incomplete	Instructor documentation required; student cannot initiate	
W	Withdrawal	Student or instructor drop	
IP	In Progress	Issued for classes which continue across semester and/or inter-sessions dates.	
RD	Report Delayed	Can only be assigned by the Registrar's Office	

STANDARDS FOR PROBATION

A student shall be placed on either Academic Probation or Progress Probation when

1. Academic Probation
- The student's cumulative grade point average in twelve or more units falls below 2.0 in all units attempted which were graded on the basis of the college grading scale.

2. Progress Probation

The student has enrolled in at least twelve units and has received non-evaluative symbols of "W," "I" and "NC" in 50% or more of the units for which he/she was enrolled.

3. The student has been disqualified from another collegiate institution.

REMOVAL FROM PROBATIONARY STATUS

1. A student on probation may appeal this status by filing a request for special consideration with the appropriate scholastic standards committee.
2. A student shall remain on Academic Probation until he/she earns a cumulative grade point average of 2.0 or higher.
3. A student shall remain on Progress Probation until he/she receives less than 50% of "NCs," "Is" and "Ws" in all units in which he/she has been enrolled.

COUNSELING REQUIREMENT

When a student earns a grade point average of less than 1.75 while on either academic or progress probation, he/she will not be allowed to register until after having met with a counselor for class scheduling approval

STANDARDS FOR DISMISSAL

For the purposes of this section, semesters shall be considered consecutive on the basis of the student's enrollment (i.e., the fall semester of 1988-89 followed by the fall semester 1989-90 shall be considered consecutive if the student was not enrolled in the spring semester of 1988-89.)

A student on Academic and/or Progress Probation shall be dismissed for one semester when one or more of the following conditions exists:

1. The student has earned a cumulative grade point average of less than 1.75 in all units attempted, based on the grading scale, in each of three consecutive semesters;
2. The student has received non-evaluative symbols of "W," "I," or "NC" in 50% or more of the units for which he/she was enrolled in each of three consecutive semesters; or
3. The student receives a combination of the evaluative and/or non-evaluative patterns listed in 1 and 2 in each of three consecutive semesters.

RE-ADMISSION

1. A disqualified student may appeal his/her dismissal by filing a petition for special consideration with the appropriate scholastic standards committee.
2. A student may be reinstated after one semester from the date of disqualification
3. A student enrolled following dismissal shall be on probationary status and subject to dismissal.
4. If the scholastic achievement of a student readmitted after disqualification continues at a probationary level the student may be disqualified for one year.

REPEATING COURSES

Students are allowed to repeat a course where either standard or substandard academic or skills training performance has been recorded on the student's permanent record pursuant to the current grading system, Board Policy 6015.

Courses in which a substandard grade was issued (D, F, NC) may be repeated one time. The units and the grade for the course taken the second time will only be used to compute the GPA and to count for degree or certificate requirements.

Courses in which an "Incomplete" ("I") has been recorded may not be considered for repetition until such time as an evaluative symbol (letter grade) has been issued.

Courses in which a standard grade was issued (C, B, A, CR) may be repeated one time only upon petition establishing circumstances that will justify such repetition. Grades issued for repeating a course under this petition process will not be counted in the computation of the GPA.

Grades, once entered on a student's academic record, remain permanent unless changed by the instructor of record or pursuant to Education Code Section 76224. Student permanent records shall reflect all work attempted so that the student's transcript is a true and complete academic record pursuant to Administrative Code, Title 5, Section 55761. Prior course repetition actions by other accredited colleges may be honored when a student's permanent record is reviewed for degree or certificate requirements.

ACADEMIC RENEWAL WITHOUT COURSE REPETITION

If you have a record of poor academic performance during one or two semesters, you may petition to eliminate certain units from the computation of your total grade point average. Up to thirty units may be removed from the computation. The units involved must have been completed at least two semesters prior to the semester in which you submit the petition. In addition, if you submit such a petition, you must have since completed twenty-four units of college work with a grade point average of 2.5 or better.

A petition for academic renewal will be granted once only. When the petition is granted, the units involved may not be reinstated.

CODE OF CONDUCT

Students enrolling in Crafton Hills College have a right to expect that the faculty, administrators, and other students will maintain an environment in which there is freedom to learn. This requires that appropriate conditions be maintained in the classroom and on the campus. All Crafton Hills College students are expected to respect and obey civil and criminal law and to conduct themselves in accordance with the rules of Crafton Hills College, the policies of the San Bernardino Community College District, and the California Education Code. Copies of the Education Code and District Policy are available in the Library. Crafton Hills College regulations are in the Student Handbook available in the Student Affairs Office.

Violations of regulations, policies, or laws are punishable by probation, suspension, or expulsion from the College.

FAMILY EDUCATIONAL RIGHTS & PRIVACY ACT

Federal and state law does not permit access to or release of any information contained in student educational records to any unauthorized party or agency without proper court orders or written consent of the student.

Crafton Hills College maintains a student record for everyone admitted; it contains the request for admission, transcripts of college work attempted, semester class enrollment data, placement test data, requests for financial aid while attending college, student health information, and VA authorization benefit forms. The College does not maintain a public directory. Crafton Hills College students have the right to review their educational records.

Students may challenge the content of records by filing the proper petition.

GRADUATION REQUIREMENTS

ASSOCIATE IN ARTS DEGREE:

Requirements for the Associate of Arts Degree:

1. Completion of a minimum of 60 semester units acceptable college work with at least a "C" or better grade point average.
NOTE: Effective 7/88, some courses have been designated as "non-degree applicable"; however, units earned in these courses DO COUNT as student workload units. The list of courses is available in the Admissions Office or the Counseling/Career Center.
2. Completion of eighteen (18) semester units (a major) in a specific transfer or occupational discipline, or related disciplines, as identified by the college catalog. Students who have not yet selected a major field can graduate as a Liberal Studies major. Prospective transfer students should complete the general education requirements in their four-year program.
3. Completion of twelve (12) semester units in residence at Crafton Hills College.
4. Demonstrated reading capability at the 30th percentile, or higher, on the Nelson-Denny test, or completion of a reading course with a grade of "C" or higher.
NOTE: Students may contact the Learning Resource Center (LR-207) for an appointment to take the Nelson-Denny test at any time during the semester. Students are encouraged to obtain the scores from this test as early as possible in their college careers.
5. Mathematics proficiency as demonstrated by achieving a passing score on the mathematics Proficiency exam or completion of Math 090 or any higher level math course with a grade of "C" or better.
6. Writing competency as demonstrated by a grade of "C" or better in English 015, 101 or 144.
NOTE: Students with scores of 3, 4, or 5 on the Advanced Placement English Examination, or passing scores on the English Equivalency Examination or a score at the 50th percentile, or higher, on the College Level Examination may petition to have these scores meet the above requirement.
7. The following restrictions apply to the 60 units required for graduation:
 - a. A maximum of 4 units of physical education activities may be applied.
 - b. A maximum of 15 units of credit (CR) grades may be applied. No course in the student's major or required for that major may be taken for CR
NOTE: Those students who complete a course of credit (CR) and later declare a major in

that field may petition to have this rule waived.

- c. The following courses in any discipline may not satisfy the general education requirements for the Associate degree: selected topics, selected studies, special problems, special projects, special studies, work experience.
8. Completion of twenty-six (26) units of general education must be distributed as indicated: a minimum of three units in category A, two units in category B, and three to six units in categories C, D, E, and F. When only the name of the discipline is listed with no course numbers, all courses in that discipline may be used to meet the general requirements except those noted in 7c above.
 - a. English (3 units minimum) to be selected from English 015, 101, 144
 - b. Physical Education/Nutrition/Health Education (2 units)
 - Health Education 102
 - Physical Education activity courses
 - Physical Education 262 or 263
 - c. Natural Sciences (3-6 units)
 - Anatomy/Physiology 101, 150, 151
 - Astronomy
 - Biology (except 155)
 - Chemistry
 - Geography 110, 114, 126 (only)
 - Geology
 - Microbiology
 - Oceanography
 - Physics
 - d. Humanities (3-6 units) Students must take at least one course from section i:
 - i. Art 100, 102, 105
 - English
 - (except 001, 002, 008, 009, 015, 101, 144, 232, 233)
 - Foreign Languages
 - History 160, 161, 164, 165 (only)*
 - Interdisciplinary Studies 101, 102, 140
 - Music 100, 120, 121
 - Philosophy
 - Religious Studies
 - Speech 120, 121
 - Theatre Arts 100, 108, 109
 - *may also be used for Social Science
 - ii. Applied Arts
 - Art, Music or Theatre Arts majors may not use applied courses to fulfill the Humanities requirement
 - Art: All courses may apply except 100, 102, and 105
 - Music: All courses may apply except 100, 120 and 121
 - Theatre Arts: All courses may apply except 100, 108, and 109
 - e. Social Sciences (3-6)
 - Anthropology
 - Economics
 - Geography (except 114)
 - History **
 - Political Science
 - Psychology (except 055, 058, 065, 080)
 - Sociology
 - ** some courses may also be used for Humanities.

- f. Communication & Analytical Thinking (3-6 units)
 - Business Administration 053
 - Computer and Information Science (except 100, 101, 106)
 - English 015, 101, 144
 - Mathematics (except 042, 052)
 - Philosophy 103 (only)
 - Speech 100, 101, 111, 140, 142

NOTE: No single course may be used to meet more than one general education requirement.

ASSOCIATE IN SCIENCE DEGREE

1. Completion of all requirements for the Associate in Arts degree.
 2. A major of at least eighteen semester units in the field of Natural Science*, or in an occupational curriculum.
- 1 A minimum of one life science with lab and one physical science with lab are required.

CONTINUOUS ATTENDANCE AND GRADUATION

Students in continuous attendance at Crafton Hills College or students who have a break in attendance of less than five years may choose to meet either the graduation requirements in effect at the time they first attended the College or those in effect at the time they graduate.

READMISSION AND GRADUATION

Students who have had a break in attendance at Crafton Hills College of more than five years may choose to meet either the graduation requirements in effect at the time of their readmission or those in effect at the time they graduate.

TRANSFER STUDENTS AND GRADUATION

Students who transfer to Crafton Hills College from other colleges and universities may choose to meet either the graduation requirements in effect at the time of their transfer or those in effect at the time they graduate.

ALUMNI ASSOCIATION

We warmly welcome you to join other alumni and friends of the college in carrying on the tradition and school spirit of Crafton Hills College by becoming a member of the Crafton Hills College Alumni Association. Half of the money raised from annual dues, which are tax deductible, will be placed into a scholarship fund for Crafton Hills College students, with the remaining half being used for operational costs.

SECTION II

COURSE DESCRIPTIONS

Accounting
 Administration of Justice
 Allied Health Sciences
 Anatomy/Physiology
 Anthropology
 Art
 Astronomy
 Biology
 Business Administration
 Chemistry
 Child Development
 Computer and Information Sciences
 Economics
 Emergency Medical Services
 English
 Fire Technology
 French
 Geography
 Geology
 German
 Health Education
 History

Interdisciplinary Studies
 Marketing
 Mathematics
 Microbiology
 Music
 Office Administration
 Oceanography
 Philosophy
 Physical Education
 Physics
 Political Science
 Psychology
 Radiologic Technology
 Real Estate
 Religious Studies
 Respiratory Care
 Sociology
 Spanish
 Speech
 Supervision
 Theatre Arts
 Work Experience

NUMBERING OF COURSES

- 000-009 Basic skills courses not applicable to the Associate degree.
- 010-099 Multipurpose courses, sometimes applicable to the Associate degree, sometimes not, but not generally applicable to the baccalaureate degree.
- 100-299 Basic lower division courses usually applicable to both the Associate and the baccalaureate degrees.

Course Transferability:

Most courses numbered 100 through 299 are acceptable for at least elective credit at the California State University (CSU). Courses acceptable at the University of California have UC printed directly beneath the title of the course. If UC is followed by an asterisk, (*) there is a limitation on the credit allowed. For specific details, check with a counselor. All courses applicable to the Associate degree are so indicated.

ACCOUNTING

098 Accounting Work Experience
1-4 Units
Associate Degree Applicable
Prerequisite: None.
Corequisite: Concurrent enrollment in at least 7 units, including this course.
Laboratory: 5-20 hours per week.
Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

102 Finance Accounting and Analysis
3 Units
CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week
Analysis of financial statements; examination of financial documents such as credit reports, Dun and Bradstreet reports, and stock market reports; nonaccounting majors only.

205 Bookkeeping
3 Units
CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week.
Fundamentals of bookkeeping, such as recording of transactions in journals, posting to ledgers, preparation of the trial balance, and use of the controlling accounts and related schedules with practice in opening, adjusting, and closing various professional sets of books. (Recommended for occupational students, and for those who wish preparatory training before entering Accounting 210.)

210 Principles of Accounting 3 units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Corequisite: Accounting 211
Lecture: 3 hours per week
Development of the basic principles and practices applicable to the general accounting process; application of these principles to the accounting cycle, statement preparation, and the problems of merchandise, depreciation, accounts receivable and payable as well as accruals and deferrals.

211 Principles of Accounting Laboratory 1 Unit
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Corequisite: Accounting 210
Laboratory: 3 hours per week
Laboratory accompaniment to Accounting 210.

220 Principles of Accounting 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Accounting 210, 211
Corequisite: Accounting 221
Lecture: 3 hours per week
Development of the basic principles and practices applicable to the general accounting process; application of these concepts in the fields of cost, income tax, stockholder's equity, funds statements and financial statement analysis.

221 Principles of Accounting Laboratory 1 Unit
UC, CSU, Associate Degree Applicable
Prerequisite: Accounting 210, 211
Corequisite: Accounting 220
Laboratory: 3 hours per week
Laboratory accompaniment to Accounting 220.

225 Intermediate Accounting 3 Units
 CSU, Associate Degree Applicable
 Prerequisite: Accounting 210, 220
 Lecture: 3 hours per week

Study of adjustments, working papers, financial statements, cash and receivables, inventories, investments, plant assets, intangibles, liabilities, capital stock and retaining earnings, statement analysis and application of funds.

226 Cost Accounting 4 Units
 CSU, Associate Degree Applicable
 Prerequisite: Accounting 220, 221
 Lecture: 4 hours per week

Objectives and procedures of accounting for manufacturing enterprises; job order and process costing accounting for manufacturing overhead joint-product and by-product costing cost budgeting standard costs and cost reports.

227 Advanced Accounting 4 units
 CSU, Associate Degree Applicable
 Prerequisite: Accounting 220, 221
 Lecture: 4 hours per week

Study of problems encountered in accounting for partnerships, joint ventures, consignments, installment sales, home office and branch operations, presentation of consolidated balance sheets, consolidated operating statements and statements of affairs and operation of estate and trusts.

230 ABCD State and Federal Income Tax Accounting 4 Units
 CSU, Associate Degree Applicable
 Prerequisite: None. Accounting 205 and/or Accounting 210 recommended. Courses must be taken in sequence.
 Lecture: 3 hours per week
 Laboratory: 3 hours per week

Introduction to state and federal income tax returns, tax principles and procedures, application, special tax problems, tax planning including implications of investments, tax shelters, tax preferences, small business endeavors, and retirement programs. The course objective is to provide a breadth and depth of tax knowledge suitable for entry level accounting jobs and transfer accounting majors.

ADMINISTRATION OF JUSTICE

098 Administration of Justice Work Experience 1-4 Units
 Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

101 Introduction to Administration of Justice 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week

Consideration of the history, philosophy, and operation of administration of justice in the United States; theories of crime, punishment, and rehabilitation; ethics, education and training for professionalism in the system.

102 Principles and Procedures of the Justice System 3 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week

Study of the roles, responsibilities, and procedures of law enforcement agencies, courts of law, and correctional institutions; examination of their interaction from an historical and contemporary perspective.

103 Concepts of Criminal Law 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Study of the historical development, philosophy of law and constitutional provisions; definitions, classification of crime, and their application to the system of administration of justice; legal research, study of case law, methodology, and concepts of law as a social force.

104 Legal Aspects of Evidence 3 Units
 CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Examination of the origin, development, philosophy and constitutional basis of evidence; constitutional and procedural considerations affecting arrest, search and seizure; kinds of degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

105 Community Relations 3 Units
 UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Exploration of the roles of the administration of justice practitioners and their agencies; development of an awareness of the interrelationships and role expectations among the various agencies and the public; emphasis placed upon the development of positive relationships between members of the system and the public.

106 Principles of Investigation 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the basic principles of investigation; problems in dealing with the public; specific knowledge necessary for handling crime scenes, interviews, evidence, surveillance, technical resources, and case preparation.

107 Concepts of Enforcement Services 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Exploration of theories, philosophies, and concepts related to the role expectations of the law enforcement officer; emphasis on patrol, traffic and public service responsibilities and their relationship to the administration of the justice system.

108 Juvenile Procedures 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of organization, functions and jurisdiction of juvenile agencies, processing and detention of juveniles, juvenile case disposition, juvenile status and court procedures.

ALLIED HEALTH
SCIENCES

090 Survey of Radiologic Technology 1.5 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 24 hours per semester

Introduction to basic principles and applications of Radiologic Technology and historical development of radiology; orientation to careers in the field.

098 Allied Health Work Experience 1-4 Units
Associate Degree Applicable
Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

101 Medical Terminology 3 Units
CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Instruction in terminology used to describe the human body, its functions, its normal state, its abnormal state, the diseases and injuries that affect it, and the various means, agents and procedures employed to prevent, minimize or cure the effects of disease or injury; mastery of fundamental terminology and correct pronunciation and usage of the medical vocabulary. This course is especially appropriate for students intending to enter the health professions.

103 Introduction to Medical Records Coding 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 48 hours per semester

Study of hospital organizational structure and functions, with an orientation to medical records, including philosophy, ethics, content, reimbursement emphasis and resource information. The student will also be introduced to Basic Coding techniques, concepts, and guidelines with respect to understanding the format, organization and mechanics of the ICD-9-CM.

104 Medical Records Coding II 3 Units
CSU, Associate Degree Applicable
Prerequisite: AH 103

Lecture: 48 hours per semester

Continuation of technical skills development necessary to gain intermediate level proficiency in medical coding.

105 Medical Records Coding III 3 Units
CSU, Associate Degree Applicable
Prerequisite: AH 104

Lecture: 48 hours per semester

Continuation of the development of the technical skills necessary to provide the student with advanced level proficiency in medical coding.

119ABCD Selected Topics in Allied Health Sciences ½-3 Units
CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 1/2-3 hours per week and/or

Laboratory: 11/2-9 hours per week

Examination of current information on selected topics in allied health sciences.

210 Introduction to Pathophysiology 3 Units
CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the processes and mechanism of human diseases; study of common diagnoses and treatments.

ANATOMY/ PHYSIOLOGY

101 General Anatomy and Physiology 4 Units

CSU, Associate Degree Applicable

Prerequisite: None. High School chemistry or Chemistry 101 recommended.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

Introduction to the basic structures and functions of the human body; the skeletal, circulatory, respiratory, excretory, muscular, digestive, nervous, endocrine, and reproductive systems. This course meets the anatomy and physiology requirement for those seeking a certificate or degree in the emergency medical care, paramedic, respiratory therapy, physical education, and LVN fields.

102 Anatomy and Physiology of the Cardio-respiratory System 3-5 Units

CSU, Associate Degree Applicable

Prerequisite: Anatomy 101

Lecture: 3-4 hours per week

Laboratory: 0-3 hours per week

Study of the anatomy and physiology of the cardiorespiratory system including the oxygen-carbon dioxide transport system and related areas.

150 Human Anatomy and Physiology 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None. High school chemistry or Chemistry 101 recommended.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

Intensive study of the structure and functions of the human body, with emphasis on the skeletal, circulatory, respiratory, and excretory systems.

151 Human Anatomy and Physiology 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Anatomy 150

Lecture: 3 hours per week

Laboratory: 3 hours per week

Intensive study of the structures and functions of the human body, with emphasis on the muscular, digestive, nervous, endocrine, and reproductive systems.

Selected Topics in Anatomy and Physiology 1-4 Units

236ABCD

237ABCD

238ABCD

239ABCD

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 1-4 hours per week and/or

Laboratory: 1-4 hours per week

Study of topics of current interest in Anatomy and Physiology.

247 Special Problems in Anatomy and Physiology 2 Units

CSU, Associate Degree Applicable

Prerequisite: Anatomy 101 or Anatomy 150

Laboratory: 6 hours per week

Independent projects for students with a special interest in a particular aspect of anatomy and/or physiology, involving assigned readings and a combination of library and practical research.

ANTHROPOLOGY

100 Introduction to Archeology 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to prehistory and culture growth, objectives and methods of modern archeology, important archeological discoveries throughout the world, and the contributions of archeology to the understanding of the development of human culture from man's emergence as a culture-bearing animal to the beginning of written history.

102 Cultural Anthropology 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the nature of culture through a survey of the range of cultural phenomena linguistics, and other related topics.

106 Physical Anthropology 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.
Lecture: 3 hours per week
Introduction to human biology and evolution, the relationship of men to other primates, the origin and antiquity of man, fossil man. geochronological dating, anthropometry, race classification and racial problems.

246ABCD Special Problems in Anthropology 1 Unit
UC*, CSU, Associate Degree Applicable
Prerequisite: Completion of or concurrent enrollment in another Anthropology class.
Laboratory: 3 hours per week
Practical archeology for selected students, including archeological digging and museum work as these activities are available.

ART

100-102 Art History 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None. Courses need not be taken in sequence.
Lecture: 3 hours per week
Survey of outstanding periods in the history of Western Art, tracing the relationship between the arts and the society which produced them. Required of all art majors and open to non-art majors.

105 History of 20th Century Art 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None. Art 100-102 recommended
Lecture: 3 hours per week
Survey of twentieth century art, touching on its historical roots and examining contemporary art as a manifestation of our social and environmental milieu.

120A Basic Design I 1½-3 Units
120B Basic Design II 1½-3 Units
120C Basic Design III 1½-3 Units
120D Basic Design IV 1½-3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 1-2 hours per week and
Laboratory: 2-4 hours per week
Progressive exploration of both the spontaneous and the developmental creative process; discovery and development of resources necessary to visual communication; access to tools and experiences necessary for visual literacy.

124A Drawing I 1½-3 Units
124B Drawing II 1½-3 Units
124C Drawing III 1½-3 Units
124D Drawing IV 1½-3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 1-2 hours per week and
Laboratory: 2-4 hours per week
Progressive investigation and interpretation of form and space, using a variety of media and continuing the theory and application of perspective.

126A Painting I 1½-3 Units
126B Painting II 1½-3 Units
126C Painting III 1½-3 Units
126D Painting IV 1½-3 Units
UC*, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 1-2 hours per week and
Laboratory: 2-4 hours per week
Painting in watercolor and oils; still life, landscape, and figure painting.

132A Life Drawing I 1½-3 Units
132B Life Drawing II 1½-3 Units
132C Life Drawing III 1½-3 Units
132D Life Drawing IV 1½-3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 1-2 hours per week and
Laboratory: 2-4 hours per week
Progressive study of the functional qualities of the human figure, including an overview of anatomy in relation to figure drawing graphic interpretations of the human figure, including contour, gesture, and volume drawings.

175A Sculpture I 1½-3 Units
175B Sculpture II 1½-3 Units
175C Sculpture III 1½-3 Units
175D Sculpture IV 1½-3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 1-2 hours per week and
Laboratory: 2-4 hours per week
Progressive exploration in form and space, using stone, wood, clay, and plaster, development of skills in using the tools required for carving and life modeling methods typically employed in these media.

200ABCD Printmaking 1½-3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 1-2 hours per week and

Laboratory: 2-4 hours per week

Focus on techniques and skills of printmaking. Areas to be covered linoleum, woodcuts, silk screening and stenciling.

Special Projects in Art

246 1 Unit

247ABCD 2 units

248 3 Units

249 4 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: Completion of or concurrent enrollment in an art course.

Laboratory: 3 hours per week per unit.

Independent study for selected students in any area of art, with projects determined jointly by student and instructor.

275ABCD Contemporary Sculpture

Techniques 1½-3 Units

CSU, Associate Degree Applicable

Prerequisite: Art 175D. Sources must be taken in sequence.

Lecture: 1-2 hours per week and

Laboratory: 2-4 hours per week

Exploration of the use of contemporary tools and equipment necessary to execute stone sculptures in the environment of a working artist's studio.

ASTRONOMY

050-051 Astrophotography 1 Unit

052-053

Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Laboratory: 3 hours per week

Operation and use of the telescope in photographing the moon, planets, the sun, nebulae, star groups, etc.

133 Frontiers in Astronomy ½-4 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 16 hours per unit and

Laboratory: 48 hours per unit per semester

Lecture and field study of the most recent developments in astronomy with class activities conducted on campus or at field sites. Addressed to the examination of the origin and nature of the universe, its component parts and the methods of their exploration.

150 Introductory Astronomy 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the broad principles underlying the behavior of cosmic forces, man's place in the universe, the historical role of astronomy, and the processes which shape the universe.

160 Astronomy Laboratory 1 Unit

UC, CSU, Associate Degree Applicable

Prerequisite or Corequisite: Astronomy 150

Laboratory: 3 hours per week

Laboratory work to supplement Astronomy 150: identification of constellations and stars, discussion of astronomical methods of observation, and additional work with the telescope and accessories.

175ABCD Selected Topics in Astronomy

1-3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: To be determined by course topic.

Lecture: 1-3 hours per week

Laboratory: 3-9 hours per week

Current information on selected topics in astronomy.

Special Problems in Astronomy

246AB 1 Unit

247AB 2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: Astronomy 160

Laboratory: 3-6 hours per week

Laboratory projects designed for students with a special interest in astronomy.

BIOLOGY

100 General Biology 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

Study of the biological principles involved in cellular biology, human physiology, animal and plant diversity, genetics, evolution, and ecology, including field trips to areas of biological interest. Designed for students not majoring in biology.

122 Marine Biology 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

Survey of the major areas of marine biology, including plant and animal groups, coastal and deep water ecology, food webs, aquaculture, marine pollution, and conservation.

123 Ecology and Environment 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Survey of the basic concepts of ecology, including energy flow in ecosystems, predation, symbiosis, population biology, local biological communities, the human population explosion, and environmental topics, including air and water pollution, nuclear reactors, pesticides, and solid waste. Legal, political, and economic solutions to problems are also considered.

127-128 Subtidal Marine Biology 2 Units
129
CSU, Associate Degree Applicable
Prerequisite: None. Courses need not be taken in sequence.
Lecture: 16 hours per semester

Laboratory and Field Work: 32 hours per semester
Survey of the major groups of plants and animals in the water of the nearshore areas and offshore islands of California, with a study of collecting techniques, use of taxonomic keys, and ecological methods.

130 Cell & Molecular Biology 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: High School chemistry or equivalent.
Lecture: 3 hours per week
Laboratory: 3 hours per week

Study of the principles of molecular and cell biology, with emphasis on cell structure and genetics, cellular respiration, photosynthesis, synthetic processes and the role of physiology in homeostasis.

131 Biology of Organisms and Populations 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week and
Laboratory: 3 hours per week

Study of classification, development, physiology and regulation at the level of the organism. Other topics are population dynamics, community ecology, evolution, and population genetics.

150-151 Introduction to Field Biology 1/2-3 Units
152
CSU, Associate Degree Applicable

Prerequisite: None.
Lecture: 4-16 hours per semester
Laboratory: 12-96 hours per semester
Demonstration and practice of field techniques in biology, including transects, quadrants, collecting methods, taking field notes, and the use of plant and animal identification keys. Study of succession, ecosystems, and population dynamics. Field trips to areas of biological importance.

209 Biology of Hawaiian Islands 3 Units
CSU, Associate Degree Applicable
Prerequisite: A college course in Biological Science with a grade of "C" or better, or equivalent.
Corequisite: GEOL 209.
Lecture: 16 hours per semester and
Laboratory: 96 hours per semester

Terrestrial and marine biology of the Hawaiian Islands, including tropical rain forests, marine biology and human impact on the ecology of the Islands.

210-211-212-213 Laboratory Preparation in Biology 1 Unit
CSU, Associate Degree Applicable
Prerequisite: BIOL 100 or academic equivalent. Courses must be taken in sequence.
Laboratory: 3 hours per week

Practical laboratory techniques designed to acquaint the student with methods of collection and preparation of common biological materials used in the biology laboratory.

246AB Special Problems in Biology 1 Unit
247AB 2 Units
248AB 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: Biology 100
Laboratory: 3-9 hours per week

Independent projects for selected students with a special interest in biology; assigned problems will involve both library and laboratory work.

BUSINESS ADMINISTRATION

053 Quantitative Business Methods 3 Units
(Formerly Applied Business Mathematics)
Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Emphasis on practical business application of mathematics in the areas of accounting, marketing, finance, including payroll, invoicing, insurance, taxes, depreciation, stocks, bonds, annuities, and management analysis.

094ABCD Seminars in Business ½-1 Unit
Associate Degree Applicable
Prerequisite: None.

Lecture: 4 hours per semester per ¼ unit

Selected seminar topics in the field of business. Seminars are developed to meet specific group needs.

098 Business Administration Work Experience 1-4 Units

Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Introduction to Business 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Survey of the business field; provides a background in business and serves as the basic beginning college course in business subjects. Recommended for all business majors.

105 Small Business Management 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the aspects of small business operations, from start up through distribution of goods and services, from producer through middlemen to consumers.

135 Women in Management 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Integration of lecture and discussion of the problems, challenges, and opportunities facing women in managerial positions; study of leadership styles, risk taking, power, and corporate promotions of women.

145 Business Communications 3 Units
CSU, Associate Degree Applicable
Prerequisite: OA144 or ENGL144 or ENGL015 or eligibility for ENGL 101.

Lecture: 3 hours per week

Study of oral and written communication skills essential to the business/industrial setting. (Also listed as OA 145.)

200 Business Management 3 Units
(Organizational Behavior)

CSU, Associate Degree Applicable

Prerequisite: Busad 100 or equivalent.

Lecture: 3 hours per week

Concepts and applications of successful business functions including planning, organizing, controlling, and staffing; current applications examined and evaluated through media support and computer simulation.

210 Business Law 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Principles of law and use of cases as applied to business, and specifically to contracts, principal and agent, employment, negotiable instruments principal and surety, insurance, bailments, sales partnerships, corporations, security devices, trusts and estates and governmental regulations.

211 Business Law 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Introduction to the formation, operation and dissolution of partnerships and corporations. Included is a section on how various anti-trust legislation affects business (e.g., Sherman, Clayton Act, etc.) and how business is carried out through the use of commercial paper and secured transactions.

230AB Using Microcomputers for Business 3 Units

CSU, Associate Degree Applicable

Prerequisite: Acct 205 or Bus AD 100 or equivalent.

Courses must be taken in sequence.

Lecture: 3 hours per week

Fundamentals of hardware and software principles and applications used in the business environment. Students will explore software for spreadsheet design, word processing, data base management, graphics, and other business applications in a hands-on environment.

CHEMISTRY

101 Introductory Chemistry 4 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: One year of high school algebra or Math 090.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Introduction to the principles of chemistry, with emphasis on discoveries, methods of refin-

ing, physical and chemical properties, and use of the more common elements and compounds.

102 Introduction to Organic Chemistry 4 Units

UC* CSU, Associate Degree Applicable

Prerequisite: Chemistry 101 or 150.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Introduction to organic chemistry, with emphasis on understanding how and why the basic functional groups in the organic compounds function as they do, and on their application in biological systems. Designed for students who need two semesters of chemistry, including some biochemistry in organic chemistry.

150 General Chemistry 5 Units

UC, CSU, Associate Degree Applicable

Prerequisite: High school chemistry or Chemistry 101.

Lecture 3 hours per week

Laboratory: 6 hours per week

Introduction to college chemistry, emphasizing the general principles of chemistry and the analysis and solution of problems in chemistry.

151 General Chemistry 5 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Chemistry 150 with a grade of "C" or better.

Lecture: 3 hours per week

Laboratory: 6 hours per week

Continuation of Chemistry 150, with special emphasis on the relations among chemical kinetics, thermochemistry and electrochemistry. Applications of these areas of chemistry are demonstrated.

212-213 Organic Chemistry 4 units

UC, CSU, Associate Degree Applicable

Prerequisite: Chemistry 150-151 with a grade of "C" or better. Courses must be taken in sequence.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Study of carbon compounds, the aliphatic, aromatic, and heterocyclic series, including modern theoretical concepts. Laboratory includes the preparation, identification, and study of the properties of organic compounds.

246 Special Problems in Chemistry 1 Unit

247 2 Units

248 3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: Chemistry 150

Laboratory: 3 hours per week per unit

Laboratory projects for selected students with a special interest in chemistry. The problem is normally selected by the instructor to fit the student

CHILD DEVELOPMENT

101 Theories of Parent-Child Communication 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Review of the concept of human development and the interactions within the biological, psychological, social and cultural phenomena and their relationship to children's and parent's attitudes and behavior.

105 Child Growth and Development 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the growth and development of children from the prenatal period through adolescence; individual needs of children in the modern world.

126 The Child, Family, and the Community 3 Units

CSU, Associate Degree Applicable

Prerequisite: CD 105 recommended

Lecture: 3 hours per week

Essentials and principles of preschool programs as they relate to the child, parent and teacher with emphasis on the interaction of the child, family and community. Types of programs, licensing regulations, discipline and the services available to families will be investigated.

128 Creative Experiences for Children 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

In-depth study of creativity in children. including the rationale for creative development. Philosophy and theories of the general humanities are investigated, including art, music, movement, and drama as facilitators for developing basic skills, human interaction and aesthetic appreciation in children.

137 Play and Materials in Early Learning 3 Units

CSU, Associate Degree Applicable

Prerequisite: CD 105 recommended.

Lecture: 3 hours per week

In-depth study of the dynamics of play and play materials for children including the rationale for play as a facilitator of learning History and philosophy of play, current theories and their relationships to materials as they are utilized in creating and implementing play environments.

180 Infant Development and Activities 3 Units

CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Investigation of the developmental, sensory, cognitive and emotional development of children ages 0-36 months. Fulfills licensing requirements for Infant Center personnel Content includes recordkeeping, parent issues and the development of needs and services, plan/activities.

229 Science for the Child 3 Units
CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the theories and practices needed by the adult in understanding the natural world of the child. Classifying, simple reasoning, observing and making hypothesis, testing, and generalizations of cause and effect using energy, matter and living things.

COMPUTER AND INFORMATION SCIENCES

098 Computer and Information Sciences
Work Experience 1-4 Units

Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Computer Literacy 1½-3 Units
UC*, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 1½-3 hours per week

Study of basic computer technology; basic keyboarding; problem solving using microcomputers; practice in the operations and functions of a computer and writing simple programs; examination of social issues; discussion of the creative use of the computer in the home, in business, and in industry.

101 Survey of Data Processing 3 Units
CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the methods, techniques and systems for manually, mechanically and electronically processing business data

102 BASIC Language 3 Units
UC*, CSU, Associate Degree Applicable

Prerequisite: C&IS 101 or pass placement test.

Lecture: 3 hours per week

Fundamentals of computer programming and problem solving using the BASIC language; writing, running and debugging programs in the interactive computer system to solve both numerical and nonnumerical problems in various areas of applications.

104 Fortran 77 (Computer Programming) 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: C&IS 102/or equivalent

Lecture: 3 hours per week

Study of Fortran 77 as a language supporting any discipline using computer-mathematical methods; emphasis on business applications

106 Microcomputers 3 Units
CSU, Associate Degree Applicable

Prerequisite: C&IS 102

Lecture: 3 hours per week

Study of the organization and programming of small computers, design conventions, microprocessor organization and hardware programs, control units (CPU), interrupt and input/output.

107ABCD Basics of PC/MS DOS
(Disk Operating System) 2 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 4 hours per week (8 week course)

Basics of DOS in a hands-on environment. Exposure to important terms related to the most common software found in a PC setting. Understanding the syntax of basic DOS commands. Working knowledge of disk and file management, tree-structured directories, and batch processing. (Also listed as OA 107ABCD)

C&IS 108 Advanced PC/MS DOS (Disk
Operating System) 2 Units

CSU, Associate Degree Applicable

Prerequisite: C&IS 102 and C&IS 107.

Lecture: 4 hours per week (8 week course)

Study of advanced aspects of MS/DOS in a hands-on environment. Use DOS commands and

the Line Editor (EDLIN) in support of Programming Applications. Use the MS/DOS Message Directory. Configure hard disk for multiple purposes effectively. Use the DOS "DEBUG" facility in a program testing environment

110 PASCAL 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: C&IS 102 or equivalent
Lecture: 3 hours per week

Examination of programming concepts, data expressions, and assignments; decisions, syntax and implementation; program design; and program standards.

120 Mini-Computer Concepts, Characteristics, and Components 3 Units
CSU, Associate Degree Applicable
Prerequisite: C&S 101 or equivalent
Lecture: 3 hours per week

Introduction to Mini-Computer System concepts by reviewing computer architecture, software and components. Acquaints the student with the terminology and typical applications of mini-computers.

200 Programming Business Applications: COBOL I 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: C&IS 102 or equivalent
Lecture: 3 hours per week

Fundamentals of computer logic, flow charting and documentation techniques; advanced techniques for large scale computing systems. Introduction to COBOL

201 Programming Business Applications: COBOL II 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: C&IS 200.
Lecture: 3 hours per week

Continuation of C&IS 200; development of specialized programming techniques.

230 Assembly Language 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: C&IS 102/or equivalent
Lecture: 3 hours per week

Study of organization and data structures typical of 6500 Apple assembly language and operating systems, and the knowledge of the inner workings of a computer and the effects of the instruction set on computer design.

236ABCD Selected Topics in Computer and Information Sciences 1-3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 16-48 hours per semester

Study of the components of modern information processing systems and microcomputer applications.

240 Advanced Programming Techniques 3 Units
UC, CSU, Associate Degree Applicable
Prerequisites: C&IS 104, 110, 200.
Lecture: 3 hours per week

Study of techniques for establishing the correctness of algorithms, estimating time and storage requirements, including file processing, list processing data structured programming and documentation

250 Numerical Computing 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: C&IS 104.
Lecture: 3 hours per week

Survey of computer methods and techniques for solving practical numerical problems and pragmatics, including floating point arithmetic error analysis, integration, solutions of linear equations, least square and curve fitting, interpolation, infinite sums, iteration, and probability.

270 Advanced Integrated Basic Programming 3 Units
UP, CSU, Associate Degree Applicable
Prerequisite: C&IS 101 or equivalent and C&IS 102 or equivalent
Lecture: 3 hours per week

Study of mini computer, advanced interactive BASIC programming. Study of AOS/VS Operating System BASIC Language utilities for editing compiling, testing, and debugging basic programs. Students solve both numerical and non-numerical problems in various application areas.

ECONOMICS

100 Introduction to Economics 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Survey of the American economy, with emphasis on the development, functioning and significance of economic institutions; special attention to economic growth the national debt, inflation, and international economic problems Designed for non-majors who desire to get economic perspective without intensive or technical investigation Students majoring in Business Administration or Economics should not enroll in this course.

200 Principles of Economics (Marco) 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Introduction to principles of economic analysis, economic institutions and issues of public policy. Macroeconomic analysis focuses on national income analysis, money and banking and economic stabilization policies.

201 Principles of Economics (Micro) 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Introduction to microeconomic theory. Elaboration of supply and demand analysis. Development of the models of industrial organization and factor pricing.

246 Special Problems in Economics 1 Unit

247 2 units

UC*, CSU, Associate Degree Applicable

Prerequisite: Economics 200 or 201.

Laboratory: 3-6 hours per week

Independent projects for selected students with a special interest in economics, involving library research, laboratory projects, and/or field studies. Results are presented as a term paper and oral interview.

EMERGENCY MEDICAL SERVICES

010ABCD Basic Cardiac Life Support -
Provider ¼ Unit

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 4 hours per semester

Laboratory: 4 hours per semester

Instruction in Basic Life Support, Cardiopulmonary Resuscitation, for groups with specific needs, such as policemen, firemen, lifeguards, rescue workers, high risk industry workers, families of heart patients and others interested in rendering emergency cardiac care.

011ABCD Basic Cardiac Life Support -
Provider (Recertification) 1/8 Unit

Not Applicable to the Associate Degree

Prerequisite: EMS010.

Lecture: 1 hour per semester

Laboratory: 3 hours per semester

Instruction and practice in CPR and obstructed airway skills; should be taken as frequently as every three months by those persons who work

with the public but have not needed to use the skill American Heart Association recertification is required.

012ABCD Basic Cardiac Life Support -
Instructor 1/4-3/4 Unit

Not Applicable to the Associate Degree

Prerequisite: EMS010.

Lecture: 3-9 hours per semester

Laboratory: 3-9 hours per semester

Review and update of skills and knowledge necessary to perform Cardiopulmonary Resuscitation; techniques of teaching, including practice teaching.

013ABCD Basic Cardiac Life Support -
Instructor (Recertification) 1/4 Unit

Not Applicable to the Associate Degree

Prerequisite: EMS012.

Lecture: 3 hours per semester

Laboratory: 3 hours per semester

Provision of updated material for the Basic Life Support instructor; leads to recertification as designated by the American Heart Association

014ABCD Standard First Aid/Multimedia -
Provider 1/4 Unit

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 4 hours per semester

Laboratory: 4 hours per semester

Instruction in standard First Aid Course; designed to teach the knowledge and skills that are needed for the emergency care of the injured until a physician arrives, and to create an active interest in the prevention of accidents through the elimination of their causes.

015ABCD Standard First Aid/Multimedia -
Provider (Recertification) ¼ Unit

Not Applicable to the Associate Degree

Prerequisite: EMS014.

Lecture: 4 hours per semester

Laboratory: 4 hours per semester

Information to update skill and knowledge level on a regular basis as dictated by the American Red Cross.

016ABCD Standard First Aid/Multimedia -
Instructor ½ Unit

Not Applicable to the Associate Degree

Prerequisite: EMS014.

Lecture: 6 hours per semester

Laboratory: 6 hours per semester

Provision of information necessary for development of American Red Cross Standard First Aid and Personal Safety instructor; includes practice teaching and skills sessions to enhance the student's overall knowledge of first aid and emergency care.

017ABCD Advanced First Aid and Emergency
Care - Provider 2¼ Units
Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 32 hours per semester

Laboratory: 16 hours per semester

Instruction to provide advanced first aid and emergency care knowledge and skills.

018ABCD Advanced First Aid and Emergency
Care - Provider (Recertification) ½Unit

Not Applicable to the Associate Degree

Prerequisite: EMS017.

Lecture: 6 hours per semester

Laboratory: 6 hours per semester

Information to update the Advanced First Aid provider with a knowledge of first aid; opportunity to reinforce skill levels

019ABCD Advanced First Aid and Emergency
Care - Instructor 1 Unit

Not Applicable to the Associate Degree

Prerequisite: EMS017.

Lecture: 16 hours per semester

Provision of information necessary for development of American Red Cross Advanced First Aid and Emergency Care instructors; includes practice training and skills sessions to enhance the student's overall knowledge of first aid and basic techniques of teaching those skills to the general public

020ABCD Emergency Medical Technician I-A
4½ Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 54 hours per semester

Laboratory: 54 hours per semester

Clinic: 8 hours per semester

Field 8 hours per semester

Instruction in all facets of basic life support measures, CPR, and the use of appropriate emergency medical equipment and supplies, stresses hands-on emergency medical skills proficiency, needed to enhance the EMS Delivery System in the field.

021ABCD Emergency Medical Technician I-A
(Recertification) 1¼ units

Not Applicable to the Associate Degree

Prerequisite: EMS 020 or EMS 022.

Lecture: 12 hours per semester

Laboratory: 20 hours per semester

Review of all facets of basic life-support measures; cardiopulmonary resuscitation in accord with the standards of the American Heart

Association; use of emergency medical equipment and supplies, plus new techniques and materials. Leads to recertification

022ABCD Emergency Medical Technician
I-NA 5 units

Associate Degree Applicable

Prerequisite: None.

Lecture: 56 hours per semester

Laboratory: 40 hours per semester

Clinic: 10 hours per semester

Field 8 hours per semester

Instruction in all facets of basic life-support measures, CPR, and the use of appropriate emergency medical equipment and supplies, stresses hands-on emergency medical skills proficiency, needed to enhance the EMS Delivery System in the field.

023 Cardiology for the Technician 1½ Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 16 hours per semester

Laboratory: 24 hours per semester

Introduction to basic cardiology; provides the background necessary to function at a technician level

050 Integrated Science and Basic Medical
Language for Paramedics 3 Units

Associate Degree Applicable

Prerequisite: Must be preselected into the Paramedic Program.

Lecture: 3 hours per week

Overview of basic anatomy/physiology and medical terminology, presented in an integrated manner to inform the pre-paramedic student how the language of medicine and the study of the structures and functions of the body are used in the practice of emergency medicine.

066-069ABCD Selected Topics in Emergency
Medical Services ¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Studies designed to review specific knowledge and skills essential to the practice of paramedicine.

090ABCD Selected Topics in Emergency
Medical Services ¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or
Clinic/Field/Preceptorship: 5-240 hours per semester

Current information on selected topics for the continuing education of Mobile Intensive Care Nurses and/or Paramedics; topics include cardiology, medical trauma, pharmacology, basic paramedic sciences, pediatrics, obstetrics, medical, surgical, and psychiatric problems

091ABCD Continuing Education for the Health Professional ¼-4 Units

Associate Degree Applicable

Prerequisite: Current EMT-P or MICN Certificate.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Current information on selected topics for the continuing education of Paramedics and Mobile Intensive Care Nurses (MICN); topics include cardiology, medical trauma, pharmacology, basic paramedic sciences, pediatrics, obstetrics, medical, surgical and psychiatric problems.

098 Emergency Medical Services

Work Experience

1-4 Units

Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Introduction to Emergency Medical Services - MICN ¼ Unit

Associate Degree Applicable

Prerequisite: RN with one year emergency department nurse experience.

Corequisite: EMS 010, EMS 101.

Lecture: 4 hours per semester

Introduction to the local Emergency Medical Services system.

101 Cardiology for the Health Professional

3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 48 hours per semester

Introduction to pre-hospital coronary care systems; identification of coronary emergencies; operation of defibrillation and ECG equipment; review of cardiopulmonary resuscitation; practical management in a field situation of patients with acute myocardial infarction.

102 Emergency Department Nursing

1-3 Units

Associate Degree Applicable

Prerequisite: Currently licensed as a RN

Lecture: 16-48 hours per semester

Information on clinical assessment and priority setting, psychological intervention, fluid and electrolytes, shock syndrome, legal constraints, respiratory emergency, cardiovascular emergencies, neurological injuries, thermal injuries, surface trauma, orthopedic injuries, multiple trauma, pharmacology, and various other emergencies; instruction in patient and family teaching, community relations, and team management

103 Mobile Intensive Care Nurse 2½ Units

Associate Degree Applicable

Prerequisite: EMS 101, 102, and 110 or RN with one year current emergency department nursing.

Lecture: 24 hours per semester

Laboratory: 24 hours per semester

Clinic: 8 hours per semester

Field. 16 hours per semester

Information and practice on the radio communications system; introduction to pre-hospital care protocols and standing orders.

104ABCD MICN Recertification ¾ Unit

Not Applicable to the Associate Degree

Prerequisite: Must be a MICN currently certified in the ICEMA region Courses must be taken in sequence.

Lecture: 8 hours per semester

Laboratory: 8 hours per semester

Clinic: 16 hours per semester

Information and practice to prepare the practicing MICN to take the written recertification exam and the skills tests

105 Physical Assessment

2 Units

Associate Degree Applicable

Prerequisite: RN or LVN

Lecture: 24 hours per semester

Laboratory: 24 hours per semester

Introduction of the nurse to the extended skill of physical assessment.

106 Neonatal Nursing

2 units

Associate Degree Applicable

Prerequisite: Must be a RN, LVN or Respiratory Therapist.

Lecture: 30 hours per semester

Laboratory: 4 hours per semester

Clinic: 8 hours per semester

Study of neonatal care with special attention to pathophysiology of the newborn; focus on the nurse's role in the neonatal intensive care unit and on the special equipment used; participation in appropriate clinical laboratory experience.

107 Basic N Therapy Certification 2 Units Associate Degree Applicable

Prerequisite: Must be a RN or LVN and possess a valid California nursing license.

Lecture: 30 hours per semester

Laboratory: 6 hours per semester

Study of intravenous therapy, with emphasis on starting and superimposing IV fluids; use of the various types of catheters, tubing, secondary sets, and other appropriate devices; examination of reactions to IV therapy and the treatment protocols.

108 Cardiology Practicum ½ Unit

Associate Degree Applicable

Prerequisite: None.

Corequisite: EMS 101.

Clinic: 40 hours per semester

Provision of clinical experience necessary to prepare students for entrance level employment in a Coronary Care Unit; observation of a variety of equipment and techniques used in the care of acutely ill cardiac patients; provides the clinical experience necessary to qualify for a Coronary Care Certificate.

110 ABCD Advanced Cardiac Life Support - Provider 1 Unit

Associate Degree Applicable

Prerequisite: EMS 010 and must be a MD, RN, EMT-P, RT or DDS.

(Must hold a current certificate in Basic Life Support from American Red Cross or American Heart Association.)

Lecture: 12 hours per semester

Laboratory: 12 hours per semester

Improvement of the emergency Advanced Life Support skills of professional medical and paramedical personnel.

111ABCD Advanced Cardiac Life Support - Provider (Recertification) ¼ Unit

Not Applicable to the Associate Degree

Prerequisite: EMS 110.

Lecture: 3 hours per semester

Laboratory: 3 hours per semester

Provision of updated material for the Advanced Life Support provider; leads to recertification as designated by the American Heart Association

112ABCD Advanced Cardiac Life Support - Instructor 1 Unit

Associate Degree Applicable

Prerequisite: EMS 110. Must be 18 years of age.

Lecture: 14 hours per semester

Laboratory: 6 hours per semester

Instruction in the knowledge and skills essential to train qualified instructors to teach Advanced

Life Support skills to the medical nursing and paramedical community.

113ABCD Advanced Cardiac Life Support - Instructor (Recertification) ¼ Unit

Not Applicable to the Associate Degree

Prerequisite: EMS 102.

Lecture: 3 hours per semester

Laboratory: 3 hours per semester

Provision of updated material to the Advanced Cardiac Life Support instructor. Assessment of skills, new methods of presenting material, and a written test.

121 Vehicle Rescue 2 Units

Associate Degree Applicable

Prerequisite: EMS 020 or Firet 178.

Lecture: 1 hour per week

Laboratory: 3 hours per week

Study and practice of procedures of rescue of victims from vehicles, including preparation, response, assessment, hazard control, support operations, access, emergency care, disentanglement, removal, transfer, and operation terminations. (Also listed as FIRET 121.)

130 Wilderness Survival and Rescue Techniques 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 24-48 hours per semester and/or

Field 0-120 hours per semester

Instruction in meeting stress situations and medical emergencies in remote areas; development of outdoor survival skills and use of related equipment; emphasis on rescue procedures, protocols, and techniques. (Also listed as Firet 130.)

131 Emergency Mountain Medicine 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 24-48 hours per semester

Field. 0-120 hours per semester

Studies in emergency mountain medicine: recognition, prevention, treatment, and physiology of high altitude illnesses; management of injuries in the mountain environment.

140 Advanced Wilderness Survival and Rescue Techniques 3 Units

Associate Degree Applicable

Prerequisite: EMS 130.

Lecture: 24-48 hours per semester

Clinic/Field: 0-120 hours per semester

Continuation of EMS 130 with specific emphasis on helicopter rescue, whitewater rescue, alpine rescue (rock rescue), desert rescue, and ice and snow rescue. (Also listed as Firet 140.)

151 Introduction to Emergency Medical Services - Paramedic 2 Units

Associate Degree Applicable

Prerequisite: EMS 050 or equivalent; must be pre-selected into the Paramedic program.

Corequisite: EMS 152, 153, 154, 155.

Lecture: 32 hours per semester

Orientation to paramedic training discussion of the relationship between the field paramedic and other professionals in the Emergency Medical system; examination of patient-family response to an emergency situation; introduction to the legal concepts of Emergency Medical Care; study of verbal and nonverbal behavior as it relates to the Emergency Medical Care Delivery System

152 Cardiology for Paramedics 4 Units

Associate Degree Applicable

Prerequisite: EMS 050 or equivalent; must be pre-selected into the Paramedic program.

Corequisite: EMS 151, 152, 154, 155.

Lecture: 60 hours per semester

Laboratory: 12 hours per semester

Introduction to the basic pre-hospital coronary care systems; information on implementing such a system; theoretical and practical management of patients with acute myocardial infarction

153 Pharmacology for Paramedics 3 Units

Associate Degree Applicable

Prerequisite: EMS 050 or equivalent; must be pre-selected into the Paramedic program.

Corequisite: EMS 151, 152, 154, 155.

Lecture: 48 hours per semester

Information to enhance the student's knowledge in regard to the administration of medications, to develop an understanding of drug therapy and to develop a background of general information about drugs and their actions and interactions; development of an understanding of basic drug mathematics and posology.

154 EMS Theory 8 Units

Associate Degree Applicable

Prerequisite: EMS 050 or equivalent; must be pre-selected into the Paramedic program.

Corequisite: EMS 151, 152, 153, 155.

Lecture: 128 hours per semester

Studies in the theory and practice of the diagnosis and treatment of trauma and other medical emergencies; emphasis on the pathophysiology of disease processes as the basis for effective initial emergency management.

155 Skills Development for the Paramedic

2 Units

Associate Degree Applicable

Prerequisite: EMS 050 or equivalent; must be pre-

selected into the Paramedic program.

Corequisite: EMS 151, 152, 153, 154.

Laboratory: 80 hours per semester

Practice to enhance the student's knowledge of and ability to diagnose and treat signs of traumatic emergencies and/or medical emergencies and respond to specific emergency situations arising from traumatic or medical emergencies; opportunity to approach clinical problems in emergency medicine with emphasis on the pathophysiology of disease processes as the basis for efficient and rational initial emergency management.

156 Clinical Externship for the Paramedic

1½ Units

Associate Degree Applicable

Prerequisite: EMS 151, 152, 153, 154, 155.

Clinic: 120 hours per semester

Practice to enhance the student's knowledge of administration of emergency medicine in a clinical setting; opportunity to assist and observe in emergency rooms under the direct supervision of staff members of the treating facility, as well as in other clinical areas of the treating facility.

157 Field Externship for the Paramedic

7½ Units

Associate Degree Applicable

Prerequisite: EMS 156.

Field 600 hours per semester

Coordination of advanced paramedical training with a field mobile intensive care unit; opportunity to observe and assist in emergency medical intervention in traumatic medical and surgical emergencies and diseases. This phase of the training program will be in conjunction with a registered paramedical unit

158ABCD Paramedic Recertification ¾ Unit

Not Applicable to the Associate Degree

Prerequisite: Must be a paramedic currently certified in the ICEMA region Courses must be taken in sequence.

Lecture: 6 hours per semester

Laboratory: 6 hours per semester

Clinic: 16 hours per semester

Preparation for the practicing paramedic to take the written recertification exam and the skills test.

200ABCD Selected Topics in Emergency Medical Services

¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic: 5-240 hours per semester.

Group investigation of a special topic in the area of pre-hospital emergency medicine, with special attention to large-scale crisis intervention.

236-239ABCD Selected Topics in Emergency Medical Services ¼-4 Units
Associate Degree Applicable
Prerequisite: None.

Lecture: 1-64 hours per semester and/or
Laboratory: 2-96 hours per semester and/or
Clinic: 5-240 hours per semester

Group investigation of a special topic in the area of pre-hospital emergency medicine, with special attention to large scale crisis intervention.

Special Studies in Emergency Medical Services
246ABCD 1 Unit
247ABCD 2 Units
248ABCD 3 Units
249ABCD 4 Units

Associate Degree Applicable
Prerequisite: None.
Laboratory: 48-192 hours per semester and/or
Clinic: 80-320 hours per semester

Independent study for selected students in any area of emergency medical services, with projects determined jointly by student and instructor.

ENGLISH

001-002 Vocabulary Improvement 3 Units
Not Applicable to the Associate Degree
Prerequisite: None. Courses need not be taken in sequence.

Lecture: 3 hours per week
Overview of the growth and structure of the English language, emphasizing development of skill in self-expression through vocabulary improvement

008 Patterns of Contemporary English 3 Units
Not Applicable to the Associate Degree
Prerequisite: None.
Lecture: 3 hours per week

Study of basic patterns of standard spoken and written English for the student whose cultural background has equipped him or her with a language or language patterns other than standard English

009 Patterns of Contemporary English 3 Units
Not Applicable to the Associate Degree

Prerequisite: English 008 with a grade of “C or better.

Lecture: 3 hours per week
Study of the basic patterns of standard written English for the student whose cultural background has not provided him or her with the necessary skills to write standard English.

015 Preparation for College Writing 4 Units
Associate Degree Applicable
Prerequisite: None.

Lecture: 4 hours per week
Study of the fundamental skills necessary for effective writing with emphasis on clarity, correctness, and appropriate style. Basic grammar and usage will also be covered.

016ABCD Writing Laboratory 1-3 Units
Not Applicable to the Associate Degree
Prerequisite: None.

Laboratory: 48 hours per semester per unit.
Diagnosis of specific weaknesses in basic writing; design and provision of an individualized program to help the student overcome these problems.

055 Children’s Literature 3 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Study of literature written for children. Books discussed in the course are essentially books for children, but values common to all significant literature are emphasized. (See English 155.)

101 Freshman Composition 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Pass Placement Test
Lecture: 4 hours per week

Training in effective written composition, utilizing both instruction in writing and regular composition assignments.

144 Business English 3 Units
CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Review of basic grammar and the principles of effective English usage as applied in business, including skills and techniques of written communication. Written composition includes various types of business letters, memoranda, reports, employment applications and cover letters, and resumes. (Also listed as OA 144.)

152 Freshman Composition and Literature 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: English 101.

Lecture: 3 hours per week

Study of fiction, poetry, and drama, with emphasis on the fundamental principles of literary criticism and interpretation including student writing based on critical reading.

155 Children's Literature 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101

Lecture: 3 hours per week

Survey of literature written for children. Books discussed in the course are essentially books for children, but values common to all significant literature are emphasized. Students in English 155 are expected to do a significantly greater amount of college-level writing than are students in English 055. (See English 055.)

160 Literature by Women 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101.

Lecture: 3 hours per week

Overview of contemporary literature by and about women.

170 The Film Experience 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of what makes a good film for the film viewer, utilizing the methods of literary criticism to examine the use of image, symbol, theme, character, and plot in selected films.

175 Literature and Religion of the Bible 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101

Lecture: 3 hours per week

Study of the English Bible as literature and as religion Examination of the types of literature found in the Bible, the historic-religious context in which the literature developed, and an extensive reading of the two testaments. (Also listed as Religious Studies 175.)

232-233 Creative Writing 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Eligibility for English 101. Courses need not be taken in sequence.

Lecture: 3 hours per week

Study of the techniques of creative writing, with an emphasis on the improvement of the student's ability to write effectively within the framework of a literary genre - fiction, drama, or poetry. Students may concentrate on special interests.

250-251 Fiction 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101. Courses need not be taken in sequence.

Lecture: 3 hours per week

Intensive study of fiction as a literary form, using outside reading and in-class discussions of representative short stories and novels accompanied by short written analyses. Emphasis will usually be on a particular type of fiction; see the current schedule of classes for the specific emphasis.

260-261 American Literature 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101. Courses need not be taken in sequence.

Lecture: 3 hours per week

Analysis of representative literary works of significant American writers to illustrate the origin and development of American thought and culture.

270-271 Survey of English Literature 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101. Courses need not be taken in sequence.

Lecture: 3 hours per week

Analysis of representative literary works of significant English writers from the beginning to the present, with a study of the historical and social background of the literature and lives of important writers.

275 Shakespeare 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101

Lecture: 3 hours per week

Study of the plays and poetry of Shakespeare, with additional study of Shakespeare's life and times.

FIRE TECHNOLOGY

050-061ABCD Selected Topics in Fire Technology ¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Selected studies related to fire technology. Each semester the specific subject matter of the course will be announced in the schedule of classes.

064 Basics of Firefighter Training I 2¼ Units

Associate Degree Applicable

Prerequisite: None. (Firet 100 may be substituted for this course.)

Lecture: 34 hours per semester

Laboratory: 6 hours per semester

Basic introduction to fire technology, rules and regulations, personnel duties and functions, fire service organizations, history of fire, fire apparatus note taking pre-fire planning and career opportunities and safety practices.

065 Fire Hose Operations 1½ Units

Associate Degree Applicable

Prerequisite: Firet 064 or Firet 100

Lecture: 4 hours per semester

Laboratory: 60 hours per semester

Introduction to fire hose construction, hose loads, fire hydrant connections, hose lav both wet and dry, and hose lines aloft for single and multiple lines of various sizes, including large diameter hose, nozzles, fittings, adapters and appliances.

066 Fire Ladder Operations 1 Unit

Associate Degree Applicable

Prerequisite: Firet 064 or Firet 100

Lecture: 4 hours per semester

Laboratory: 36 hours per semester

Study of fire department ladders and operations, including ladder construction and terminology, as well as instruction and practice in carrying, raising and climbing various types and sizes of fire ladders.

067 Basic Rescue Practices 1¼ Units

Associate Degree Applicable

Prerequisite: Firet 064 or Firet 100.

Lecture: 13 hours per semester

Laboratory: 27 hours per semester

Introduction to basic rescue, including use of breathing apparatus, search techniques, ropes, knots and hitches, auto extrication theory and practice.

068 Fire Prevention and Investigation 2½ Units

Associate Degree Applicable

Prerequisite: Firet 064 and Firet 100. (Firet 100 may be substituted for this course.)

Lecture: 39 hours per semester

Laboratory: 1 hour per semester

Introduction to fire prevention procedures, codes and ordinances, building construction, sprinkler systems and occupancy classifications. Includes firefighter's responsibility in fire investigation and report writing

069 Water Supply, Fire Hydraulics and Salvage 1¼ Units

Associate Degree Applicable

Prerequisite: Firet 064 and Firet 100.

Lecture: 18 hours per semester

Laboratory: 6 hours per semester

Study of water sources, distribution systems and an introduction to basic fire hydraulics. Includes salvage operations, folding carrying and spreading salvage covers, water removal overhaul, protection of property and forcible entry.

070 Response to Emergencies 1 Unit

Associate Degree Applicable

Prerequisite: Firet 064 or Firet 100.

Lecture: 16 hours per semester

Study of basic principles of emergency driving, fire alarm systems, communications, and awareness of hazardous materials.

071 Structure Fire Control 1½ Units

Associate Degree Applicable

Prerequisites: Firet 064 or Firet 100 and Firet 065 and Firet 066 and Firet 067.

Lecture: 20 hours per semester

Laboratory: 20 hours per semester

Introduction to fire chemistry and behavior, both in classroom and in field. Operation of fire department tools. Practical fire control methods in the field, involving both interior and exterior attack on hot fires, as well as ventilation methods. Fireground operations, including strategy and tactics and the incident command system. Practical breathing apparatus drills utilizing smoke.

072 Flammable Liquid and Gas Fire Control ¾ Unit

Associate Degree Applicable

Prerequisites: Firet 064 or Firet 100 and Firet 065.

Lecture: 8 hours per semester

Laboratory: 16 hours per semester

Study of physical properties of flammable liquids and gases and various extinguishing agents and methods. Practical hose handling drills and hot fire field activities utilizing various L.P.G. and flammable liquid props and training pits.

073 Wildland Fire Control ¾ Unit

Associate Degree Applicable

Prerequisites: Firet 064 or Firet 100 and Firet 065.

Lecture: 8 hours per semester

Laboratory: 16 hours per semester

Introduction to basic wildland fire control, including both classroom and practical field operations. Includes theory, burning characteristics, safety procedures and fire control measures Use

of wildland fire hand tools and motorized equipment Hot fire practice, including both hand tools and hose lays.

074 Emergency Medical Technician I - Fire Service 5 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 60 hours per semester

Laboratory: 60 hours per semester

Preparation for fire service personnel to render pre-hospital basic life support services, including cardiopulmonary resuscitation under field emergency conditions; and to extricate and prepare victims for transport to an acute care hospital. In contrast to other EMS authority approved EMT-I programs, the SBFS EMT-1 NA/FS program emphasizes those skills most used in the Fire Service, including extrication skills.

075 Fire Technology Basic Training Academy 4½-9 Units

Associate Degree Applicable

Prerequisite: EMS 020, Firet 100. Firet 101. or equivalent

Lecture: 50-100 hours per semester

Laboratory: 100-220 hours per semester

Introduction to basic fire fighting theory and skills; study of the characteristics and behavior of fire; practice in fundamental fire suppression activities, with special attention on safety, first aid, and rescue procedures.

080 Fire Instructor 1A 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Preparation for teaching fire service skills; development of course outlines, job breakdowns, behavioral objectives and lesson plans; study of occupational analysis, terms of instruction, teaching methods and the psychology of learning

081 Fire Instructor 1B 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Preparation for teaching technical fire service skills; technical lesson plans, supplementary instruction sheets, test planning sheets, and written and oral examinations; fundamentals of evaluation, lesson plan formats and the principles of effective instruction.

082 Fire Prevention 1A 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Study of fire prevention; focus on code use, improvement, enforcement and fire cause; consideration of flammable liquids, gases, and solids, combustible dust and metals, explosive materials, properties of plastics, portable and fixed fire protection equipment Successful completion of Firet 082 and 083 fulfills the fire prevention requirements for State Officer certification.

083 Fire Prevention 1B 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Continuation of the study of fire prevention; focus on building construction, flame spread classifications, fire doors, exiting standards, calculation of occupant loads, smoke proof enclosures, sprinkler system design, basic electric and its hazards, fixed extinguishing systems, fire alarm systems, and detection systems and devices. Successful completion of Firet 082 and 083 fulfills the fire prevention requirements of State Officer certification.

084 Fire Management 1 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Study of fire ground and fire department management; issues in management; external influences; decision making stress; characteristics and source of goals; management by objectives; task analysis; motivation inventories; demotivators; productivity; management control; setting policy; organizational structures; delegation; principles of leadership; counseling; Equal Employment Opportunity guidelines; communication; handling disputes and grievances.

085 Fire Command 1A 2-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 2-3 hours per week

Examination of fire command through the simulation of first-alarm structural fires, including the role of a command officer, the fire protection tree, building typology, experience/knowledge/synergistic effects, fire behavior, heat transfer, flashover assessment, command pressures, stress and distress, concepts of decision making. emergency levels, decision models, management styles, tactical operation modes, operational planning principles of command, issuing orders, command placement, directing fire scene forces, operational control fire ground performance standards, command and control components.

086 Fire Command 1B 2-3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 2-3 hours per week

Examination of fire command through the simulation of emergencies involving hazardous materials; identification of hazardous materials; safety priorities; chemical hazard planning; hazardous materials legislation; responsibility for pollution; coordinating resources and agencies; use of the DOT Emergency Response Guide Book protective clothing and equipment; using Chemtrec; shipping documents; decision making models for hazardous materials incidents; concept of alternatives; environmental conditions; decontamination; command posts and staging areas; containers; diking, sealing, and containment; evacuation procedures.

087 Fire Investigation 1 2-3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 2-3 hours per week

Study of the principles of fire behavior; building construction; point of fire origin determination; motives of the fire setter; accidental ignition sources; incendiary fire indicators; structure of fire investigation; vehicle fire investigation; fire fatalities; investigation tools and documentation techniques; report writing; evidence recognition, documentation, and preservation; legal aspects of fire investigation; explosives and incendiary devices; juvenile fire setters; wildland fire investigation

090-097ABCD Selected Topics in Fire Technology ¼-4 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Selected studies related to fire technology. Each semester the specific subject matter of the course will be announced in the schedule of classes.

098 Fire Technology Work Experience 1-4 Units

Associate Degree Applicable
Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Introduction to Fire Technology 3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the philosophy and history of fire protection; review of municipal fire defenses; examination of the organization and function of Federal State, County and private protection agencies and survey of professional fire protection career opportunities.

101 Fundamentals of Fire Prevention 3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the structure and function of the fire prevention organization; inspection; surveying and mapping procedures; recognition, solution and response to fire hazards, and public relations as affected by fire prevention

103 Fundamentals of Personal Fire Safety and Emergency Care 3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Development of the basic skills essential to the assessment of fire dangers; handling common fire situations in the home and/or industry; basic cardiac life support and standard first-aid.

104 Fire Apparatus and Equipment 3 Units

Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of fire apparatus design, specifications, and performance capabilities, and effective utilization of apparatus in fire service emergencies

105 Related Codes and Ordinances 3 Units

Associate Degree Applicable
Prerequisite: Firet 101

Lecture: 3 hours per week

Familiarization with national state and local laws and ordinances which influence the field of fire prevention

106 Fire Hydraulics 3 Units

Associate Degree Applicable
Prerequisite: Completion of Firet 100 or appropriate work experience.

Lecture: 3 hours per week

Review of basic mathematics, hydraulic laws, and formulas as applied to the fire service; application of formulas and mental calculation of hydraulic problems, water supply problems and underwriters' requirements for pumps

107 Rescue Practices 3 units

Associate Degree Applicable

Prerequisite: Completion of Fire 100 or appropriate work experience.

Lecture: 3 hours per week

Study of rescue practices the human body, emergency care of victims, childbirth, artificial respiration, toxic gases, chemicals and diseases radioactive hazards; consideration of rescue problems and techniques.

108 Fundamentals of Fire Behavior and Control 3 units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Review of basic chemistry, storage, handling laws, standards and fire fighting practices pertaining to hazardous materials; study of problems involved in storage, handling manufacture, transportation and use of hazardous material likely to be encountered in fire fighting practices

110 Fire Investigation 3 Units

Associate Degree Applicable

Prerequisite: Fire 101 and Adjus 106.

Lecture: 3 hours per week

Introduction to arson and incendiarism, arson laws and types of incendiary fires; methods of determining fire causes, recognizing and determining evidence, interviewing and determining witnesses and procedures in handling juveniles, court procedure and court testimony in arson cases

116 Fundamentals of Fire Protection 3 Units

Associate Degree Applicable

Prerequisite: Fire 101.

Lecture: 3 hours per week

Fundamentals of building construction and design; fire protection features and special considerations.

117 Public Service Communication 3 Units

Associate Degree Applicable

Prerequisite: Fire 101.

Lecture: 3 hours per week

Study of the history, theory, mechanics, and operations of public safety communications system, including fire law enforcement and emergency medical communications systems and practices; basic equipment and procedures for computer based operations.

118 Wildland Fire Control 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the factors affecting wildland fire prevention, behavior, and control techniques.

121 Vehicle Rescue 2 Units

Associate Degree Applicable

Prerequisite: EMS 020 or Fire 178.

Lecture: 1 hour per week

Laboratory: 3 hours per week

Study and practice of procedures of rescue of victims from vehicles, including preparation, response, assessment, hazard control, support operations, access, emergency care, disentanglement, removal, transfer, and operation termination.

149 Basic Incident Command System 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of interagency response to emergency situations at local, state, and federal levels; examination of systematic interagency activities including such organizational concerns as operations, planning logistics, and finance under a single or unified command system.

150 Crew Supervisor 3 units

Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel.

Lecture: 3 hours per week

Study of the skills used in assessing and making decisions in fire situations and the knowledge and leadership needed to effectively supervise a hand crew.

151 Situation Unit Leader 3 Units

Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel

Lecture: 3 hours per week

Instruction in the duties and responsibilities associated with the Incident Command System (I.C.S.) Situation Status (SITSTAT) Unit

152 Prescribed Fire Training 3 Units

Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel.

Lecture: 3 hours per week

Examination of the skills and knowledge in assessing and in making decisions in prescribed fire situations.

153 Logistics Chief 3 Units

Associate Degree Applicable

Prerequisite: Fire 149. Intended Primarily for emergency service personnel.

Lecture: 3 hours per week

Introduction to the role of the Planning Section Chief within the Incident Command System (ICS); study of the collection, evaluation, and dissemination of ICS information

160 Incident Commander 3 Units
Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel.

Lecture: 3 hours per week

Study of the responsibilities related to incident activities, including the development and implementation of strategic decisions and the ordering and releasing of appropriate resources.

161 Operations Section Chief 3 Units
Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel

Lecture: 3 hours per week

Study of the management tactics and strategies for all operations directly applicable to the primary mission

162 Logistics Section Chief 3 Units
Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel

Lecture: 3 hours per week

Study of the provision of facilities, services, and material necessary to support the management of a major incident

163 Planning Section Chief 3 Units
Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel.

Lecture: 3 hours per week

Study of the collection, evaluation, and dissemination of tactical information; examination of the maintenance of information on the current and forecast situation and on the status of resources; consideration of the preparation and documentation of action plans.

164 Finance Section Chief 3 Units
Associate Degree Applicable

Prerequisite: Fire 149. Intended primarily for emergency service personnel.

Lecture: 3 hours per week

Study of the financial and cost analysis aspects of the incident; development of a financial operations plan tied to work objectives and performance evaluation.

165 Helicopter Coordinator 2 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 2 hours per week

Study of the Helicopter Coordinator position in the Incident Command System Operations Section; application of the information and knowledge received, through discussions, problem solving, and role playing.

170 Basic Wildland Fire Fighting 3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to wildland fire suppression; overview of commonly used concepts and practices of fire fighting.

171 Basic Engine Laboratory 2 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 1 hour per week

Laboratory: 3 hours per week

Technical training in the use of portable pumps, hoselays, engine equipment, chainsaws, and water in fire suppression

172 Fire Operations Supervision 3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the skills essential to effective supervision in major fire management operations.

173 Crew Leadership Operation 3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study and practice of operational theory as it relates to crew leadership under fire fighting conditions.

174 Wildland Fire Prevention 3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the theories of wildland fire prevention; inspection techniques, surveying and mapping procedures; recognition of fire and life hazards; engineering solutions; enforcing solutions; public relations and wildland fire prevention.

175 Wildland Fire Investigation 3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of basic wildland fire investigation; instruction in determining fire causes and point of origin; study of investigative tools such as

photography, interviewing techniques and evidence collection; development of written and oral reporting skills.

176 Wildland Fire Behavior 3 units
Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the basic factors, principles and terminology for fuels, topography, and weather; application of theory in simulated field situations

177 Tactics and Strategies of Wildland Fire Control 4 Units
Associate Degree Applicable
Prerequisite: None.

Lecture: 2 hours per week

Laboratory: 3 hours per week

Field: 5 hours per week

Examination of the principles of fire control through the use of manpower, equipment, and extinguishing agents in the classroom, laboratory and field.

178 Map Interpretation 2 Units
Associate Degree Applicable
Prerequisite: None.

Lecture: 1 hour per week

Laboratory: 3 hours per week

Identification and interpretation of maps appropriate to wildland fire prevention and response.

179 Weather and Fire Behavior 3 Units
Associate Degree Applicable
Prerequisites: Firet 176, 177, 178.

Lecture: 3 hours per week

Study of weather variables that influence fire behavior.

180 Oil and Gas Fires 4 Units
Associate Degree Applicable
Prerequisites: Firet 176, 177, 178.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Study of the proper tactics and methods for response to oil and gas fires.

181 Hazardous Materials Spills 4 Units
Associate Degree Applicable
Prerequisites: Firet 176, 177, 178.

Lecture: 2 hours per week

Laboratory: 3 hours per week

Field: 5 hours per week

Study of the identification, handling, and fire fighting practices involved when explosives, toxic substances, and radioactive materials ignite in storage or in transit.

182 Structural Fires 4 Units

Associate Degree Applicable

Prerequisites: Firet 176, 177, 178.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Study of how building construction influences fire behavior.

183 Aircraft Accidents 3 Units

Associate Degree Applicable

Prerequisites: Firet 176, 177, 178.

Lecture: 2 hours per week

Laboratory: 3 hours per week

Study of the methods and tactics used in response to potential or active aircraft fire.

184 Infrared Imagery Interpreter 1 Unit

Associate Degree Applicable

Prerequisite: None.

Lecture: 16 hours per semester

Laboratory: 8 hours per semester

Introduction to infrared interpretation, including the responsibilities for the collection, and dissemination of the imagery.

185 Infrared Field Specialist 1 Unit

Associate Degree Applicable

Prerequisite: Firet 184.

Lecture: 16 hours per semester

Laboratory: 8 hours per semester

Introduction to the duties of infrared field specialist including the responsibilities for organizing and disseminating information on the proper topographic or orthographic maps.

200 Fire Fighting Tactics and Strategy 3 Units

Associate Degree Applicable

Prerequisite: Completion of Firet 100 or appropriate work experience.

Lecture: 3 hours per week

Review of fire chemistry, equipment and manpower, basic fire fighting tactics and strategy, methods of attack and pre-planning fire problems

201 Fire Protection Equipment and Systems 3 Units

Associate Degree Applicable

Prerequisite: Firet 101.

Lecture: 3 hours per week

Study of portable fire extinguishing equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems

202 Fire Company Organization and Management 3 Units

Associate Degree Applicable

Prerequisite: Completion of Firet 100 and Firet 200

or appropriate work experience.

Lecture: 3 hours per week

Review of fire department organization, fire company organization, the company officer's duties and responsibilities; study of leadership and supervision control company personnel administration, company communications, company training company fire prevention, company fire fighting, company records and reports, and problem solving

210 Fire Behavior 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Recognition of the factors relating to fuels, topography, and weather that affect wildland fire behavior; application to the theories and principles to the fire control process.

211 Aviation and Management 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of aviation management responsibilities, with attention given to the duties of the aviation officer, the development of unit aviation plans and project plans, the problems of fuel quality management and an overview of the transportation of hazardous materials.

220-245ABCD Selected Topics in Fire Technology ¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Selected topics related to emergency services. Each semester the specific subject matter of the course will be announced in the schedule of classes.

250-263ABCD Selected Topics in Fire Technology ¼-4 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-64 hours per semester and/or

Laboratory: 2-96 hours per semester and/or

Clinic/Field: 5-240 hours per semester

Special topics related to fire technology. Each semester the specific subject matter of the course will be announced in the schedule of classes.

275 Emergency Vehicle Operation 2 Units

Associate Degree Applicable

Prerequisite: Contract paid-call or documented volunteer fire fighting experience.

Lecture: 2 hours per week

Laboratory: 4 hours per semester

Study of vehicle laws, driver responsibilities, emergency response procedures, apparatus and equipment maintenance procedures; maneuvering of fire apparatus through controlled driving exercises and in normal traffic conditions.

276 Pump Operation 2 Units

Associate Degree Applicable

Prerequisite: Firet 275.

Lecture: 2 hours per week

Laboratory: 4 hours per semester

Study of the types and design of fire pumps; principles of pumping; review of applied mathematics, hydraulic laws; application of mental hydraulic calculations and operation of pumps under fire ground conditions.

FRENCH

015-016 Conversational French 3 Units

Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 3 hours per week

Study of spoken French. No formal grammar study. Designed to suit the needs of persons who wish to learn to communicate orally in the French language for purposes of travel business, personal pleasure, etc

101A College French I (Part 1) 2½ Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 21/2 hours per week

Laboratory: 1/2 hour per week

Comprehension, conversation, reading and composition, including drill in essential grammar at the elementary level

101B College French I (Part 2) 2½ Units

UC, CSU, Associate Degree Applicable

Prerequisite: French 101 A.

Lecture: 2½ hours per week

Laboratory: ½ hour per week

Continuation of French 101 A. (French 101AB is equivalent to French 101.)

101 College French I 5 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 5 hours per week

Laboratory: 1 hour per week

Comprehension, conversation, reading and composition, including drill in essential grammar, at the elementary level

102A College French II (Part 1) 2½ Units
 CS, CSU, Associate Degree Applicable
 Prerequisite: French 101B or French 101, or one
 year of high school French
 Lecture: 2Y2 hours per week
 Laboratory: Y2 hour per week
 Continuation of French 101B or French 101

102B College French II (Part 2) 2½ Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: French 102A
 Lecture: 2Y2 hours per week
 Laboratory: Y2 hour per week
 Continuation of French 102A. (French 102AB
 is equivalent to French 102.)

102 College French II 5 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: French 101 or French 101A and 101B,
 or one year of high school French
 Lecture: 5 hours per week
 Laboratory: 1 hour per week
 Continuation of French 101.

103 College French III 4 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: French 102 or French 102A and 102B,
 or two years of high school French
 Lecture: 4 hours per week
 Laboratory: 1 hour per week
 Composition and conversation. including a
 review of grammar, plus extensive and intensive
 reading of practical as well as literary French

104 College French TV 4 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: French 103 or three years of high
 school French
 Lecture: 4 hours per week
 Laboratory: 1 hour per week
 Continuation of French 103.

166 Selected Studies in French 1-3 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: French 102 or French 102A and 102B,
 or two years of high school French, or equiv-
 alent proficiency.
 Lecture: 1-3 hours per week
 Laboratory: 2 hours per week per unit of inde-
 pendent study

Special studies in French which allow students
 to concentrate on increasing their proficiency in
 the language and/or broadening their knowledge
 of French civilization and culture, through a com-
 bination of independent study and meetings with
 the instructor.

242 French Culture and Civilization 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week
 Study of the culture and civilization of France.
 (Class is conducted in English)

GEOGRAPHY

102 Introduction to Cultural Geography 3 Units
 CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week and field trips
 Introduction to cultural geography, empha-
 sizing the interrelationship of man and the land,
 including study of populations, regional analysis,
 and livelihood patterns.

110 Physical Geography 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week and field trips
 Introduction to the basic elements of physical
 geography, emphasizing climate, landforms,
 hydrography, soils, native animal life, and
 national vegetation, their interrelationships and
 patterns of distribution throughout the world

111 Physical Geography Laboratory 1 Unit
 UC, CSU, Associate Degree Applicable
 Prerequisite or Corequisite: Geography 110.
 Laboratory: 3 hours per week
 Laboratory to accompany Geography 110.

114 Weather and Climate 3-4 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week and field trips
 Laboratory: 0-3 hours per week
 Study of the earth's atmospheric phenomena,
 emphasizing the causes and regional distribution
 of weather and climate.

119ABCD Selected Studies in Geography ¼-1 Unit
 UC*, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: ½-1 hour per week and/or
 Laboratory: ¾-3 hours per week
 Short courses in regional physical and cultural
 geography, offered on an occasional basis.

126 Geography of California 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week and field trips
Historical study of each general region in California (seashore, mountain, valley, desert) in terms of five ingredients: land, vegetative cover, fauna, water, and air.

GEOLOGY

100 Physical Geology 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week
Laboratory: 3 hours per week and field trips
Introduction to earth materials and structures and the processes shaping the surface of the earth, including laboratory studies which are closely coordinated with lecture topics

101 Introduction to Geology 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week
Introduction to earth materials and structures, the processes shaping the surface of the earth the origin of the planet, and the evolution of plant and animal life, with no laboratory studies.

112 Historical Geology 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Completion of a geology course.
Lecture: 3 hours per week
Laboratory: 3 hours per week and field trips
Study of the geologic history of the earth including the chronological development of major continental features, the interpretation of earth history from rock records, and the evolutionary development of plant and animal life.

150 Man and His Geologic Environment 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week and field trips
Introduction to the interrelationships among geologic processes, earth materials, and man, emphasizing population, geologic hazards (landslides, mudflows, earthquake, volcanism, etc.), mineral fuels and resources and the geologic impact of their extraction, and other problems of a geologic nature related to massive urbanization. Emphasis will be placed on case studies within California

160 Geology Laboratory 1 Unit
UC, CSU, Associate Degree Applicable
Prerequisite or Corequisite: Any course in Geology.

Laboratory: 3 hours per week
Laboratory to accompany various Geology courses in order to complete the laboratory science requirement

170ABC Geologic History of the Great Basin 1 Unit

UC, CSU, Associate Degree Applicable
Prerequisite: Any course in Geology.
Lecture: 8 hours per semester
Laboratory: 32 hours during a four-day field trip.
Discussion and observation of the physical and historical geology of the Great Basin province of the United States, with specific emphasis on the geology of the Death Valley National Monument
Course work will include a series of lectures preparatory to a four-day field trip through parts of the Great Basin in and around Death Valley. Students must attend the field trip for successful completion of the course.

209 Geology of the Hawaiian Islands 3 Units
CSU, Associate Degree Applicable
Prerequisite: Any course in Geology or equivalent
Corequisite: Biology 209.
Lecture: 16 hours per semester
Laboratory: 96 hours per semester

Lecture and field trip study of the physical and historical geology of the Hawaiian Islands, with emphasis on Hawaii, Maui, Oahu and Kauai
Lecture topics are closely coordinated with laboratory and field study. Practice swimming pool sessions are conducted prior to field study.

246ABCD Special Problems in Geology 1 Unit

UC*, CSU, Associate Degree Applicable
Prerequisite or Corequisite: Any course in Geology.
Laboratory: 3 hours per week
Independent projects for selected students with a special interest in geology, involving library research, laboratory projects, and/or field studies

250 Geology of California 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week and field trips

Survey of the physical and historical geology of California. with emphasis on the characteristic geologic record of the twelve geomorphic provinces into which the state is divided.

251 Geology of National Parks and Monuments 3 units
CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week and field trips

Study of the geology of selected national parks and monuments of the United States, with particular emphasis on the geologic process which formed them.

252 Geology for the Space Age 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Survey of the problems raised by geologic studies related to the space age, including meteorites and meteorite impact craters, terrestrial geology done with the aid of satellites, geologic investigations on the moon, and the geologic nature of other planets in the solar system

260ABC Introduction to Field Geology 2 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Any course in Geology.
Lecture: 16 hours per semester
Laboratory: 48 hours per semester

Demonstration, discussion and practice of field investigations of geologic environments involving describing mapping and identifying geologic phenomena. Students must attend the field studies for successful completion of the course.

270ABC Geology of the Eastern Sierra Nevada 1 Unit
CSU, Associate Degree Applicable
Prerequisite: Any course in Geology.
Lecture: 8 hours per semester

Laboratory: 32 hours during a four-day field trip.
Physical and historical geology of the Eastern Sierra Nevada Province, with special emphasis on the volcanic and glacial features in and around the Mammoth-Mono Lakes region. Course work will involve a series of lectures preparatory to a four-day field trip along the eastern margin of the Sierra Nevada. Students must attend the field trip for successful completion of the course.

GERMAN

101A College German I (Part 1) 2½ Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 2½ hours per week
Laboratory: ½ hour per week

Comprehension, conversation, reading and composition, including drill in essential grammar at the elementary level.

101B College German I (Part 2) 2½ Units
UC, CSU, Associate Degree Applicable

Prerequisite: German 101 A.
Lecture: 2½ hours per week
Laboratory: ½ hour per week
Continuation of German 101A.

101 College German I 5 units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 5 hours per week
Laboratory: 1 hour per week
Comprehension, conversation, reading and composition, including drill in essential grammar, at the elementary level

102 College German II 5 Units
UC, CSU, Associate Degree Applicable
Prerequisite: German 101, or German 101A and 101B, or one year of high school German.
Lecture: 5 hours per week
Laboratory: 1 hour per week
Continuation of German 101.

103 College German III 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: German 102 or two years of high school German.
Lecture: 4 hours per week
Laboratory: 1 hour per week

Composition and conversation, including a review of grammar, plus extensive and intensive reading of practical as well as literary German

104 College German IV 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: German 103 or three years of high school German.
Lecture: 4 hours per week
Laboratory: 1 hour per week
Continuation of German 103.

166 Selected Studies in German 1-3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: German 102 or two years of high school German, or equivalent proficiency.
Lecture: 1-3 hours per week
Laboratory: 2 hours per week per unit of independent study

Special studies in German which allow students to concentrate on increasing their proficiency in the language and/or broadening their knowledge of German civilization and culture, through a combination of independent study and meetings with the instructor.

HEALTH EDUCATION

102 Biologic Principles of Health 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Principles of personal, physical, emotional, and sociological health in modern society, including the study of substance abuse: tobacco, alcohol, and other drugs This course fulfills all requirements for graduation from four-year colleges and universities and for all educational credentials. It is especially appropriate for physical education, recreation and health education majors.

HISTORY

100-101 History of the United States 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None. Courses need not be taken in sequence.
 Lecture: 3 hours per week

Survey of the history of the United States from the Age of Discovery to the present, with emphasis on political social, and cultural developments. First semester deals with the period from discovery until 1900; second semester deals with the twentieth century.

135 Religion in America 3 units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Study of the principal figures, groups issues, and trends in religion from colonial times to the present, covering such topics as the Puritans, the growth of religious liberty in America religion and social protest, the Black religious experience, Catholic-Protestant-Jew, and contemporary religious phenomena (Also listed as Religious Studies 135.)

145 History of California 3 units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Survey of California history from colonial times to the present, including its diverse social, political economic and cultural development.

153 History of Mexico 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Survey of the development of Mexico from its

Indian agrarian. colonial beginning to its present industrial growth, emphasizing the themes of Mexico's cultural, social, and political changes.

160-161 History of Western Civilization 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None. Courses need not be taken in sequence.
 Lecture: 3 hours per week

Survey of the political, economic social and intellectual developments that form the basis for Western Civilization

164 History of England and Great Britain 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Survey of the history of England emphasizing the rise of England and the extension of British cultural, economic and political influence over the world in the British Empire and the Commonwealth of Nations.

165 History of England and Great Britain 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Survey and analysis of the rise of the English people, with emphasis on the extension of British culture, economic and political influence over the world in the British Empire and the Commonwealth of Nations

246 Special Problems in History 1 Unit
 247 2 units

UC*, CSU, Associate Degree Applicable
 Prerequisite: Completion of/or concurrent enrollment in a History course.
 Laboratory: 3 hours per unit per week

Independent projects for selected students with a special interest in history, involving assigned readings, research, and conferences.

INTERDISCIPLINARY STUDIES

084 Project Quest ¼-4 Units
 Not Applicable to the Associate Degree
 Prerequisite: None.
 Lecture: 8-32 hours per semester and/or
 Laboratory: 8-32 hours per semester and/or
 Clinic: 20-80 hours per semester

Orientation to postsecondary education and to nontraditional careers; emphasis on the development of academic and job survival skills.

101-102 The Humanities 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the human search for understanding and those efforts to achieve dimension and significance in human existence. Critical examination of certain philosophical, religious, scientific, and aesthetic attitudes as essential motivating influences upon the development of Eastern and Western cultures and examinations of major forces and issues involved in contemporary civilization.

106 Introduction to Sign Language 2 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Laboratory: 3 hours per week

Introduction to the American Manual Alphabet (fingerspelling) and American Sign Language as used among most deaf people in North America with emphasis on learning a basic survival vocabulary of 420 signs, learning to use these signs in proper sentence construction, and learning to interpret simple sentences into sign language. Lectures will focus on the problems a deaf person faces in a hearing society; laboratory will focus on sign language acquisition

122ABCD Selected Studies in Sign Language 1-2 Units

CSU, Associate Degree Applicable

Prerequisite: Intdis 106.

Lecture: ½-1 hour per week

Laboratory: 1½-3 hours per week

Intensive study of sign language for special purposes, with emphasis on learning a basic vocabulary of 500 signs which will aid in communicating with deaf people in particular job settings. The specific area of study will vary each semester. Lectures will focus on the psychological and sociological problems the deaf must face in the particular area of study. Areas of study: law/court/probation; law enforcement/fire control; medical/health services; business/office; social work and related areas.

140 Humanities Through the Arts 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the humanities through a study of seven major arts: film, drama, music, literature, painting, sculpture, and architecture. Each of

these arts is considered from the perspectives of historical development; the elements used in creating works of art; meaning and form expressed; and critical evaluation.

MARKETING

098 Marketing Work Experience 1-4 Units

Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Marketing Principles 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Principles and methods of marketing as practiced by all successfully managed business firms: covers such topics as demand analysis, forecasting, product development, price determination, distribution channels, material handling, advertising and personal selling

105 Salesmanship Principles 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the psychology involved in selling services, goods, ideas, and one's own personality; examination of the problems of analyzing the sales talk. making an adequate approach meeting objections and excuses, closing the sale, and others.

110 Advertising 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Principles, purposes, and practices of advertising; analysis of the channels of trade, the importance of the correct appeal, style, trademarks, headlines, typography, color, layout, ethics, and other problems involved in effective advertising. No artistic ability required.

MATHEMATICS

042 Arithmetic 3 Units

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 3 hours per week

Study of the fundamental operations involving whole numbers, fractions, decimals, ratios, proportions and percents.

052 Review Arithmetic and Introduction to Algebra 4 Units

Not applicable to the Associate Degree

Prerequisite: Math 042 or equivalent.

Lecture: 4 hours per week

Review of fractions, decimals, ratio and proportions, percent, and an introduction to algebra

090 Elementary Algebra 4 Units

Associate Degree Applicable

Prerequisite: Math 052 or equivalent.

Lecture: 4 hours per week

Study of basic topics in algebra, including operations with signed numbers and algebraic expressions. Emphasis is placed on the mastery of factoring and fractions. The solutions of first degree, fractional, and literal equations are addressed. Also included are the study of first degree equations in two variables, graphing linear equations, and an introduction to exponents and radicals.

093 Plane Geometry 3 Units

Associate Degree Applicable

Prerequisite: Math 090 or equivalent.

Lecture: 3 hours per week

Fundamentals of plane geometry developed by inductive and deductive processes, with emphasis on deductive reasoning and the beauty of mathematical rigor. Topics addressed are construction, parallel and perpendicular lines, congruences, similar polygons, Pythagorean theorem, ratio, proportion, area, and circles.

095 Intermediate Algebra 3-4 Units

Associate Degree Applicable

Prerequisite: Math 090 or equivalent.

Lecture: 3-4 hours per week

Review of factoring fractions, equation, and problem solving. Study of linear inequalities, exponents, radicals, quadratic equations, graphing linear-functions, and systems of equations.

102 Introduction to College Mathematics 4 Units

CSU, Associate Degree Applicable

Prerequisite: Math 095 or equivalent.

Lecture: 4 hours per week

Study of inequalities and absolute value, integral and rational exponents, radicals, quadratic

equations, graphing linear, quadratic and exponential functions, linear and nonlinear systems of equations, functions and their inverses, logarithms sequences, series, binomial expansion

103 Plane Trigonometry 4 Units

CSU, Associate Degree Applicable

Prerequisite: Math 102 or equivalent.

Lecture: 4 hours per week

Study of the trigonometric functions, their properties and graphs, and study of inverse trigonometric functions, their properties and graphs. Emphasis is placed on mastering trigonometric identities and the solution of trigonometric equations. Applications of these topics to the solution of triangles and vector representations are presented.

108 Introduction to Probability and Statistics 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 095 or equivalent.

Lecture: 4 hours per week

Introduction to probability, descriptive and inferential statistics, with application to the natural sciences, business, economics, and behavioral sciences.

128 Mathematics and Modern Culture 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 095 or equivalent.

Lecture: 3 hours per week

Study of historical background of mathematics; inductive and deductive reasoning; mathematical patterns found in nature, society and the fine arts; and the basic concepts of counting probability and statistics.

140 Finite Mathematics 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 095 or equivalent.

Lecture: 4 hours per week

Introduction to probability including "tree" diagram, stochastic processes, Markov chains. Matrices, linear systems, introduction to linear programming and theory of games.

141 Calculus for Business 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 095 or equivalent.

Lecture: 4 hours per week

Differential and integral calculus with emphasis on applications in business, social sciences, and life sciences. Not open to students with credits in Mathematics 152, 251.

151 College Algebra and Analytic Geometry 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 103 or equivalent.

Lecture: 4 hours per week

Study of inequalities; absolute value; functions and functional notation; quadratic equations (in two variables); sketching conic sections and rational functions; theory of equations; general forms of conic sections; induction, including the binominal theorem, an introduction to analytic geometry and its proofs, and an introduction to limits.

152 Analytic Geometry and Calculus 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 151 or equivalent

Lecture: 4 hours per week

Study of relations and functions, introduction to limits and continuity, derivatives of algebraic and trigonometric functions, applications of the derivatives including maxima and minima, graphing relations and functions, related rates, and integrals of algebraic and trigonometric functions, and applications of integrals.

251 Analytic Geometry and Calculus 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 152 or equivalent.

Lecture: 4 hours per week

Study of derivatives and integrals of inverse trigonometric functions, transcendental functions, methods of integration, additional applications of integrals, polar coordinates, parametric equations, conic sections, infinite series, improper form and improper integrals

252 Analytical Geometry and Calculus 4-5 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 251 or equivalent.

Lecture: 4-5 hours per week

Study of vectors and solid analytic geometry, functions of several variable, spartial derivatives, multiple integrals, and line and surface integrals.

254 Introduction to Ordinary Differential Equations 4 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Math 251 or equivalent.

Lecture: 4 hours per week

Introduction to differential equations, first and second order differential equations, solutions of homogeneous and non homogenous equations, applications of differential equations, series solutions of second order linear equations and systems of first order linear equations.

MICROBIOLOGY

102 Introductory Microbiology 4 units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Introduction to microbiology, emphasizing the general characteristics of microorganisms; principles of microbial growth, identification. and control; and the relationships between human beings and microbes Special attention is given to infectious disease. Recommended for students in health occupations.

150 Basic Microbiology 5 units

UC, CSU, Associate Degree Applicable

Prerequisite: Chemisry 101.

Lecture: 3 hours per week

Laboratory: 6 hours per week

Study of microbiology, emphasizing the biology of microorganisms, including bacteria. viruses, fungi, protozoa. and algae. Introduces the student to the fundamental principles of microbial cultivation, metabolism, genetics, growth and control Principles of disease transmission and a survey of communicable diseases are also included

246AB Special Problems in Microbiology 1 Unit

247AB 2 Units

248AB 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Micro 150.

Laboratory: 3 hours per week per unit

Independent projects for selected students with a special interest in microbiology, involving library research and/or laboratory projects.

MUSIC

100 Fundamental Skills in Music 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Sight reading of materials found in music; development of sight reading techniques, rhythmic expression and notation; simple melodic dictation and harmonization. Particularly designed for pre-education majors.

101-102 Music Theory I, II 3 Units
 201-202 Music Theory III, IV
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week

Laboratory: 1 hour per week

Progressive study through four semesters includes work in sight-singing dictation, rhythms, scales, signatures, elementary harmony from the common practice period intermediate harmony through secondary dominants, advanced harmony through augmented sixths, extensions into scalar and chordal harmonies, extended chromaticism, elementary twelve tone relationships.

105AB Musicianship 3 units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week

Laboratory: 1 hour per week

Study of melodic rhythmic dictation, drill in sight reading and analysis of music of the masters using keyboard harmonies

112AB Jazz Theory and Musicianship 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Ability to read music

Lecture: 3 hours per week

Study of the elements of contemporary jazz theory, emphasizing techniques of jazz improvisation

120AB Appreciation of Musical Literature 3 Units

UC, CSU, Associate Degree Applicable
 Prerequisite: None. Courses need not be taken in sequence.

Lecture: 3 hours per week

Introduction to the music of the great composers, designed to aid the musically untrained listener to develop an understanding and enjoyment of great music, both vocal and instrumental

130AB Elementary Voice 2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Ability to match pitches. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Introduction to the proper use of the voice in both singing and speaking including techniques of posture, breathing breath control, tone color, diction, use of the simple musical repertoire, and beginning interpretation

132ABCD Guitar I, II, VI, IV 2 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: Student must have his/her own guitar. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Progressive study of the basic techniques of playing the guitar, including instruction in chords; arpeggios in all keys; improvisation; accompaniment; sightreading transposition; folk, classical jazz, and pop styles in major and minor scales; introduction to the literature and style of classical guitar; solo and ensemble guitar of the different periods of musical history; introduction of three octave scales in all keys; development of skills in rare time meters and rhythms.

134 American Jazz Music - Past and Present 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the evolution of jazz as an American musical art form; knowledge of the men and women who developed jazz from its early beginnings up to the present time; listening to all of the major jazz artists and their innovations.

135ABCD Piano I, II, UI, IV 2 units

UC, CSU, Associate Degree Applicable

Prerequisite: None. Music 100 recommended.

Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Progressive class instruction in piano, including scale techniques, sight-reading ensemble playing basic literature, keyboard techniques, and musicianship skills

137ABCD Class Organ I, II, III, IV 2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: 2 years piano or equivalent. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Progressive instruction on the organ, to include two-part manual playing, manual and pedal work, hymn playing, phrasing, articulation, three voice compositions, and registration technique.

143ABCD Woodwind, Brass and Percussion Instruction 2 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Ability to match pitches and perform basic manual skills. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Class instruction on wind and percussion instruments. A beginning level class open to all, but students must provide their own instruments. Music majors interested in learning a second

instrument are encouraged to take advantage of this opportunity.

147 American Choral Music 1 Unit
 CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 1 hour per week

Examination and analysis of the basic requirements for the performance of both traditional and contemporary choral music with special emphasis on placement of singers acoustics, and how each is affected by the performance of all styles of choral literature.

150ABCD Mixed Chorus 1 Unit
 UC, CSU, Associate Degree Applicable
 Prerequisite: None. Courses must be taken in sequence.
 Laboratory: 3 hours per week

Foundational techniques in such aspects of choral music as breathing, posture, tone production, enunciation and musicianship; especially recommended for pre-teaching and liberal arts majors who desire vocal training.

154ABCD College Singers 1-3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Audition with instructor. Enrollment in Music 100 recommended.
 Lecture: ½-1 hour per week
 Laboratory: 2½-5 hours per week

Study and performance of outstanding representative choral works from all periods of music history.

156ABCD Concert Choir 1-2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Ability to match pitches Courses must be taken in sequence.
 Laboratory: 2-4 hours per week

Study and performance of outstanding representative choral works from all periods of music history.

160ABCD Wind Instrument Ensemble 1 Unit
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Laboratory: 2 hours per week

Acquaintance with standard literature for wind instrument ensemble, with performance opportunities according to the ability of the particular group.

164ABCD College Concert Band (Community) 1-2 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: Intermediate or high performance

level on traditional band instrument.

Laboratory: 3 hours per week per unit

Study of band literature, stressing the finest of concert literature for band use.

168ABCD Wind Instrument Ensemble 1 Unit
 UC, CSU, Associate Degree Applicable

Prerequisite: Ability to match pitches and perform basic manual skills. Courses must be taken in sequence.

Laboratory: 2 hours per week

Study of the literature available for the particular ensemble under consideration; studies in appreciation and performance of standard works

169ABCD College Concert Band 1-2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Intermediate or high performance level on a traditional band instrument. Courses must be taken in sequence.

Laboratory: 2-4 hours per week

Study of band literature, including training and experience in traditional and contemporary repertoire. Previous band experience necessary.

171ABCD Stage Band 1-2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Intermediate or higher performance level on a traditional "Big Band instrument. Courses must be taken in sequence.

Laboratory: 2 hours per week per unit

Study of the techniques and repertoire of the current jazz and stage band.

174ABCD Jazz Ensemble 2 units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Advanced performance level on a traditional "Big Band instrument Courses must be taken in sequence.

Laboratory: 4 hours per week

Study of new jazz literature, style, and interpretation. Advanced level performance course; performance required.

175ABCD Jazz Band Workshop 2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Advanced performance level on a "Big Band instrument. Courses must be taken in sequence.

Laboratory: 4 hours per week

Continued study of new jazz literature style and interpretation. Advanced level performance course; performance required.

180ABCD Rehearsal and Performance 1-2 Units
 UC, CSU, Associate Degree Applicable

Prerequisite: Advanced performance ability on instrument or voice. Courses must be taken in sequence.

Laboratory: 2 hours per week per unit

Preparation and public performance of musical plays, operettas, operas, and/or oratorios for both vocalists and instrumentalists

184ABCD Broadway Musical Production 2 Units

CSU, Associate Degree Applicable

Prerequisite: Audition. Courses must be taken in sequence.

Laboratory: 4 hours per week

Designed to train and/or coach students in the presentation of musical theatre performances, emphasizing proper solo and ensemble vocal techniques as they pertain to the musical theatre.

OCEANOGRAPHY

101 Elements of Oceanography 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Survey of the four major aspects of oceanography: physical, geological, chemical, and biological

160-161-162 Introduction to Field Oceanography 2 Units

CSU, Associate Degree Applicable

Prerequisite: A college course in life or physical sciences with a grade of "C" or better. Courses need not be taken in sequence.

Lecture: 1 hour per week and

Laboratory: 3 hours per week

Demonstration and practice of field techniques in oceanography, including water sampling and testing for salinity, temperature, oxygen and pH. Collection and analysis of plankton and nekton samples, use of taxonomic keys, and a study of the geologic processes of the marine environment

OFFICE ADMINISTRATION

009ABCD Office Skills Lab 1-3 Units

Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Laboratory: 3-9 hours per week

Individualized instruction designed to assist students improve office skills; assistance with equipment and materials provided.

050ABCD Office Experience 1-3 Units

Associate Degree Applicable

Prerequisite: OA 100. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 3-6 hours per week

On-the-job training through secretarial, clerical, and receptionist work on campus.

070ABCD Beginning Word Processing Applications: Displaywrite 2 Units

Associate Degree Applicable

Prerequisite: OA 100 or OA 116 or equivalent.

Lecture: 4 hours per week (8-week course)

Development of marketable skills in word processing using IBM microcomputers or compatible hardware and IBM's DISPLAYWRITE software. Training in basic functions such as executing commands, understanding the document screen, entering and editing text (hyphens, search/replace, spell-check), formatting text (page breaks, page numbers, text emphasis, margins and tabs, superscripts/subscripts, headers/footers), saving and printing documents

071ABCD Advanced Word Processing Applications: Displaywrite 2 Units

Associate Degree Applicable

Prerequisite: OA 070A or 070B or 070C or 070D.

Lecture: 4 hours per week (8-week course)

Development of marketable skills in word processing using IBM's DISPLAYWRITE software. Training in advanced functions such as managing print queues, merging documents, printing envelopes and labels, drawing lines, printing in columns, recording keyboard macros, using glossaries, entering and printing endnotes, generating outlines, working with math functions.

072ABCD Beginning Word Processing Applications: Wordperfect 2 Units

Associate Degree Applicable

Prerequisite: OA 100 or OA 116 or equivalent

Lecture: 4 hours per week (8-week course)

Development of marketable skills in word processing using IBM microcomputers or compatible hardware and WORDPERFECT software. Training in basic functions such as executing commands, understanding the document screen, entering and editing text (hyphens, search/replace, spell-check), formatting text (page breaks, page numbers, text emphasis, margins and tabs, superscripts/subscripts headers/footers), saving and printing documents.

073ABCD Advanced Word Processing Applications: Wordperfect 2 Units

Associate Degree Applicable

Prerequisite: OA 072A or 0728 or 072C or 072D
Lecture: 4 hours per week (8-week course)

Development of marketable skills in word processing using WORDPERFECT software. Training in advanced functions such as working with column blocks, merging documents, recording keyboard macros, using the thesaurus, working with math functions.

076ABCD Beginning Business Desktop Publishing 2 Units

Associate Degree Applicable

Prerequisite: OA 070ABCD or OA 072ABCD and OA 100 or OA 116 or equivalent

Lecture: 4 hours per week (8-week course)

Introduction to business desktop publishing concepts and activities utilizing a microcomputer-based page layout system. Practical basic understanding of templates, typography, and graphic integration.

077ABCD Intermediate Business Desktop Publishing 2 Units

Associate Degree Applicable

Prerequisite: OA 076A or OA 076B or OA 076C or OA 076D.

Lecture: 4 hours per week (8-week course)

Application of basic DTP concepts to the enhancement of text and graphics in the creation of business publications such as newsletters, graphic presentations, and other business reports.

079ABCD Fundamentals of Electronic Spreadsheets 2 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 4 hours per week (8-week course)

Principles of designing spreadsheets; entering data, labels, formulas, and commands; working with mathematical, statistical, financial, and logical functions; creating graphs and keyboard macros.

090ABCD Selected Topics in Office Administration ½-3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: ½-3 hours per week

Study of topics selected to acquaint the office worker with the latest techniques, skills and procedures in the rapidly changing business world.

098 Office Administration Work Experience 1-4 Units

Associate Degree Applicable

Prerequisite: None.

Corequisite: Concurrent enrollment in at least 7 units, including this course.

Laboratory: 5-20 hours per week

Integration of classroom instruction with practical on-the-job experience coordinated with the program of study and related to appropriate occupational goals.

100 Beginning Typewriting 1-3 Units
Associate Degree Applicable

Prerequisite: None.

Lecture: 1-2 hours per week and/or

Laboratory: 2-3 hours per week

Fundamentals of typewriting: functions of machine, use of keyboard, speed and accuracy drills, rough copy, and simple tabulation Designed to develop a minimum typing speed of 30 words a minute.

100A Beginning Typewriting (Part I) 1-3 Units

Associate Degree Applicable

Prerequisite: None:

Lecture: 1-2 hours per week and/or

Laboratory: 2-3 hours per week

Fundamentals of typewriting: functions of machine, use of keyboard, speed and accuracy drills, rough copy, and simple tabulation.

100B Beginning Typewriting (Part II) 1-3 Units

Associate Degree Applicable

Prerequisite: OA 100A

Lecture: 1-2 hours per week and/or

Laboratory: 2-3 hours per week

Continuation of OA 100A. At the conclusion of 100B, the student should have developed a minimum typing speed of 30 words a minute.

101 Intermediate Typewriting 1-3 Units
Associate Degree Applicable

Prerequisite: OA 100 or OA 100B or ability to type at least 30 net words a minute.

Lecture: 1-2 hours per week and/or

Laboratory: 2-3 hours per week

Procedures for arranging and tabulating materials; continued emphasis on accuracy and speed; preparation of receipts, letters, and a large volume of other diversified business forms Designed to develop a minimum typing speed of 40 words a minute.

101A Intermediate Typewriting (Part I) 1-3 Units

Associate Degree Applicable

Prerequisite: OA 100 or OA 100B or ability to type at least 30 net words a minute.

Lecture: 1-2 hours per week and/or

Laboratory: 2-3 hours per week

Procedures for arranging and tabulating materials; continued emphasis on accuracy and speed, preparation of receipts letters, and a large volume of other diversified business forms

101B Intermediate Typewriting (Part II) 1-3 Units
Associate Degree Applicable
Prerequisite: OA 101A
Lecture: 1-2 hours per week and/or
Laboratory: 2-3 hours per week

Continuation of OA 101A. At the conclusion of 101B, the student should have developed a minimum typing speed of 40 words a minute.

102 Advanced Typewriting 1-3 Units
Associate Degree Applicable
Prerequisite: OA 101 or OA 101B or ability to type at least 40 net words a minute.
Lecture: 1-2 hours per week and/or
Laboratory: 2-3 hours per week

Development of speed and accuracy to meet the most exacting requirements of business; preparation of legal papers, financial reports, statistical material and advanced letter production. Designed to develop a minimum typing speed of 50 words per minute.

102A Advanced Typewriting (Part I) 1-3 Units
Associate Degree Applicable
Prerequisite: OA 101 or OA 101B or ability to type at least 40 net words a minute.
Lecture: 1-2 hours per week and/or
Laboratory: 2-3 hours per week

Development of speed and accuracy to meet the most exacting requirements of business; preparation of legal papers, financial reports, statistical material, and advanced letter production.

102B Advanced Typewriting (Part II) 1-3 Units
Associate Degree Applicable
Prerequisite: OA 102A
Lecture: 1-2 hours per week and/or
Laboratory: 2-3 hours per week

Continuation of OA 102A. At the conclusion of 102B, the student should have developed a typing speed of 50 words per minute.

107ABCD Basics of PC/MS DOS (Disk Operating System) 2 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: 4 hours per week (8-week course)

Basics of DOS in a hands-on environment
Exposure to important terms related to the most common software found in a PC setting. Under-

standing the syntax of basic DOS commands. Working knowledge of disk and file management, tree structured directories, and batch processing. (Also listed as C&IS 107ABCD)

110 Beginning Word/Information Processing Concepts 3 Units
Associate Degree Applicable
Prerequisite: OA 100 or OA 100B or equivalent
Corequisite: OA 070A or 0708 or 070C or 070D and OA 071A or 071B or 071C or 071D
Lecture: 3 hours per week

Study of changes in the modern office through the use of automated equipment; emphasis on the organization of word processing from input through distribution; examination of basic machine operations, transcription techniques for word processing, and basic language arts skills.

111 Intermediate Word/Information Processing Concepts 3 Units
Associate Degree Applicable
Prerequisite: OA 110
Corequisite: OA 072A or 0728 or 072C or 072D and OA 073A or 0738 or 073C or 073D
Lecture: 3 hours per week

Development of marketable skills in word processing; advanced techniques in machine transcription for word processing; language arts/communication skills. Emphasis on information processing in the electronic office from hardware and systems configuration to software and communications systems

112 Advanced Word/Information Processing Concepts 3 Units
Associate Degree Applicable
Prerequisite: OA 111.
Lecture: 3 hours per week

Development of advanced marketable skills in word processing concepts, including administrative and management responsibilities in selecting and staffing systems; an understanding of the total word/information processing environment and how it affects employees and society.

116 Microcomputer Keyboarding 1-3 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: 1-2 hours per week
Laboratory: 1-3 hours per week

Fundamentals of basic keyboarding; entering of alphabetic, numeric, and symbol information on a keyboard quickly and accurately; understanding the basic vocabulary and concepts used in keyboarding operations for entering and retrieving information.

120 Beginning Gregg Shorthand 3-6 Units
Associate Degree Applicable
Prerequisite: OA 100 or equivalent
Lecture: 2-5 hours per week
Laboratory: 3 hours per week

Theory and basic principles of Gregg shorthand; practice and vocabulary development to attain a dictation speed on new material of 60 words a minute for three minutes upon completion of six units.

120A Beginning Gregg Shorthand 3 Units
(Part I)
Associate Degree Applicable
Prerequisite: OA 100 or equivalent.
Lecture: 2½ hours per week
Laboratory: 1½ hours per week

Theory and basic principles of Gregg shorthand; practice and vocabulary development

120B Beginning Gregg Shorthand 3 Units
(Part II)
Associate Degree Applicable
Prerequisite: OA 120A.
Lecture: 2Y2 hours per week
Laboratory: 1½ hours per week

Continuation of OA 120A. At the conclusion of 120B, the student should have attained a dictation speed on new material of 60 words a minute for three minutes.

121 Intermediate Gregg Shorthand 3-6 Units
Associate Degree Applicable
Prerequisite: OA 120 or OA 120B with a grade of "C" or better.
Lecture: 2-5 hours per week
Laboratory: 3 hours per week

Principles of elementary shorthand applied to writing of sentences and letters from dictation. Intensive review of shorthand fundamentals, vocabulary-building drills, reading material, transcription exercises, and phrase-building to attain a dictation speed of 80 words a minute for three minutes upon completion of six units.

121A Intermediate Gregg Shorthand 3 Units
(Part I)
Associate Degree Applicable
Prerequisite: OA 120 or OA 120B with a grade of "C" or better.
Lecture: 2½ hours per week
Laboratory: 1½ hours per week

Principles of elementary shorthand applied to writing of sentences and letter from dictation. Intensive review of shorthand fundamentals, vocabulary-building drills, reading material, transcription exercises and phrase-building.

121B Intermediate Gregg Shorthand 3 Units
(Part II)
Associate Degree Applicable
Prerequisite: OA 121A.
Lecture: 2½ hours per week
Laboratory: 1½ hours per week

Continuation of OA 121 A. At the conclusion of 121B, the student should have attained a dictation speed of 80 words a minute for three minutes.

122 Advanced Dictation and Transcription 3-6 Units
Associate Degree Applicable
Prerequisite: OA 121 or OA 121B with a grade of "C" or better.
Lecture: 2-5 hours per week
Laboratory: 3 hours per week

Instruction to develop speed and efficiency in sustained dictation and transcription; specialized vocabularies for business, industrial, and professional fields; review of punctuation and spelling as applied to secretarial usage. Students should attain a speed of 100 words per minute for three minutes upon completion of six units.

122A Advanced Dictation and Transcription (Part I) 3 units
Associate Degree Applicable
Prerequisite: OA 121 or OA 121B with a grade of "C" or better.
Lecture: 2-5 hours per week
Laboratory: 3 hours per week

Instruction to develop speed and efficiency in sustained dictation and transcription; specialized vocabularies for business, industrial, and professional fields; review of punctuation and spelling as applied to secretarial usage.

122B Advanced Dictation and Transcription (Part II) 3 Units
Associate Degree Applicable
Prerequisite: OA 122A or OA 121.
Lecture: 2½ hours per week
Laboratory: 1½ hours per week

Continuation of OA 122A. At the conclusion of 122B, the student should have attained a speed of 100 words per minute for three minutes.

128ABCD Shorthand Theory Review 3 Units
Associate Degree Applicable
Prerequisite: Typing speed of 30 words per minute for 5 minutes and OA 120 or equivalent.
Lecture: 3 hours per week

Intensive review of basic theory and brief forms for students with some knowledge of shorthand

preting, preparing, and maintaining medical office and hospital records; personal conduct, ethics, and public relations; review of manual and electronic records management standards.

161 Medical Shorthand 3 Units
Associate Degree Applicable
Prerequisite: OA 100 and OA 120 or 120B or equivalent.

Lecture: 2½ hours per week

Laboratory: 1 hour per week

Intensive training in medical vocabulary, medical dictation and transcription, and the specialized duties of the secretary employed in a medical office.

162 Medical Terminology and Transcription I 1-6 Units

Associate Degree Applicable

Prerequisite: OA 100 or equivalent

Lecture: 1-6 hours per week

Laboratory: 1 hour per week

Instruction in medical terminology as it relates to transcription of medical records in all phases, including history and physical examination reports, radiology reports, operation reports, pathology reports including autopsies, and discharge summary reports, transcription of reports, taking each type of report separately; e.g., history and physical examination first, radiology second. etc

163 Medical Terminology and Transcription II 1-6 Units

Associate Degree Applicable

Prerequisite: OA 162

Lecture: 1-6 hours per week

Laboratory: 1 hour per week

Instruction in medical terminology as it relates to transcription of medical records in all phases, including all the specialties in the medical field, with particular emphasis on laboratory data, surgery terminology, and pharmaceuticals; documentation of new terminology; simulation of "on-the-job" training.

PHILOSOPHY

101 Introduction to Philosophy 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the major problems of philosophy, utilizing classical and modern philosophical literature as a basis for discussion of epistemology, metaphysics, ethics, and aesthetics.

103 Introduction to Logic 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the techniques of critical thought, including language analysis, inductive and deductive logic, symbolic logic, and the development of the scientific method

105 Moral Values in Today's Society 3 Units
UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of moral philosophy, with analysis of the basic ideas and principles involved in moral conduct, including the concepts of good right, obligation, and conscience. Problems of truthfulness, race, sex, marriage, and war or peace are examined in relationship to moral philosophy.

190-191 Selected Studies in Philosophy 3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to philosophical thinking through study of a specific philosophical theme, period, or culture. The specific emphasis of the course is announced in the class schedule for semesters it is taught

246ABC Special Problems in Philosophy 1 Unit

247ABC 2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: Completion of/or concurrent enrollment in a philosophy course.

Laboratory: 3 hours per week per unit

Independent projects for selected students with a special interest in philosophy, involving assigned readings, papers and conferences.

PHYSICAL EDUCATION

INDIVIDUAL AND GROUP ACTIVITIES

All courses in this section provide instruction in the basic skills and techniques of the sport or activity. Each course is designed to improve physical fitness; some provide recreational skills for life-long enjoyment of leisure time.

070ABCD Health Evaluation ¼ Unit
Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 8 hours per semester.
Identification of the health status of an individual through appraisal of cardio-vascular wellness, fitness testing and calculations of metabolic rate and body composition

104ABCD Pre-Aerobics ½-1 Unit
CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 1½-3 hours per week
Provides instruction in the basic skills and techniques to pre-aerobics Each course is designed to improve physical fitness.

AEROBIC EXERCISE TO MUSIC

UC*, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 1½-3 hours per week

105A Introductory Low Impact Aerobics ½-1 Unit
105B Beginning Low Impact Aerobics ½-1 Unit
105C Intermediate Low Impact Aerobics ½-1 Unit
105D Advanced Low Impact Aerobics ½-1 Unit

BODY BUILDING

UC*, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 1½-3 hours per week

108A Introductory Body Building ½-1 Unit
108B Beginning Body Building ½-1 Unit
108C Intermediate Body Building ½-1 Unit
108D Advanced Body Building ½-1 Unit

BODY CONDITIONING

UC*, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 1½-3 hours per week

112A Introductory Body Conditioning ¼-1 Unit
112B Beginning Body Conditioning ¼-1 Unit
112C Intermediate Body Conditioning ¼-1 Unit
112D Advanced Body Conditioning ¼-1 Unit

114ABCD Conditioning for skiing ½-1 Unit
CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 1½-3 hours per week
Conditioning specifically designed to enhance skiing performance, with special training in endurance and strength. Exercise programs are used to maximize leg strength, hand and leg coordination, mobility, endurance, and flexibility.

BOWLING

UC*, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 11/2-3 hours per week

116A Introductory Bowling ½-1 Unit
116B Beginning Bowling ½-1 Unit
116C Intermediate Bowling ½-1 Unit
116D Advanced Bowling ½-1 Unit

GOLF

UC*, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 1½-3 hours per week

120A Introductory Golf ½-1 Unit
120B Beginning Golf ½-1 Unit
120C Intermediate Golf ½-1 Unit
120D Advanced Golf ½-1 Unit

**HANDBALL/
RACQUETBALL**

UC, CSU, Associate Degree Applicable
Courses must be taken in sequence.
Laboratory: 1½-3 hours per week

145A Introductory Handball/Racquetball ½-1 Unit

- 145B Beginning Handball/Racquetball $\frac{1}{2}$ -1 Unit
 145C Intermediate Handball/Racquetball $\frac{1}{2}$ -1 unit
 145D Advanced Handball/Racquetball $\frac{1}{2}$ -1 Unit

TENNIS

UC*, CSU, Associate Degree Applicable
 Courses must be taken in sequence.
 Laboratory: $1\frac{1}{2}$ -3 hours per week

- 148A Introductory Tennis $\frac{1}{2}$ -1 Unit
 148B Beginning Tennis $\frac{1}{2}$ -1 unit
 148C Intermediate Tennis $\frac{1}{2}$ -1 Unit
 148D Advanced Tennis $\frac{1}{2}$ -1 unit

TEAM ACTIVITIES

UC*, CSU, Associate Degree Applicable

- 130ABCD Team Sports $\frac{1}{2}$ -1 Unit
 (Co-Ed)
 Prerequisite: None. Courses must be taken in sequence.
 Laboratory: $1\frac{1}{2}$ -3 hours per week
 (Specific sport announced in class schedule.)

PERSONAL ACTIVITIES

- 262 Body Conditioning and Nutrition 1-3 Units

UC*, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 1 hour per week and/or

Laboratory: 2-6 hours per week

Conditioning for strength, flexibility, and endurance, as well as lectures on nutrition. Co-ed class.

- 263 Nutrition and Health 3 Units

UC*, CSU, Associate Degree Applicable
 Prerequisite: None.

Lecture: 3 hours per week

Introduction to nutrition and health covering topics ranging from the basic nutrients, health behavior change, lifestyle contributions to modern disease and nutritional requirements and physiological responses to exercise.

- 264 Health Testing Lab 2-3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 2 hours per week and

Laboratory: 1-4 hours per week

Instruction in the purpose, functions and mechanics of testing in the health evaluation laboratory. After competence is demonstrated, lab experience will comprise the remainder of the course. Students will become technicians and will play a role in the health education of clients.

PHYSICS

- 100 Introduction to Physics 4 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Introduction to the ideas concepts, and theories of physics; a nonmathematical course.

- 106 The Mechanical Universe, an Introduction to Physics 3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: Elementary Algebra

Lecture: 3 hours per week

Introduction to the concepts, techniques and historical development of physics, using algebra Topics covered include the laws of motion, energy, momentum, forces, rotation, and thermodynamics.

- 107 The Mechanical Universe Laboratory 1 Unit

UC*, CSU Associate Degree Applicable

Prerequisite: Elementary Algebra

Corequisite: Physics 106

Laboratory: 3 hours per week

Laboratory course to accompany Physics 106. The student will conduct experiments in motion forces, momentum energy, rotation, and thermodynamics.

- 108AB Physics in the Classroom 3 Units

CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 3 hours per week

Laboratory: 1 hour per week

Overview of physics including mechanics, energy, heat, sound, light electricity, and the structure of matter, with particular emphasis on the use of physics in the classroom. This course is designed to introduce teachers and others interested in education to physics and to provide insight on ways to use physics in the classroom in elementary and junior high schools.

110-111 General Physics 4 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: High school Physics or Physics 100 or Physics 108AB and intermediate algebra and trigonometry. Courses must be taken in sequence.
 Lecture: 3 hours per week
 Laboratory: 3 hours per week

Introduction to mechanics, heat waves, optics, electricity, and atomic and nuclear physics.

200-201 Physics 5 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: High school Physics or Physics 100. Courses must be taken in sequence.
 Prerequisite or Corequisite: For 200, Math 152; for 201, Math 251

Lecture: 4 hours per week
 Laboratory: 3 hours per week

Study of physics, including mechanics, conservation laws, fluids, thermodynamics, wave motion, optics, electricity, magnetism, Maxwell's Equations, relativity, vector analysis, quantum theory, structure of atoms, nuclei, molecules and solids.

246AB Special Problems in Physics 1 Unit

247AB 2 Units
 UC*, CSU, Associate Degree Applicable
 Prerequisite: One semester of college physics.
 Laboratory: 3-6 hours per week

Laboratory projects designed for students with a special interest in physics.

POLITICAL SCIENCE

100 American Politics 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Examination and analysis of the basic structures of the government of the United States (national, state, and local) and the major issues, both foreign and domestic, that confront the American body politic. Course designed to meet the state requirement in United States and California constitution and government.

101 Contemporary Political Issues 3 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: None.
 Lecture: 3 hours per week

Introduction to political studies through an examination and analysis of basic questions and problems dealing with contemporary political life, including such main topics as government, authority, power, law, right, war, revolution, racial and class conflict and contemporary issues

of public policy. Designed to meet the state requirement in United States and California constitution government.

PSYCHOLOGY

055 Orientation and Career/Life Planning 1 Unit
 Associate Degree Applicable
 Prerequisite: None.
 Lecture: 1 hour per week

Orientation to the philosophy, regulations, and services at Crafton Hills College, in order to assist students in understanding the scope and function of community college education. Also includes interest, aptitude, and work values and exercises, designed to prepare students to assume the responsibility for their educational and career/life planning. Required of students entering college for the first time.

065 Self-Confidence for Successful Achievement 1-3 Units
 Associate Degree Applicable
 Prerequisite: None.

Lecture: 1-3 hours per week

Examination of the thinking habits involved in common anxiety-causing situations and some alternative thought patterns which can lead to increasing self-understanding and self-confidence. Study of specific techniques for achieving academic success in the postsecondary educational environment

080 Math Without Fear ½ Unit
 Associate Degree Applicable
 Prerequisite: None.
 Lecture: ½ hour per week
 Laboratory: ½ hour per week

Examination of the problem of math anxiety. This is a course for students at any level of mathematics who have avoided the subject or have developed a fear of mathematics. A variety of appropriate mathematical and psychological topics will be discussed through individual, small group, and large group activities. This class is not a review course in mathematics. It is designed to help students, in a non-intimidating environment, to recognize, understand, and deal with the fear of mathematics.

090ABCD Selected Topics in Applied Psychology 1-3 Units
 Associate Degree Applicable
 Prerequisite: None.
 Lecture: 1-3 hours per week

Examination of selected topics of special interest to students in the field of applied psychology. Specific topics will be announced in the class schedule when this course is taught

100 General Psychology 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Survey of the nature and scope of psychology as a science, including the principles of perception, thinking, learning, personality, emotion, motivation, and psychological testing, and covering the essential features of the biological and neurological bases of behavior.

101 Experimental Psychology 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Advanced study of the principles of general psychology, emphasizing the experimental method and the psychological bases of behavior.

102 Humanistic Psychology 3 Units
CSU, Associate Degree Applicable
Prerequisite: Psychology 100 or equivalent
Lecture: 3 hours per week

Human-centered approach to the study of general psychology, with primary emphasis upon the whole person and selected topics such as creativity, self-actualization, growth love, loneliness, and being.

103 Psychology of Personality 3 Units
UC, USC, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Study of the factors that contribute to the development of personality, in order to help the individual better understand his own behavior as well as the behavior of others.

110 Abnormal Psychology 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Survey of the field of mental and emotional disturbances, emphasizing causes and types of disorders. Special attention is paid to the variety of suffering in our culture and the issues raised over classification of normal and abnormal behavior.

112 Child and Adolescent Psychology 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Survey of the psychological development of the normal individual from infancy through adolescence, emphasizing critical areas of adolescent behavior.

116 Psychology of Sex Roles 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Study of both traditional theories regarding sex roles and modern research results in the field of sex differences.

118 Human Sexual Behavior 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Study of selected factors in human sexual behavior. Emphasis on psychology of sex Analysis of assumptions and attitudes toward human sexuality.

119AB Selected Topics in Psychology 3 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Examination of selected of selected topics of special interest to students in the field of psychology, on an occasional basis. Specific topics will be announced in the class schedule when this course is taught

132 Interviewing and Counseling Techniques 3 Units
CSU, Associate Degree Applicable
Prerequisite: Psychology 100.
Lecture: 3 hours per week

Methods of interviewing and counseling for the student preparing for public service agency employment.

133 Group Dynamic3 3 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Psychology 100
Lecture: 3 hours per week

Examination of membership in and leadership of various kinds of groups, emphasizing factors involved in problems of communication, effective emotional responses, personal growth within groups, and the group process as a whole.

246AB Special Problems in Psychology 1 Unit

247AB 2 Units
UC*, CSU, Associate Degree Applicable
Prerequisite: Completion of or concurrent enrollment in a Psychology course.
Laboratory: 3 hours per week per unit

Independent projects for students with a special interest in psychology, involving assigned readings, research and conferences.

RADIOLOGIC TECHNOLOGY

100 Introduction to Radiologic Technology ¾ Unit

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program.

Corequisites: Radiology 101, 102, 103, 104, 105, 106, 115A.

Lecture: 12 hours per semester

Introduction to the general structure of medicine specifically applicable to radiologic technology; departmental administration, office procedures, radiation protection, equipment care, and basic medical techniques.

101 Medical Ethics for the Radiologist ½ Unit

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 102, 103, 104, 105, 106, 115A.

Lecture: 8 hours per semester

Study and practice of professional ethics relative to radiologic technology; emphasis on personal appearance, attitudes, hygiene, and the code of ethics for radiologic technologists.

102 Radiographic Medical Technology 1½ Units

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 101, 103, 104, 105, 106, 115A.

Lecture: 24 hours per semester

Introduction to the written and spoken language of medicine, including the elements of medical terminology, terms abbreviations, spelling, pronunciation and interpreting radiographic requests written in medical phraseology.

103 Radiographic Positioning I 1½ Units

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 101, 102, 104, 105, 106, 115A.

Lecture: 24 hours per semester

Study of various anatomical positions necessary to demonstrate specific anatomical parts for diagnostic evaluation; emphasis on chest, abdomen, upper and lower extremities and shoulder girdle.

104 Radiologic Physics I 1½ Units

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology Program.

Corequisites: Radiology 100, 101, 102, 103, 105, 106, 115A.

Lecture: 24 hours per semester

Study of basic radiologic physics including units of measurement, energy, matter, atomic structure, magnetism and other concepts related to the production and control of high voltage.

105 Radiographic Anatomy/Physiology I 1½ Units

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 101, 102, 103, 104, 106, 115A.

Lecture: 24 hours per semester

Study of basic human anatomy and physiology pertinent to Radiology.

106 Radiographic Positioning Lab I ½ Unit

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 101, 102, 103, 104, 105, 115A.

Laboratory: 24 hours per semester

Practice in positioning various anatomical parts for specific radiographic examinations.

107 Basic Radiologic Medical Techniques 1½ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 108, 109, 110, 111, 112, 113, 114, 115B.

Lecture: 22 hours per semester

Study of basic nursing techniques and methods of patient care for Radiologic Technologists.

108 Radiation Protection I 1¼ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 109, 110, 111, 112, 113, 114, 115B.

Lecture: 22 hours per semester

Study of the basic principles and application of radiation protection, physics, and radiation monitoring devices.

109 Radiologic Physics II 1¼ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 110, 111, 112, 113, 114, 115B.

Lecture: 22 hours per semester

Study of the production of X-rays, multiple energy transformation required for radiation production, the mechanics of interaction with matter, X-ray tubes, rectifiers, X-ray circuits, and the history of X-ray tubes.

110 Radiographic Exposure I 1¼ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 109, 111, 112, 113, 114, 115A.

Lecture: 22 hours per semester

Study of the fundamentals of radiographic exposure techniques, image formation, and technical conversions pertaining to radiography.

111 Radiographic Film Critique I 1¼ Units

Associate Degree Applicable

Prerequisite: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 109, 110, 112, 113, 114, 115B.

Lecture: 22 hours per semester

Introduction to analyzing radiographic examinations with emphasis on improving film quality and using proper identification labels.

112 Radiographic Positioning II 1¼ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 109, 110, 111, 113, 114, 115B.

Lecture: 22 hours per semester

Study and demonstration of various anatomical positions necessary to demonstrate specific anatomical parts for diagnostic evaluation; emphasis on pelvic structures and vertebral column.

113 Radiographic Anatomy/
Physiology II 1¼ Units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology, 107, 108, 109, 110, 111, 112, 114, 115B.

Lecture: 22 hours per semester

Study of human anatomy and physiology pertinent to radiology.

114 Radiographic Positioning Lab II ½ Unit

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 115B.

Laboratory: 24 hours per semester

Practice of positioning anatomical parts for specific radiographic examinations.

115A Radiographic Clinic I 11¼ Units

Associate Degree Applicable

Prerequisite: Must be preselected into the X-Ray Technology program

Corequisites: Radiology 100, 101, 102, 103, 104, 105, 106.

Clinic: 900 hours per semester

Observation and supervised clinical experience; emphasis on the development of primary basic skills in radiologic technology.

115B Radiographic Clinic II 10½ units

Associate Degree Applicable

Prerequisites: Radiology 100, 101, 102, 103, 104, 105, 106, 115A.

Corequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114.

Clinic: 840 hours per semester

Practice and development of basic radiographic skills within a hospital environment

200 Radiation Protection II 1½ Units

Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 201, 202, 203, 204, 205, 206, 213A.

Lecture: 24 hours per semester

Study of the biological effects of radiation, cell structure, ionizing radiation, and government regulations regarding its use.

201 Radiographic Exposure II 1½ Units

Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 202, 203, 204, 205, 206, 213A.

Lecture: 24 hours per semester

Study of the principles of radiographic exposure methods and procedures pertaining to radiographic technology.

202 Radiographic Film Critique II 1½ Units

Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 201, 203, 204, 205, 206, 213A.

Lecture: 24 hours per semester

Analysis of radiographic examinations with emphasis on improving each student's ability to identify anatomical structures on radiographs.

203 Radiographic Positioning III 1½ Units
Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 201, 202, 204, 205, 206, 213A.

Lecture: 24 hours per semester

Study and demonstration of various anatomical positions necessary to demonstrate specific anatomical parts for diagnostic evaluation; emphasis on the thorax and cranium.

204 Radiographic Anatomy/Physiology III 1½ Units
Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 201, 202, 203, 205, 206, 213A.

Lecture: 24 hours per semester

Study of human anatomy and physiology pertinent to radiology.

205 Radiographic Exposure Lab ½ Unit
Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 201, 202, 203, 204, 206, 213A.

Laboratory: 24 hours per semester

Demonstration and experiments pertaining to the fundamentals of exposure techniques, image formation and technical conversations; demonstration of photographic and geometric properties of radiographic quality.

206 Radiologic Physics Lab ½ Unit
Associate Degree Applicable

Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.

Corequisites: Radiology 200, 201, 202, 203, 204, 205, 213A.

Laboratory: 24 hours per semester

Demonstration and experiments pertaining to the fundamentals of radiographic physics and X-ray production and control

207 Radiographic Imaging 1¼ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 208, 209, 210, 211, 212, 213B.

Lecture: 22 hours per semester

Study of the history and principles of radiology including nuclear medicine, clinical ultra-sonography, tomography, radiation therapy, computer tomography, and other imaging modalities

208 Registry Review Test in Radiology 2¾ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 207, 209, 210, 211, 212, 213B.

Lecture: 44 hours per semester

Review and testing of all Radiologic Technology classes in preparation for board examination.

209 Radiographic Film Critique III - Pathology 1¼ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 207, 208, 210, 211, 212, 213B.

Lecture: 22 hours per semester

Study of disease, basic concepts of pathology, pathological conditions of the body and their impact on the radiographic process.

210 Radiographic Positioning N 1¼ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 207, 208, 209, 211, 212, 213B.

Lecture: 22 hours per semester

Study and demonstration of various anatomical positions necessary to demonstrate specific anatomical parts for diagnostic evaluations; emphasis on osseous structures of the face; genitourinary and gastrointestinal systems.

211 Radiographic Anatomy/Physiology N 1¼ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 207, 208, 209, 210, 212, 213B.

Lecture: 22 hours per semester.

Advanced study and review of human anatomy and physiology pertinent to radiology.

212 Special Procedures in Radiology 1¼ Units
Associate Degree Applicable

Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.

Corequisites: Radiology 207, 208, 209, 210, 211, 213B.

Lecture: 22 hours per semester.

Study of the fundamentals of angiography and the special procedures, equipment, positioning and techniques involved in producing diagnostic radiographs.

213A Radiographic Clinic III 10¾ Units
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 202, 203, 204, 205, 206.
Clinic: 872 hours per semester
Advanced clinical experience; emphasis on further development of skills in radiologic technology.

213B Radiographic Clinic IV 11 Units
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 206, 213A.
Corequisites: Radiology 207, 208, 209, 210, 211, 212.
Clinic: 884 hours per semester
Advanced clinical experience; emphasis on perfecting learned skills and techniques of radiography.

READING AND STUDY SKILLS

060ABCD Study Techniques ¼ unit
Not Applicable to the Associate Degree
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 12 hours per semester
Participation in individually planned programs designed to help students master basic learning skills necessary for successful achievement in college classes. Also designed to prepare advanced students to become effective peer tutors (A student may receive a maximum of 12 units of credit for any combination of Reading and Study Skills courses.)

O61ABCD Study Techniques ½ Unit
Not applicable to the Associate Degree
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 24 hours per semester
(See description under 060ABCD.)

062ABCD Study Techniques 1 Unit
Not Applicable to the Associate Degree
Prerequisite: None. Courses must be taken in sequence.
Lecture: 48 hours (Summer Session only) (3 Units)
Laboratory: 48 hours Fall and Spring semesters
(See description under 060ABCD.)

063ABCD Study Techniques 2 Units
Not Applicable to the Associate Degree

Prerequisite: None. Courses must be taken in sequence.
Laboratory: 96 hours per semester
(See description under 060ABCD.)

064ABCD Study Techniques 3 Units
Not Applicable to the Associate Degree
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 144 hours per semester
(See description under 060ABCD.)

075ABCD Developmental Reading 1 Unit
Not Applicable to the Associate Degree
Prerequisite: None. Courses must be taken in sequence.
Laboratory: 48 hours per semester
Supervision of assigned activities closely coordinated to ensure maximum improvement in reading comprehension

076 Developmental Reading 2 Units
Not Applicable to the Associate Degree
Prerequisite: None.
Laboratory: 96 hours per semester
(See description under 075ABCD.)

077 Developmental Reading 3 units
Not Applicable to the Associate Degree
Prerequisite: None.
Laboratory: 144 hours per semester
(See description under 075ABCD.)

079ABCD Developmental Reading 3 Units
Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.
Lecture: 48 hours per semester
Development of college reading skills—retention, comprehension, and vocabulary development - utilizing individualized and/or small-group instruction. based on the student's score on the Nelson-Denny Reading Test. (A student may receive a maximum of twelve units of credit for courses in Reading and Study Skills.

090 College Reading Improvement 1-3 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week or
Laboratory: 3-9 hours per week
Improvement of college level reading skills including increased reading rate, increased comprehension, and improved vocabulary. Students will learn to apply critical reading skills to college material

091 College Study Skills 1-3 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week or
Laboratory: 3-9 hours per week
Instruction in the skills of listening notetaking class preparation and participation, organizing and analyzing textbook material, and using the library. Provides methods for the improvement of concentration, memory and test-taking

REAL ESTATE

001 Real Estate Re-License 3 Units
Not Applicable to the Associate Degree
Prerequisite: None.
Lecture: 3 hours per week
Preparation for the Real Estate Salesman License examinations given weekly by the California Department of Real Estate and covering legal procedures, California real estate law, listing and deposit receipts, appraising, financing taxation and mathematics of real estate.

002 Broker's License Review 3 Units
Not Applicable to the Associate Degree
Prerequisite; Salesman's License or equivalent
Lecture: 3 hours per week
Review of legal procedure, law, contracts, appraising financing, taxation, business practices, syndication subdivision, and Liens. Designed for individuals who qualify to take the California Real Estate Broker's examination. A multitude of review test questions will be studied

005 License Examination Preparation 3 Units
Associate Degree Applicable
Prerequisite: Real Estate 100 recommended.
Lecture: 3 hours per week
Review of the fundamentals, basic laws, and principles of California real estate, with emphasis on successful examination techniques. The course will be of assistance to those preparing for the Real Estate sales license examination.

085-092ABCD Selected Topics in Real Estate ^{1/8} -4 Units
Associate Degree Applicable
Prerequisite: None.
Lecture: ^{1/8} -4 hours per week
Study of the basic laws and principles of California real estate; gives understanding, background, and terminology necessary for advanced study in specialized courses. Will be of assistance to those preparing for the Real Estate sale license examination.

100 Real Estate Principles 3 Units
CSU, Associate Degree Applicable
Lecture: 3 hours per week
Study of the basic laws and principles of California real estate; gives understanding background, and terminology necessary for advanced study in specialized courses. Will be of assistance to those preparing for the Real Estate sales license examination.

200 Real Estate Practice 3 Units
CSU, Associate Degree Applicable
Prerequisite: Real Estate 100 or Real Estate License.
Lecture: 3 hours per week
Day-to-day operations in real estate, overview of brokerage procedures and the various roles of the employee. Mandatory prerequisite to Real Estate Broker's examination

205 Real Estate Appraisal: Residential 3 Units
CSU, Associate Degree Applicable
Prerequisite: Real Estate 100 or Real Estate License.
Lecture: 3 hours per week
Purposes of appraisals, appraisal process and the different methods, approaches and techniques used to determine the value of various types of property. Mandatory prerequisite to Real Estate Broker's examination

210 Real Estate Finance 3 Units
Associate Degree Applicable
Prerequisite: Real Estate 100 or Real Estate License.
Lecture: 3 hours per week
Analysis of real estate financing including lending policies and problems in financing transactions in residential, apartment, commercial and special purpose properties, emphasizing methods of financing properties. Mandatory prerequisite to Real Estate Broker's examination

215 Legal Aspects of Real Estate I 3 Units
Associate Degree Applicable
Prerequisite: Real Estate 100 or Real Estate License.
Lecture: 3 hours per week
Study of California real estate law, with emphasis on its application in the real estate brokerage and related fields Mandatory prerequisite to the Real Estate Broker's examination.

230 Real Estate Economics 3 Units
Associate Degree Applicable
Prerequisite: Real Estate 100 and 200; Real Estate License.

Lecture: 3 hours per week

Intensive study of factors which influence changes in real estate values as an aid to brokers and sales personnel

RELIGIOUS STUDIES

100 Introduction to Religious Studies

3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to religious beliefs, practices, and organizations, with an emphasis on myths, rituals, symbols, and beliefs concerning God, evil, and human destiny.

101 Introduction to World Religions

3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Origins, beliefs, practices, historical development, and contemporary concerns of the major world religions, with particular attention to the Hindu, Buddhist, Taoist, Confucian, Judaic, Christian, and Islamic traditions.

135 Religion in America

3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the principal figures, groups, issues, and trends in religion from colonial times to the present, covering such topics as the Puritans, the growth of religious liberty in America, religion and social protest, the Black religious experience, Catholic-Protestant-Jew, and contemporary religious phenomena (Also listed as History 135.)

175 Literature and Religion of the Bible

3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: English 101.

Lecture: 3 hours per week

Study of the English Bible as literature and as religion including an examination of the types of literature found in the Bible, the historical and religious context in which the literature was developed, and an extensive reading of the two testaments. (Also listed as English 175.)

246ABC Special Problems in Religious Studies

1 Unit

247ABC

2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite or Corequisite: Any course in Religious Studies.

Laboratory: 3 hours per week per unit

Independent projects for students with a special interest in religious studies, involving assigned readings, research, and conferences.

RESPIRATORY CARE

050 Introduction to Respiratory Care

2 Units

Associate Degree Applicable

Prerequisite: Acceptance into Respiratory Therapy program.

Lecture: 32 hours per semester

Orientation to the field of Respiratory Care; introduction to the professional organizations, and the regulatory policies that govern the practice of respiratory care.

101 Fundamentals of Respiratory Care I

4 Units

Associate Degree Applicable

Prerequisites: Resp 050, Anat 101.

Corequisites: Resp 102, 103, 104.

Lecture: 4 hours per week

Study of the regulations for medical gases; introduction to basic respiratory physiology and various treatment modalities.

102 Fundamentals of Respiratory Care

Skills I

11 Units

Associate Degree Applicable

Prerequisites: Resp 050, Anat 101.

Corequisites: Resp 101, 103, 104.

Lecture: 132 hours per semester and

Laboratory: 132 hours per semester

Practical skills for Respiratory Care at a basic level, including oxygen and other medical gas handling and delivery modalities, humidification, application, hyper-inflation therapy devices and airway management and other basic pre-clinical skills simulations.

103 Pulmonary Medical Terminology

3 Units

Associate Degree Applicable

Prerequisite: Resp 050.

Corequisites: Resp 101, 102, 104.

Lecture: 3 hours per week

Introduction to general medical terminology, followed by an intense study of terms specific to pulmonary medicine.

104 Respiratory Care Clinical Application I 4 Units

Associate Degree Applicable

Prerequisites: Resp 050, Anat 101.

Corequisites: Resp 101, 102, 103.

Lecture: 25 hours per semester and

Clinic: 175 hours per semester

Clinical application of skills learned in the lab and theory classes. The course will follow level I part A in the clinical syllabus.

105 Fundamentals of Respiratory Care II 4 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, with a grade of "C" or better.

Corrquisites: Resp 106, 108, 110.

Lecture: 4 hours per week

Theory of compressed gases, gas laws and other physical principles; regulators and flow meters, methods of administering oxygen and other medical gases, humidification and aerosol modalities and hyper-inflation equipment procedures, basics of controlled mechanical ventilation and airway care and other critical care modalities.

106 Fundamentals of Respiratory Care Skills II 5 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, with a grade of "C" or better.

Corequisites: Resp 105, 108, 110.

Lecture: 4 hours per week

Laboratory: 4 hours per week

Practice of laboratory skills for completion of clinical stimulation demonstrations such as blood gas medicine maintenance and operation, advanced hyper-inflation therapy skills, continuous mechanical ventilation skills, and advanced critical care skills.

108 Respiratory Care Clinical Application II 5½ Units

Prerequisites: Completion of Resp 101, 102, 103, 104, with a grade of "C" or better.

Corequisites: Resp 105, 106, 110.

Lecture: 36 hours per semester and

Clinic: 252 hours per semester

Clinical application of skills required in the second skills laboratory (106) and the second semester of Respiratory Care Theory (105). This course will follow level I part B in the clinical syllabus.

110 Clinical Medicine I 2 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, with a grade of "C" or better.

Corequisites: Resp 105, 106, 108.

Lecture: 2 hours per week

Study of clinical medicine, using local physicians to present respiratory-related disease processes. This class uses a combination of lecture and case presentation to provide a pathophysiological basis for respiratory care.

115ABCD Respiratory Care: Supervision and In-Service Training 1 Unit

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 12 hours per semester

Laboratory: 20 hours per semester

In-service training for Respiratory Therapists in the areas of supervision of students in the clinic facilities and current topics of interest in the field of Respiratory Therapy.

201 Advanced Theory of Respiratory Care I 4 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110 with a grade of "C" or better.

Corequisites: Resp 202, 203, 204, 205.

Lecture: 4 hours per week

Advanced theory and procedures in the areas of oxygen administration, humidity of aerosol therapies, airway management, department organization and management, medical legal aspects of Respiratory Care, and respiratory rehabilitation/home care.

202 Advanced Respiratory Care Skills Lab I 4 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110 with a grade of "C" or better.

Corequisites: Resp 201, 203, 204, 205.

Lecture: 2 hours per week

Laboratory: 6 hours per week

Advanced laboratory procedures that follow the clinical syllabus outlines for level II parts A and B, including pulmonary function, neonatal and pediatric care, advanced mechanical ventilation techniques and weaning procedures, Swan-Ganz and other arterial monitoring devices, cardiopulmonary stress and metabolic measurements

203 Physiologic Basis of Respiratory Disease I 5 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 104, 105, 106, 108, 110, with a grade of "C" or better.

Corequisites: Resp 201, 202, 204, 205.

Lecture: 5 hours per week

Presentation of applied cardiopulmonary, renal and neuro pathophysiology related to the diagnosis and treatment of diseases the therapist will encounter in the clinical setting; use of the case history approach wherever possible in an effort to assist in preparation for National Board Examinations.

204 Advanced Respiratory Care Clinical Application I 6 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110 with a grade of "C" or better.

Corequisites: Resp 201, 202, 203, 205.

Lecture: 40 hours per semester

Clinic: 240 hours per semester

Practice of advanced clinical skills: clinical syllabus, level II, part A.

205 Introduction to Pharmacology and Drug Therapy 3 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110 with a grade of C or better.

Corequisites: Resp 201, 202, 203, 204.

Lecture: 3 hours per week

Study of the administration of medication and drug therapy in respiratory treatment; discussion of drugs with their actions and interactions; introduction to basic drug mathematics and posology.

206 Advanced Theory Respiratory Care II 4 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110, 201-205 with a grade of "C" or better.

Corequisites: Resp 207, 208, 211, 212.

Lecture: 4 hours per week

Advanced theory and procedures in the areas of neonatal and pediatric care, pulmonary function application, advanced critical care management and patient assessment techniques.

207 Physiologic Basis of Respiratory Disease II 5 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110, 201-205 with a grade of "C" or better.

Corequisites: Resp 206, 208, 211 and 212.

Lecture: 5 hours per week

Further presentation of applied cardiopulmonary, renal and neuro pathophysiology related to the diagnosis and treatment of diseases the therapist will encounter in the clinical setting; use of the case history approach wherever possible in an effort to assist in preparation of National Board Examinations.

208 Advanced Respiratory Care Clinical Application II 5½ Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110, 201-205 with a grade of "C" or better.

Corequisites: Resp 206, 207, 211, 212.

Lecture: 36 hours per semester

Clinic: 252 hours per semester

Practice of advanced clinical skills, including pulmonary function and stress lab procedures; clinical syllabus level H, part B.

211 Clinical Medicine II 2 Units

Associate Degree Applicable

Prerequisites: Completion of Resp 101, 102, 103, 104, 105, 106, 108, 110, 201-205 with a grade of "C" or better.

Corequisites: Resp 206, 207, 208.

Lecture: 2 hours per week

Case history approach to advanced clinical medicine in respiratory-related decision processes.

212 Care of the High Risk Neonate 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 1-3 hours per week

Instruction in provision of intensive neonatal respiratory care. A special focus of this class is understanding the extent to which morbidity and mortality rates for the extremely premature VLBW neonate can be improved

215ABCD Entry Level Examination: Review and Seminar 1-3 Units

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 1-3 hours per week

Preparation for the National Board for Respiratory Care's (NBRC) Entry Level Examination; discussion of examination structure and content

and review of sample NBRC test questions; self evaluation pre-tests and post-tests will be key features.

216ABCD Advanced Practitioner Written

Examination: Review and Seminar 1-3 Units
Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 1-3 hours per week

Preparation of Respiratory Care Practitioners for the Written Registry Examination; discussion of the structure of the examination; practice sessions, including self-evaluation tests designed by the NBRC.

217ABCD Clinical Simulation Review

2 Units

Not Applicable to the Associate Degree

Prerequisite: None.

Laboratory: 4 hours per week

Preparation of Respiratory Care Practitioners for all three NBRC examinations; extensive coverage of the Entry Level, Written Registry and Clinical Simulation exams will be presented; review of pre- and post-testing self-evaluation tests designed by the NBRC.

218 Advanced Respiratory Care Laboratory II

4 Units

Associate Degree Applicable

Prerequisites: Completion of Respiratory 101, 102, 103, 104, 105, 106, 108, 110 and 201-205 with a grade of "C" or better.

Corequisites: Respiratory 206, 207, 208, 211, 212.

Lecture: 2 hours per week

Laboratory: 6 hours per week

Improvement of skill levels based on assessment of individual student performance. Specialized instruction to strengthen identified competencies as final preparation for professional practice.

SOCIOLOGY

100 Introduction to Sociology 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Principles, concepts and theories of culture, social organization, social roles and stratification, social change, and social planning; the structure, function, pattern and process of man's social life.

105 Social Problems 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of vital current problems in American

society such as alcoholism, crime, divorce, ethnic and minority relations, population, and poverty - their probable causes, tangible effects on the social order, and possible treatment.

130 Marriage and the Family 3 Units

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of personal, marital, and familial relationships, designed to help the student understand the meaning and dynamics of interpersonal relationships as they relate to dating, courtship, preparation for marriage and the adjustments of marriage and family living.

141 Minority Relations 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of racial ethnic, and religious groups in American society, with an emphasis on the problems of acceptance and prejudice in a multi-group society.

SPANISH

101A College Spanish I (Part 1) 2½ Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 2½ hours per week

Laboratory: ½ hour per week

Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level.

101B College Spanish I (Part 2) 2½ Units

UC, CSU, Associate Degree Applicable

Prerequisite: Spanish 101A.

Lecture: 2½ hours per week

Laboratory: ½ hour per week

Continuation of Spanish 101A.

101 College Spanish I 5 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 5 hours per week

Laboratory: 1 hour per week

Comprehension, conversation, reading, and composition, including drill in essential grammar at the elementary level

102A College Spanish II (Part 1) 2½ Units

UC, CSU, Associate Degree Applicable

Prerequisite: Spanish 101B, or Spanish 101, or one year of high school Spanish.

Lecture: 2½ hours per week

Laboratory ½ hour per week

Continuation of Spanish 101.

102B College Spanish II (Part 2) 2½ Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 102A.

Lecture: 2½ hours per week

Laboratory: ½ hour per week

Continuation of Spanish 102A. (Spanish 102A-1028 is equivalent to Spanish 102.)

102 College Spanish II 5 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 101 or Spanish 101A and 101B, or one year of high school Spanish.

Lecture: 5 hours per week

Laboratory: 1 hour per week

Continuation of Spanish 101.

103A College Spanish III (Part 1) 2 Units
UC, CSU, Associate Degree Applicable

Prerequisite: Spanish 102, or Spanish 102A and 1028, or two years of high school Spanish.

Lecture: 2 hours per week

Laboratory: ½ hour per week

Composition and conversation, including a review of grammar, plus extensive and intensive reading of practical as well as literary Spanish

103B College Spanish III (Part 2) 2 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 103A.

Lecture: 2 hours per week

Laboratory: ½ hour per week

Continuation of Spanish 103A. (Spanish 103A-103B is equivalent to Spanish 103.)

103 College Spanish III 4 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 102, or Spanish 102A and 102B, or two years of high school Spanish

Lecture: 4 hours per week

Laboratory: 1 hour per week

Composition and conversation, including a review of grammar, plus extensive and intensive reading of practical as well as literary Spanish.

104A College Spanish IV (Part I) 2 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 103, or Spanish 103B, or three years of high school Spanish.

Lecture: 2 hours per week

Laboratory: ½ hour per week

Continuation of Spanish 103.

104B College Spanish IV (Part II) 2 Units
UC, CSU, Associate Degree Applicable
Prerequisite: Spanish 104A

Lecture: 2 hours per week

Laboratory: ½ hour per week

Continuation of Spanish 104A. (Spanish 104A-104B is equivalent to Spanish 104.)

104 College Spanish IV 4 Units
UC, CSU, Associate Degree Applicable

Prerequisite: Spanish 103 or three years of high school Spanish

Lecture: 4 hours per week

Laboratory: 1 hour per week

Continuation of Spanish 103.

130AB Spanish for Public Employees 3 Units
CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 3 hours per week

Study and practice in spoken Spanish, designed to meet the specific needs of public employees who need a speaking knowledge of Spanish in order to communicate with their Spanish speaking clientele. Recommended for nurses, social workers, policemen, firemen, and other public employees.

166 Selected Studies in Spanish 1-3 Units
UC*, CSU, Associate Degree Applicable

Prerequisite: Spanish 102, or Spanish 102A and 102B, or two years of high school Spanish or equivalent proficiency.

Lecture: 1-3 hours per week

Laboratory: 2 hours per week per unit of independent study.

Special studies in Spanish which allow students to concentrate on increasing their proficiency in the language and/or broadening their knowledge of Spanish civilization and culture, through a combination of independent study and meetings with the instructor.

235 Directed Reading in Spanish 2 Units
UC*, CSU, Associate Degree Applicable

Prerequisite: Spanish 104 or equivalent

Lecture: 2 hours per week

Independent reading and research under the supervision of the instructor, with conferences and oral and written reports.

236 Directed Reading in Spanish 2 Units
UC*, CSU, Associate Degree Applicable

Prerequisite: Spanish 104 or equivalent

Lecture: 2 hours per week

Independent reading and research under the supervision of the instructor, with conferences and oral and written reports.

242 Spanish Culture and Civilization 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Introduction to the major trends and characteristics of Spanish culture and civilization as reflected through the centuries in literature, art, and history. (Class is conducted in English.)

SPEECH

100 Elements of Public Speaking 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of effective organization and communication of ideas, with training in methods of developing confidence in presenting material before an audience. Practice in speech delivery techniques through giving various types of speeches to small groups and to the class as a whole.

101 Intermediate Public Speaking 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: Speech 100.

Lecture: 3 hours per week

Practice in various forms of public speaking with emphasis on audience analysis, and study-analysis of selected famous speeches.

111 ABCD Interpersonal Communication 1-3 Units

UC*. CSU, Associate Degree Applicable
Prerequisite: None. Courses must be taken in sequence.

Lecture: 1-3 hours per week

Examination of the dynamics of the communication process; accurate expression of ideas, self-concept as it relates to communication, the place of self-disclosure in the communication process, the influence of personal perception on communication, listening and feedback non-verbal communication, interviewing and assertive speech patterns. Speech activities will emphasize the development of skill in these areas through conversation in pairs and small groups, short talks, listening training and analysis of recorded speaking exercises.

120 Oral Interpretation I 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Analysis of literature for oral interpretative

reading with practice on the presentation of materials to an audience. Drill on minor voice problems as necessary.

121 Oral Interpretation II 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: Speech 120.

Lecture: 3 hours per week

History, theory, and practice of the art of oral interpretative reading. Preparation and presentation of four lecture-recital programs.

140 Elements of Group Discussion Leadership Skills I 3 Units

UC*, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Training in basic principles and techniques of discussion, including participation in panel discussions, problem-solving committees, and symposiums and skill development in agenda preparation, group leadership, and individual speaking. Emphasis on efficiency of group process and meaningful communication, as they apply to business and community group action, are stressed.

142 Advanced Group Communication 3 Units

UC*, CSU, Associate Degree Applicable
Prerequisite: Speech 140.

Lecture: 3 hours per week

Advanced training in basic principles and techniques of discussion Participation in panel discussions, problem-solving committees, and symposiums; development of skill in agenda preparation, group leadership and individual speaking. Efficient and meaningful communication, as it applies to business and community group action, is stressed.

246AB Special Studies in Communication 1 Unit

247AB 2 Units

248ABC 3 Units

UC*, CSU, Associate Degree Applicable
Prerequisite or Corequisite: Any speech course.
Laboratory: 3 hours per week per unit

Independent projects for students with a special interest in speech, involving assigned readings, research, conferences, and public speaking. Projects to be determined jointly by the student and instructor prior to registration.

SUPERVISION

010 Elements of Supervision 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the responsibilities of a supervisor in industry, such as organization, duties and responsibilities, human relations, grievances, training, rating, promotion, quality-quantity control, and management-employee relations.

013 Human Relations 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Practical application of basic psychology in building better employer-employee relationships by studying human relations techniques.

015 Organization and Management 3 Units

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Examination of the supervisor's role as planner, organizer, director, controller and coordinator; instruction in the basic functions of an organization

Offered for outstanding students in performing arts. Courses must be taken in sequence.

Lecture: 5 hours per week

Laboratory: 2 hours per week (8 week course)

Honors program offering for the superior career-oriented student performer. This eight week summer course differs from the regularly scheduled performance laboratory program in the degree of professionalism expected and the intensity of the work required

117ABCD Touring Repertory Theatre Workshop 3 Units

CSU, Associate Degree Applicable

Prerequisite: Thart 116. Courses must be taken in sequence.

Lecture: 3 hours per week

Laboratory: 6 hours per week (8 week course)

Practice in the concepts and procedures of the professionally produced touring show. Preparation and presentation of productions designed for touring.

120 Acting Fundamentals 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the Stanislavski theory of acting, with practical application in solo and ensemble scenes in the major areas of dramatic literature.

130ABCD Jazz Dance I 1-2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: ½-1 hour per week

Laboratory: 1-2 hours per week

Study of the principles of jazz and theatrical dance techniques, with emphasis on body placement, principles of kinesiology, and motor learning. In Jazz Dance II student choreography and performance are added

140-141-142-143 Theatre Workshop 3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None. Courses need not be taken in sequence.

Lecture: 3 hours per week

Laboratory: 7½ hours per week (8 week course)

Practice in the interpretation of varied roles in dramatic literature, plotting of action on stage, designing of costumes and settings for plays, and the use of make-up.

THEATRE ARTS

100 Introduction to Theatre 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the fundamental theories of the theatre arts, providing a basic background and helping students develop an appreciation of theatre production, film and television.

108-109 World Drama 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: None. Courses need not be taken in sequence.

Lecture: 3 hours per week

Survey of the masterworks of the theatre, covering great dramatic literature from the classical Greek period to the neoclassical period during the first semester and from the Restoration to the present during the second semester.

116ABCD Repertory Theatre 3 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: By audition or interview per summer.

145ABCD Advanced Theatre Workshop 3 Units

UC, CSU, Associate Degree Applicable
Prerequisite: Thart 143. Courses must be taken in sequence.

Lecture: 3 hours per week

Laboratory: 6 hours per week (8 week course)

Advanced practice in the development of a professionally mounted production, the interpretation of varied roles in dramatic literature, designing of costumes and settings for plays.

146ABCD Acting: Advanced Performance Workshops 3 Units

UC*, CSU, Associate Degree Applicable
Prerequisite: Thart 145. Courses must be taken in sequence.

Lecture: 3 hours per week

Laboratory: 6 hours per week (8 week course)

Supervised applied theory in acting singing and dancing for the stage through projects for public presentation.

150-151-152-153 Summer Theatre Workshop 2-4 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None.

Laboratory: 8-16 hours per week (8 week course)

Instruction in the areas of stage production, acting, promotion, and publicity. Designed as theatrical experience for high school graduates and college freshmen.

174ABCD Dance Production Workshop 2 Units

CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 1 hour per week

Laboratory: 2 hours per week

Instruction and practice in the development of dance as an integral part of a theatrical production.

175 Stage Make-up 1 Unit

UC*, CSU, Associate Degree Applicable

Prerequisite: None.

Laboratory: 3 hours per week

Introduction to the theories and practice of make-up through changing the appearance of the actor to correspond to an interpretation of the character.

176ABCD Fundamentals of Stagecraft 1-4 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Laboratory: 2 hours per week per unit

Basic theories and practice of construction+ painting assembly, shifting and lighting of stage scenery and properties.

179ABCD Fundamentals of Stagecraft - Advanced Practicum 2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Laboratory: 4 hours per week

Continuation of Theatre Arts 176, designed to extend the student's vocational opportunities in the theatrical profession. Emphasizes special projects in the theatre (lighting special effects, special designs), black and white photography which uses the actual theatre production as a subject exclusively. Includes camera familiarization and shooting techniques, negative and print darkroom procedures, finishing and presentation

180ABCD Ballet I 1-2 Units

UC*, CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: ½-1 hour per week and

Laboratory: 1-2 hours per week

Study of the techniques of classical ballet, including basic barre and center work, basic body and arm positions, port de bras, allegro, adagio, and development of a working knowledge of ballet terminology.

220-221 Advanced Acting 3 Units

UC, CSU, Associate Degree Applicable

Prerequisite: Thart 120. Courses must be taken in sequence.

Lecture: 3 hours per week

Theory and practice of characterization in solo and ensemble scenes.

225ABCD Character Analysis 3 Units

CSU, Associate Degree Applicable

Prerequisite: Thart 140 or equivalent. Courses must be taken in sequence.

Lecture: 3 hours per week

Study of the analytical steps involved in the development of characters preparatory to rehearsals and performances, followed by evaluation of performances and post-play discussion.

231ABCD Jazz Dance II 1-2 Units
 UC, CSU, Associate Degree Applicable
 Prerequisite: Thart 130. Courses must be taken
 in sequence.
 Lecfure: ½-1 hour per week and
 Laboratory: 1-2 hours per week
 Continuation of Theatre Arts 130, with student
 choreography and performance added.

WORK EXPERIENCE

099 General Work Experience 1-3 Units
 Associate Degree Applicable
 Prerequisite: None.
 Laboratory: 5-15 hours per week
 Supervised general work experience educa-
 tion to assist students in acquiring desirable work
 habits, career awareness, and job attitudes conso-
 nant with contemporary community standards.

Occupational Work Experience

Work experience education credit can be
 earned through supervised activities in each of
 the occupational disciplines. (See appropriate
 program area under entry number 098 for
 specific information)

SECTION III

TRANSFER AND ASSOCIATE DEGREE PROGRAMS

The following majors and pre-majors are available at Crafton Hills College. Majors may be used for either a transfer program or an Associate Degree program. The core courses listed under these majors are the ones recommended for transfer. Any other courses in the subject to make a total of eighteen units will meet the requirements of a major for an Associate Degree.

MAJORS

Accounting
Administration of Justice
Anatomy and Physiology
Anthropology
Art
Astronomy
Biological Sciences
Business Administration
Chemistry
Computer and Information Sciences
Economics
Emergency Medical Services
English
Fire Technology
Foreign Language

Geography
 Geology
 History
 Liberal Studies
 Marketing
 Mathematics
 Microbiology
 Music
 Office Administration (Secretarial)
 Philosophy
 Physical Education
 Physics
 Political Science
 Psychology
 Radiologic Technology
 Religious Studies
 Respiratory Care
 Sociology
 Speech
 Theatre Arts

Crafton Hills College offers the first two years of course work towards the following areas of specialization:

Pre-Chiropractic
 Pre-Dentistry
 Pre-Education
 Pre-Engineering
 Pre-Forestry
 Pre-Legal
 Pre-Medicine
 Pre-Nursing
 Pre-Optometry
 Pre-Pharmacy
 Pre-Physical Therapy
 Pre-Veterinary Medicine

NOTES TO TRANSFER STUDENTS:

1. Consult with your advisor to decide on support courses for your chosen major.
2. Consult the catalog of the college or university to which you intend to transfer to determine whether or not you need to make adjustments in specific course patterns.

3. Pay careful attention to the specific requirements of the different types of four-year institutions, as outlined in Section V of this catalog to make sure you understand the general education requirements of the institution you want to attend.

NOTES TO ASSOCIATE DEGREE STUDENTS:

1. Consult with your advisor to decide on support courses for your chosen major.
2. Consult the graduation requirements outlined in Section I of this catalog they must be completed for you to graduate from Crafton Hills College.

ACCOUNTING

Recommended Core Courses for Transfer Students:

Accounting 210, 211, 220, 221

Business Administration 210

Computer and Information Sciences 101

Economics 200, 201

Mathematics 102, 108

Recommended Core Courses for Associate Degree Students:

Accounting 205, 210, 220, 225, 230

Business Administration 053, 100, 105, 210

Computer and Information Sciences 101

Economics 200, 201

Office Administration 100

ADMINISTRATION OF JUSTICE

Recommended Core Courses:

Administration of Justice 101, 102, 103, 104, 105

ANATOMY/PHYSIOLOGY

Recommended Core Courses:

Allied Health 101

Anatomy/Physiology 150, 151

Chemistry 101

Microbiology 150

ANTHROPOLOGY

Recommended Core Courses:

Anthropology 100, 102, 106

Geography 110

Sociology 100

ART

Recommended Core Courses:

Art 100, 102, 120A, 120B, 124A

ASTRONOMY

Recommended Core Courses:

Astronomy 150

Chemistry 150, 151

Mathematics 152, 251, 252, 254

Physics 200, 201

BIOLOGICAL SCIENCES

Recommended Core Courses:

Biology 130, 131

Chemistry 150, 151, 212, 213

Mathematics 103, 108, 152

Physics 110, 111

BUSINESS ADMINISTRATION

This major includes a variety of concentrations, including Accounting, Business Data Processing, Finance, Insurance and Real Estate, Hotel and Restaurant Management, and Marketing.

Recommended Core Courses:

Accounting 210, 211, 220, 221

Business Administration 210

Computer and Information Sciences 101

Economics 200, 201

Mathematics 102, 108

CHEMISTRY

Recommended Core Courses:

Chemistry 150, 151, 212, 213

Mathematics 152, 251, 252

Physics 200, 201

COMPUTER AND INFORMATION SCIENCES

Recommended Core Courses:

Computer and Information Science 101, 102, 104, 106, 110, 200, 201, 230, 240, 250

ECONOMICS

Recommended Core Courses:

Accounting 210, 211, 220, 221

Economics 200, 201

Mathematics 108, 140

Philosophy 103

EMERGENCY MEDICAL SERVICES

Consult your advisor to develop an appropriate course of study.

ENGLISH

Recommended Core Courses:

English 101, 152, 260, 261, 270, 271

Foreign Language*

*Varies from college of college; consult appropriate college catalog.

FIRE TECHNOLOGY

Consult your advisor to develop an appropriate course of study; majors available in Fire Protection Engineering, Fire Technology, and Wildland Fire Science.

FOREIGN LANGUAGE

Recommended Core Courses:

English 101, 152

Foreign Language 101, 102, 103, 104

Second Foreign Language 101, 102

GEOGRAPHY

Recommended Core Courses:

Geography 102, 110, 114

Geology 100

Oceanography 101

Mathematics 103

GEOLOGY

Recommended Core Courses:

Chemistry 150, 151

Geography 110

Geology 100, 112, 250 or 251

Mathematics 152, 251

Physics 110, 111

HISTORY

Recommended Core Courses:

Geography 100

History 100, 101, 160, 161

Political Science 100

LIBERAL STUDIES

This general education curriculum is suggested for students who have not yet selected a particular major field. This major field is planned to complete general education requirements at many four-year colleges and also fulfills graduation requirements for the Associate Degree. This program is also designed to fulfill requirements for the multiple subjects credential for elementary school teaching

Recommended Core Courses:

Communication/Critical Thinking (9 units)

Physical and Life Science/Mathematics (12 units)

Arts/Literature/Philosophy/Foreign Language (12 units)

Social, Political and Economic Institutions (12 units)

Lifelong Understanding and Self-Development (3 units)

MARKETING

Recommended Core Courses for Transfer Students:

Accounting 210, 211, 220, 221

Business Administration 210

Computer and Information Sciences 101

Economics 200, 201

Mathematics 102, 108

Recommended Core Courses for Associate Degree Students:

Accounting 205, 210, 211, 220, 221

Business Administration 053, 100, 210

Computer and Information Sciences 101

Marketing 100, 105, 110

Speech 100, 101

MATHEMATICS

Recommended Core Courses:

Computer and Information Sciences 102, 104

Foreign Language*

Mathematics 152, 251, 252, 254

Physics 200, 201

*Varies from college to college; consult appropriate college catalog.

MICROBIOLOGY

Recommended Core Courses:

Biology 130, 131

Chemistry 150, 151, 212, 213

Mathematics 152

Microbiology 150

Physics 110, 111

MUSIC

In addition to the courses below, proficiency in piano is essential to enter a four-year program at the junior level. Continuous enrollment in a performance group is recommended. Check the catalog of the school to which you intend to transfer for specific requirements.

Recommended Core Courses:

Music 101-102, 120, 201-202 (recommended for the second year of study), and 135-136 (may be waived in part or whole by examination), and a performance group.

OFFICE ADMINISTRATION

Recommended Core Courses:

Office Administration 100, 101, 102, 110, 120, 121, 122, 144, 145, 146

PHILOSOPHY

Recommended Core Courses:

Philosophy 101, 103, 105

Religious Studies 101

PHYSICAL EDUCATION

Recommended Core Courses:

Anatomy/Physiology 150 and 151

Biology 100

EMS 010

Health Education 102

Physical Education 263

Psychology 100

Sociology 100

Minimum of one activities course per semester.

PHYSICS

Recommended Core Courses:

Chemistry 150, 151

Mathematics 152, 251, 252, 254

Physics 200, 201

POLITICAL SCIENCE

Recommended Core Courses:

Economics 200, 201

History 100, 101

Political Science 100

PRE-CHIROPRACTIC

Recommended Core Courses:

Anatomy/Physiology 150, 151

Biology 130

Chemistry 150, 151, 212, 213

English 101

Physics 110, 111

Psychology 100

Speech 100

PRE-DENTISTRY

Recommended Core Courses:

Biology 130, 131

Chemistry 150, 151, 212, 213

Physics 110, 111

PRE-EDUCATION

This program is designed for those who are interested in teaching in the California public schools. The Teachers Preparation and Licensing Act requires that teachers demonstrate their subject matter competency by either passing an examination or completing their work in a Commission-approved "waiver degree program." Additionally, all credential candidates must pass the California Basic Education Skills Test (CBEST). At present, there are four basic teaching credentials:

1. Single Subject instruction.
2. Multiple Subject instruction.
3. Specialist and Services Programs.
4. Designated Subjects instruction.

For additional information, students should check with the Counseling Center.

ELEMENTARY

Persons interested in teaching in the elementary schools should pursue the Multiple Subjects credential which authorizes the holder to teach in any self-contained classroom - classrooms in which one teacher is responsible for teaching all subjects commonly taught in the elementary schools.

In addition to the general education and lower division requirements for transfer, the following electives are recommended

Art 120A, 120B

English 260, 261

Health Education 102
 Sociology 141
 Mathematics 102
 Music 100
 Sociology 105

SECONDARY

Persons interested in teaching at the secondary level should pursue the Single Subject credential with a specific major. Additional coursework or examinations are required in order to add subjects to the basic credential.

In addition to the general education and lower division requirements for transfer, the following electives are recommended:

Anthropology 102
 Economics 201
 Health Education 102
 Psychology 112
 Sociology 100, 105

PRE-ENGINEERING

Recommended Core Courses:

Chemistry 150,151
 Computer and Information Sciences 102, 104
 Economics 201
 Mathematics 152, 251, 252, 254
 Physics 200, 201

PRE-FORESTRY

Recommended Core Courses:

Biology 130,131
 Chemistry 150, 151
 Computer and Information Sciences 102
 Economics 200,201
 Geology 100
 Mathematics 108, 152
 Physics 110, 111

PRE-LEGAL

Law schools do not prescribe a definite Pre-Legal curriculum, nor do they require a specific major as a prerequisite to being accepted. However, all law schools prefer applicants with a broad general education background, particularly in the social sciences, and applicants who can speak and write the English language with precision and fluency. In all cases the student is urged to pattern his/her program to meet the requirements of the Law school of his/her choice.

Recommended Core Courses:

Economics 200,201

English 101, 152
History 100, 101, 160, 161
Philosophy 103
Political Science 100
Psychology 100
Sociology 100
Speech 100, 101

PRE-MEDICINE

Recommended Core Courses:
Biology 130, 131
Chemistry 150, 151, 212, 213
Mathematics 152
Physics 110, 111

PRE-NURSING

Recommended Core Courses:
Anatomy/Physiology 150, 151
Chemistry 102, 150
Microbiology 150

PRE-OPTOMETRY

Recommended Core Courses:
Anatomy/Physiology 150, 151
Biology 130, 131
Chemistry 150, 151, 212, 213
Mathematics 108, 152, 251
Physics 110, 111

PRE-PHARMACY

Recommended Core Courses:
Biology 130, 131
Chemistry 150, 151, 212, 213
Mathematics 152, 251
Physics 110, 111

PRE-PHYSICAL THERAPY

Recommended Core Courses:
Anatomy/Physiology 150, 151
Chemistry 101, 102
Microbiology 150
Physics 100

PRE-VETERINARY MEDICINE

Recommended Core Courses:

Biology 130, 131

Chemistry 150, 151, 212, 213

Mathematics 108

Physics 110, 111

PSYCHOLOGY

Recommended Core Courses:

Mathematics 108

Psychology 100, 101, 103, 112

Sociology 100

RADIOLOGIC TECHNOLOGY

Required Core Courses:

Radiology 100, 101, 102, 103, 104, 105, 106, 115A, 107, 108, 109, 110, 111, 112, 113, 114, 115B, 200, 201, 202, 203, 204, 205, 206, 213A, 207, 208, 209, 210, 211, 212, 213B

(Radiologic Technology is a fully accredited, hospital-based program operated cooperatively by Crafton Hills College and the San Bernardino County Medical Center.)

RELIGIOUS STUDIES

Recommended Core Courses:

Foreign Language*

History 135, 160, 161

Philosophy 101, 103

Religious Studies 100, 101

*Varies from college to college; consult appropriate college catalog.

RESPIRATORY CARE

Required Core Courses:

Anatomy/Physiology 101/102 or 150/151

Chemistry 101 or 150/151

Allied Health 119A

English 015 or 101

Humanities - any two 3-unit courses

Mathematics 090 (or a passing score on the Mathematics Proficiency Examination)

Microbiology 102 or 150

Physics 110/111

Respiratory Care 050, 101, 102, 103, 104, 105, 106, 108, 110, 201, 202, 203, 204, 205, 206, 207, 208, 211, 212, 218

Social Science - any two 3-unit courses

Notes:

1. Program begins fall semester only. RC050 and A&P101 are minimal entrance requirements.
2. Students must complete the Respiratory Care Technician Certificate (see Section IV) plus Chemistry 101 and Physics 100 prior to entering the second year.
3. Students must complete the Respiratory Care Associate in Science Degree within a five-year period to receive Department certification.

SOCIOLOGY

Recommended Core Courses:

Anthropology 102

Mathematics 108

Sociology 100, 105, 141

SPEECH

Recommended Core Courses:

English 260, 261, 270, 271

Speech 100, 101, 111A, 111B, 120, 121, 140

Theatre Arts 120

THEATRE ARTS

Recommended Core Courses:

English 260, 275

Speech 120

Theatre Arts 100, 108, 120, 176ABCD, 220

SECTION IV

OCCUPATIONAL CERTIFICATE PROGRAMS

Accounting
*Administration of Justice
Administrative Secretary
Business Management
California Fire Officer Training
*Child Development
Clerk-Typist
Computer &
Information Science
Emergency Medical Technician I
Emergency Medical Technician II
Emergency Medical Technician
- Paramedic
Fire Academy
Fire Technology
Legal Secretary
Marketing Management
Medical Records Coding Specialist
Medical Secretary
Mobile Intensive Care Nurse
Radiologic Technology
Respiratory Care Technician

Secretary
Supervision
Wildland Fire Science
Word/Information Processing

*Offered under a conjoint arrangement with
San Bernardino Valley College

Certificates are closely tied to the work-a-day world. A certificate in a particular field - for example, Legal Secretary - is an important credential for securing a job or a promotion. It tells an employer that you have been trained and have mastered competencies in a specific area.

In this section, you will find the precise course requirements for each certificate. Certain basic English, mathematics, and reading skills are related to success in both the training and practice of an occupation. Check with your advisor for individual guidance.

Should your career plans change, courses taken to earn a certificate may also be applied to an associate degree. For more information, read Section III (Transfer and Associate Degree Programs) or contact a counselor.

CREDIT FOR OTHER TRAINING

If you have had appropriate non-college experience, such as military courses or apprenticeship training, you may request that the training be evaluated for credit toward a certificate. However, before you apply for evaluation, you must have successfully completed twelve units at Crafton Hills College.

OBTAINING A CERTIFICATE

During the latter half of the semester in which you plan to complete the last course toward a certificate, you should apply for that certificate. Pick up an application form in the Office of Admissions and Records.

ACCOUNTING CERTIFICATE

Certificate requirements include a minimum of five core courses listed below. No more than one course from each group can count toward the five core courses.

Business Core Course Requirements

1. Accounting 210-211 or Bookkeeping 205
2. Marketing 100 - Marketing Principles
3. Business Administration 100 - Introduction to Business
4. Economics 200 or 201

5. Business Administration 210 or 211 - Business Law
6. Business Administration 053 - Quantitative Business Methods, or
Mathematics 108 - Statistics
7. Office Administration 100 - Typewriting
8. One Computer Language
9. Computer and Information Sciences 101

Plus the Following Specialty Courses

		Units
Acct 210	Principles of Accounting	3
Acct 211	Principles of Accounting Laboratory	1
Acct 220	Principles of Accounting	3
Acct 221	Principles of Accounting Laboratory	1
Acct 225	Intermediate Accounting	3
Acct 226	Cost Accounting	(4)
or		
Acct 230	State and Federal Income Tax Accounting	(4)
TOTAL		15

ADMINISTRATION OF JUSTICE CERTIFICATE

Courses in Administration of Justice are currently offered at Crafton Hills College. However, the certificate is issued only through San Bernardino Valley College.

BUSINESS MANAGEMENT CERTIFICATE

Certificate requirements include a minimum of five core courses listed below. No more than one course from each group can count toward the five core courses.

Business Core Course Requirements

1. Accounting 210/211 or Accounting 205
2. Marketing 100
3. Business Administration 100
4. Business Administration 210
5. Business Administration 053 or Math 108
6. Computer and Information Sciences 101
7. One Computer Language
8. Office Administration 100
9. Economics 200 or 201

Plus the Following Specialty Courses

		Units
Busad 200	Business Management	3
Busad 105	Small Business Management	3
Busad 135	Women in Management	(3)
or		
Busad 210 or 211	Business Law	(3)
C&IS 101	Survey of Data Processing	3
Acct 220	Principles of Accounting	3
Acct 221	Principles of Accounting Lab	1
TOTAL		16

CALIFORNIA FIRE OFFICER CERTIFICATE

The courses listed below are required for officer certification by the California Fire Service Training and Education System. All eight (8) courses must be completed.

		Units
Firet 080	Fire Instructor 1-A	2-3
Firet 081	Fire Instructor 1-B	2-3
Firet 082	Fire Prevention 1-A	2-3
Firet 083	Fire Prevention 1-B	2-3
Firet 084	Fire Management I	2-3
Firet 085	Fire Command 1-A	2-3
Firet 086	Fire Command 1-B	2-3
Firet 087	Fire Investigation I	2-3
TOTAL		16-24

CHILD DEVELOPMENT CERTIFICATE

Courses in Child Development are currently offered at Crafton Hills College. However, the certificate is issued only through San Bernardino Valley College.

CLERICAL ASSISTANT CERTIFICATE

		Units
OA 050	Office Experience	6
OA 100	Beginning Typewriting	3
OA 101	Intermediate Typewriting	3
OA 102	Advanced Typewriting	3
OA 110	Beginning Word/Information Processing Concepts	3
OA 070	Word Processing Applications: Displaywrite	2
OA 071	Advanced Word Processing Applications: Displaywrite	2
or		
OA 072	Word Processing Applications: Wordperfect	2

OA 073	Advanced Word Processing Applications: Wordperfect	2
OA 140	General Office Procedures	6
OA 146	Human Relations in the Office Environment	3
Busad 053	Quantitative Business Methods	3
TOTAL		34

COMPUTER & INFORMATION SCIENCE CERTIFICATE

		Units
C&IS 101	Survey of Data Processing or Pass C&IS Placement Examination	(3)
Busad 100	Introduction to Business	3
C&IS 102	BASIC Language Programming	3
C&IS 104	FORTTRAN Language Programming	3
C&IS 106	Microcomputers	3
C&IS 110	PASCAL Language Programming	3
C&IS 200	COBOL I (Introduction to COBOL Programming)	3
C&IS 201	COBOL II (Advanced COBOL Programming)	3
C&IS 230	Assembly Language Programming	3
C&IS 240	Advanced Programming Techniques	3
C&IS 250	Numerical Computing	3
TOTAL		30-33

EMERGENCY MEDICAL TECHNICIAN-I CERTIFICATE

Required Course		Units
EMS 020	Emergency Medical Technician I-A	4½
or		
EMS 022	Emergency Medical Technician I-NA	5
TOTAL		4½-5

EMERGENCY MEDICAL TECHNICIAN-II CERTIFICATE

Prerequisite		
EMS 050	Integrated Science and Basic Medical Language for Paramedics	
EMS 020	Emergency Medical Technician I-A	
Required Courses		Units
EMS 030	Introduction to Emergency Medical Care-II	½

EMS 031	Cardiology for the Emergency Medical Technician-II	3
EMS 032	Pharmacology for the Emergency Medical Technician-II	2
EMS 033	EMS Theory for the EMT-II	3
EMS 034	Skills Development for the Emergency Medical Technician-II	1
EMS 035	Clinical Externship for the Emergency Medical Technician-II	1 ½
EMS 036	Field Externship for the Emergency Medical Technician-II	3
EMS 037	Preceptorship for the Emergency Medical Technician-II	¼
TOTAL		14¼

ARTICULATION FROM EMT-II TO PARAMEDIC

If you are currently an EMT-II and wish to become a paramedic, consult the Program Director of Emergency Medical Services to develop an appropriate course of study from EMT-II to paramedic.

**EMERGENCY MEDICAL TECHNICIAN -
PARAMEDIC**

Prerequisites

Currently Certified EMT-I

Six months full-time documented field experience (paid or volunteer)

Required Course Work

ANAT 101 General Anatomy and Physiology and

AH 101 Medical Technology

OR

EMS 050 Integrated Science and Basic Medical
Language for Paramedics

Required Courses		Units
EMS 151	Introduction to Emergency Medical Care	2
EMS 152	Cardiology for Paramedics	4
EMS 153	Pharmacology for Paramedics	3
EMS 154	EMS Theory	8
EMS 155	Skills Development for the Paramedic	2
EMS 156	Clinical Externship for the Paramedic	3
EMS 157	Field Externship for the Paramedic	6
TOTAL		28

FIRE ACADEMY CERTIFICATE

Leads to entry-level employment as a fire fighter.

Prerequisites

EMS 020	Emergency Medical Technician 1A
Firet 100	Introduction to Fire Technology
Firet 101	Fundamentals of Fire Prevention or Equivalent

Required Courses

Firet 075	Fire Technology Basic Training Academy	Units 9
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FIRE TECHNOLOGY CERTIFICATE

Studies in the theory and practice of fire management in urban and suburban settings.

		Units
EMS 020	Emergency Medical Technician 1A	4½
Firet 100	Introduction to Fire Technology	3
Firet 101	Fundamentals of Fire Prevention	3
Firet 103	Fundamentals of Personal Fire Safety and Emergency Care	3
Firet 108	Fundamentals of Fire Behavior and Control	3
Firet 201	Fire Protection and Equipment Systems	3
Electives		6

TOTAL 25½

The electives will be used to provide the student a start toward building a broad base of liberal studies. Students are encouraged to consult with their faculty advisor in the selection of electives.

LEGAL SECRETARY CERTIFICATE

		Units
OA 101	Intermediate Typewriting	3
OA 110	Beginning Word/Information Processing Concepts	3
OA 070	Word Processing Applications: Displaywrite	2
OA 071	Advanced Word Processing Applications: Displaywrite	(2)
or		
OA 072	Word Processing Applications: Wordperfect	(2)
OA 073	Advanced Word Processing Applications: Wordperfect	2
OA 120	Elementary Shorthand (Gregg)	6
OA 121	Intermediate Shorthand (Gregg)	6
OA 146	Human Relations in the Office Environment	3
OA 150	Legal Office Procedures	3
OA 151	Legal Terminology and Transcription	3
Acct 205	Bookkeeping	3

TOTAL 34

MARKETING MANAGEMENT CERTIFICATE

Certificate requirements include a minimum of five core courses listed below. No more than one course from each group can count toward the five core courses.

Business Core Course Requirements

- 1. Accounting 210-211 or Bookkeeping 205
- 2. Marketing 100 - Marketing Principles
- 3. Business Administration 100 - Introduction to Business
- 4. Economics 200 or 201
- 5. Business Administration 210 - Business Law
- 6. Business Administration 053 - Business Math or Mathematics 108 - Statistics
- 7. Office Administration 100 - Typewriting
- 8. Computer and Information Sciences 101
- 9. One Computer Language

Plus the Following Specialty Courses:

		Units
Busad 200	Business Management	3
Market 105	Principles of Salesmanship	3
Market 110	Advertising	3
Busad 105	Small Business Management	3
C&IS 101	Survey of Data Processing	(3)
or		
Business Elective (Student's Choice)		(3)
TOTAL		15

MEDICAL RECORDS CODING SPECIALIST CERTIFICATE

Prerequisites		Units
AH 101	Medical Terminology	3
A&P 101	Anatomy & Physiology	4
Corequisite		
AH 210	Pathophysiology	3
Required Courses		
AH 103	Medical Records Coding I	3
AH 104	Medical Records Coding II	3
AH 105	Medical Records Coding III	3
TOTAL		19

MEDICAL SECRETARY CERTIFICATE

		Units
OA 101	Intermediate Typewriting	3
OA 110	Beginning Word/Information Processing Concepts	3
OA 070	Word Processing Applications: Displaywrite	2
OA 071	Adv. Word Processing Applications: Displaywrite	(2)
or		
OA 072	Word Processing Applications: Wordperfect	(2)
OA 073	Adv. Word Processing Applications: Wordperfect	2
OA 120	Elementary Shorthand (Gregg)	6
OA 121	Intermediate Shorthand (Gregg)	6
OA 146	Human Relations in the Office Environment	3
OA 160	Medical Office Procedures	3
OA 161	Medical Shorthand	3
OA 162	Medical Terminology and Transcription I	6
OA 163	Medical Terminology and Transcription II	6
Acct 205	Bookkeeping	3
TOTAL		46

MOBILE INTENSIVE CARE NURSE CERTIFICATE

Prerequisites (or Corequisites as appropriate)

Registered Nurse

EMS 101 Cardiology for the Health Professional

EMS 110 Advanced Cardiac Life Support - Provider

EMS 102 Emergency Department Nurse OR

One year current experience in

Emergency Nursing

Required Course	Units
EMS 103 Mobile Intensive Care Nurse	2½

RADIOLOGIC TECHNOLOGY CERTIFICATE

	1st Semester	Units
RAD 100	Introduction to Radiologic Technology	¼
RAD 101	Medical Ethics for the Radiologist	½
RAD 102	Radiographic Medical Technology	1½
RAD 103	Radiographic Positioning I	1½
RAD 104	Radiologic Physics I	1½
RAD 105	Radiographic Anatomy/Physiology I	1½
RAD 106	Radiographic Positioning Lab I	½
RAD 115A	Radiographic Clinic	11¼
	2nd Semester	
RAD 107	Basic Radiologic Medical Techniques	1¼
RAD 108	Radiation Protection I	1¼
RAD 109	Radiologic Physics II	1¼

RAD 110	Radiographic Exposure I	1¼
RAD 111	Radiographic Film Critique I	1¼
RAD 112	Radiographic Positioning II	1¼
RAD 113	Radiographic Anatomy/Physiology II	1¼
RAD 114	Radiographic Positioning Lab II	½
RAD 115B	Radiographic Clinic II	10½
3rdSemester		
RAD 200	Radiation Protection II	1½
RAD 201	Radiographic Exposure II	1½
RAD 202	Radiographic Film Critique II	1½
RAD 203	Radiographic Positioning II1	1½
RAD 204	Radiographic Anatomy/Physiology II	1½
RAD 205	Radiographic Exposure Lab	½
RAD 206	Radiographic Physics II Lab	½
RAD 213A	Radiographic Clinic II1	10¾
4thSemester		
RAD 207	Radiographic Imaging	1¼
RAD 208	Registry Review Test in Radiology	2¾
RAD 209	Radiographic Film Critique III - Pathology	1¼
RAD 210	Radiologic Positioning IV	1¼
RAD 211	Radiographic Anatomy/Physiology IV	1¼
RAD 212	Special Procedures in Radiology	1¼
RAD 213B	Radiographic Clinic IV	11
TOTAL		78

Notes:

1. Radiologic Technology is a fully accredited, hospital based program operated cooperatively by Crafton Hills College and the San Bernardino County Medical Center.
2. Program applications, entrance examination results, and all transcripts must be filed by February 1. Classes begin the first week of July each year. (Application packets are available from October through January of each year.)

RESPIRATORY CARE TECHNICIAN CERTIFICATE

		Units
AH 119A	Basic CPR	¾
*Anat 101	General Anatomy and Physiology	4
Anat 102	Anatomy and Physiology of the Cardiorespiratory System	4
EMS 010	General Cardiac Life Support - Provider	¼
*Engl 015	Basic Writing	3
Intdis 130	Ethical Issues in Modern Medicine	3
**Math 090	Elementary Algebra	4
*Micro 102	Introductory Microbiology	4
Resp 050	Introduction to Respiratory Care	2
Resp 101	Fundamentals of Respiratory Care I	4

Resp 102	Fundamentals of Respiratory Care Skills Laboratory I	11
Resp 103	Pulmonary Medical Terminology	3
Resp 105	Fundamentals of Respiratory Care II	4
Resp 106	Fundamentals of Respiratory Care Skills Laboratory II	5
Resp 108	Respiratory Care Clinical Application II	5½
Resp 110	Clinical Medicine I	2
TOTAL		56¼

Notes:

1. Program begins fall semester only.
2. Anatomy and Physiology 101 and Respiratory Care 050 must be completed prior to the fall semester of the first year of study.
3. Students must complete the course work for the Respiratory Care Technician Certificate within a five-year period to receive Department certification.

*Students are encouraged to substitute equivalent advanced-level courses.

SECRETARY CERTIFICATE

		Units
OA 050	Office Experience	6
OA 101	Intermediate Typewriting	3
OA 110	Beginning Word/Information Processing Concepts	3
OA 070	Word Processing Applications: Displaywrite	2
OA 071	Adv. Word Processing Applications: Displaywrite	(2)
or		
OA 072	Word Processing Applications: Wordperfect	(2)
OA 073	Adv. Word Processing Applications: Word perfect	2
OA 120	Elementary Shorthand (Gregg)	6
OA 121	Intermediate Shorthand (Gregg)	6
OA 122	Advanced Dictation and Transcription	6
OA 140	General Office Procedures	6
OA 144	Business English	3
OA 146	Human Relations in the Office Environment	3
Busad 053	Quantitative Business Methods	3
Acct 205	Bookkeeping	3
TOTAL		55

SUPERVISION CERTIFICATE

Certificate requirements include a minimum of five core courses listed below. No more than one course from each group can count toward the five core courses.

Business Core Course Requirements:

- 1. Accounting 205 or Accounting 210-211
- 2. Marketing 100 -Marketing Principles
- 3. Business Administration 100 - Introduction to Business
- 4. Economics 200 or 201
- 5. Business Administration 210 or 211 - Business Law
- 6. Business Administration 053 - Quantitative Business Methods or Mathematics
108 - Statistics
- 7. Office Administration 100 - Typewriting
- 8. One Computer Language
- 9. Computer and Information Science 101

Plus the Following Specialty Courses:

sup 010	Elements of Supervision	3
Sup 013	Human Relations	3
Sup 015	Organization and Management	3
TOTAL		9

WILDLAND FIRE SCIENCE CERTIFICATE

Students seeking a certificate in Wildland Fire Science must coordinate their program of studies with a faculty advisor from the Crafton Hills College Regional Emergency Training and Research Institute.

		Units
Firet 170	Basic Wildland Fire Fighting	3
Firet 171	Basic Engine Laboratory	2
Firet 172	Fire Operations Supervision	4
Firet 173	Crew Leadership Operation	4
Firet 174	Wildland Fire Prevention	3
Firet 175	Wildland Fire Investigation	3
Firet 176	Wildland Fire Behavior	4
Firet 177	Tactics & Strategy of Wildland Fire Control	4
Firet 178	Map Interpretation	2
Firet 179	Weather & Fire Behavior	3
Wildland Fire Science Electives		8-12
TOTAL		40-44

**WORD/INFORMATION PROCESSING
CERTIFICATE**

		Units
OA 050	Office Experience	6
OA 101	Intermediate Typewriting	3
OA 110	Beginning Word/Information Processing Concepts	3
OA 070	Word Processing Applications: Displaywrite	2
OA 071	Adv. Word Processing Applications: Displaywrite	2
OA 111	Intermediate Word/Information Processing Concepts	3
OA 072	Word Processing Applications: Wordperfect	2
OA 073	Adv. Word Processing Applications: Wordperfect	2
OA 140	General Office Procedures	6
OA 144	Business English	3
OA 146	Human Relations in the Office Environment	3
	TOTAL	35

SECTION V

TRANSFER INSTITUTIONS - GENERAL REQUIREMENTS

Each four-year institution has its own admissions standards. In addition, each determines which courses it will accept to satisfy either specific or elective requirements. Further, these standards and requirements are subject to periodic change. So, if you plan to transfer to a four-year institution, you should - as soon as possible - get hold of the current catalog of that institution. Then, study carefully the admissions requirements and conditions of transfer. If you have trouble understanding the catalog, get help from a counselor.

Fortunately, the similarities among four-year institutions are greater than the differences. Listed below are the general admissions requirements and conditions of transfer for the California State University (CSU) system, the University of California (UC), and an example of an independent university.

A word of caution! Some students enroll at community colleges to remove deficiencies in their high-school programs so that they can gain admission to a four-year institution. If this is your reason for attending Crafton, be certain that the courses you select are the right ones. Again, the best sources of information are the appropriate catalogs and the college counselors.

THE CALIFORNIA STATE UNIVERSITY

The State University system is one of the three branches of public higher education in California. There are nineteen campuses in the system:

California State University Bakersfield
California Polytechnic State University, San Luis Obispo

California State Polytechnic University, Pomona
 California State University, Chico
 California State University, Dominguez Hills
 California State University, Fresno
 California State University, Fullerton
 California State University, Hayward
 California State University, Long Beach
 California State University, Los Angeles
 California State University, Northridge
 California State University, Sacramento
 California State University, San Bernardino
 California State University, Stanislaus
 Humboldt State University
 San Diego State University
 San Francisco State University
 San Jose State University
 Sonoma State University

ADMISSIONS

Crafton Hills College students who plan to transfer to one of the CSU campuses must complete a minimum of fifty-six transferable semester units with a grade point average of 2.0 or better before they are eligible to transfer. (Exception: If you were eligible for admission to a CSU campus as a freshman, you can usually transfer to any CSU campus with less than fifty-six semester units.) All high school subject deficiencies in English and mathematics must be satisfied prior to transfer. Currently, and in addition to other academic requirements, four years of college preparatory high school English and two years of mathematics (three years in 1988) are required.

Required and to be included in the fifty-six transferable units is a minimum of thirty semester units of the CSU General Education requirements, including communication in the English language (Category A) and mathematical concepts (Category B).

REGULATIONS AND GENERAL EDUCATION

Each campus requires a minimum of forty-eight (48) units of general education, of which nine (9) units **MUST** be earned in the upper division at the campus granting the baccalaureate degree. Crafton Hills College may certify that a student has satisfied thirty-nine (39) units of general education which should be and normally are completed in the lower division. Not more than thirty (30) units may be applied for areas B through D, and a course may fulfill only one requirement.

Listed below is the pattern for the lower division general education requirements at any of the California State Universities and Colleges. A specific course list and outline are available in the Counseling Center.

A. COMMUNICATION/CRITICAL THINKING

A minimum of 9 semester units in communication in the English language, to include both oral communication and written communication, and in critical thinking, to include consideration of basic principles of and common fallacies in reasoning.

B. PHYSICAL AND LIFE SCIENCE/MATHEMATICS

A minimum of 9-12 semester units to include inquiry into the physical universe and its life forms, with some immediate participation in laboratory activity, and into mathematical concepts and quantitative reasoning and their applications.

C. ARTS/LITERATURE/PHILOSOPHY FOREIGN LANGUAGE

A minimum of 9-12 semester units among the arts, literature, philosophy and foreign languages.

D. SOCIAL POLITICAL AND ECONOMIC INSTITUTIONS

A minimum of 9-12 semester units dealing with human social, political, and economic institutions and behavior and their historical background

E. LIFELONG UNDERSTANDING AND SELF DEVELOPMENT

A minimum of 3 semester units in study designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities.

THE UNIVERSITY OF CALIFORNIA

The University of California has nine major campuses - Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, and Santa Cruz. All except Berkeley are on a quarter system. While all campuses have similar general lower division requirements and will accept a maximum of seventy semester or 105 quarter units of transfer work, there are some subject differences among them. However, transfer students who follow and complete the transfer core curriculum can satisfy the general education or breadth requirements at any campus of the University of California

ADMISSION TO ADVANCED STANDING

Prospective students may apply for admission to any of the campuses of the University of California. The admission cycle for the fall quarter of each year begins on November 1. Each campus will accept for consideration all applications filed during the month of November. Enrollment ceilings have been established at each campus.

The University defines an "advanced standing applicant" as a high school graduate who has been a registered student in another college or university or college-level extension classes, other than a summer session immediately following high school graduation. An advanced standing applicant may not disregard his college record and apply for admission as a freshman.

The requirements for admission to advanced standing vary according to your high school record. If you have completed fewer than twelve quarter or semester units of transferable college credit since high school graduation, you must also satisfy the examination requirement for freshman applicants.

The transcript you submit from the last college you attended must show that you were in good standing and that you had earned a grade point average of 2.0 or better. If your grade point average fell below 2.0 at any one college you attended, you may have to meet additional requirements in order to qualify for admission.

As an advanced standing applicant you must also meet one of the following conditions:

1. If you were eligible for admission to the University when you graduated from high school—meaning you satisfied the Subject, Scholarship, and Examination Requirements - you are eligible to transfer if you have a C (2.0) average in your transfer college coursework
2. If you met the Scholarship Requirement, but did not satisfy the Subject Requirement, you must take college courses in the subjects you are missing to be eligible to transfer. You will need to earn a grade of C or better in each of these required courses, and an overall C (2.0) average in all transferable college coursework. If you completed less than 12 quarter or semester units of transferable college coursework, you must also satisfy the Examination Requirement.
3. If you were not eligible for admission to the University when you graduated from high school because you did not meet the Scholarship Requirement, or you did not meet the Scholarship Requirement and did not complete all the required "a-f" subjects, you must:
 - a. Complete 84 quarter units or 56 semester units of transferable college credit with a grade point average of at least 2.4, and satisfy either (b) or (c) as follows.
 - b. Take college courses in the subjects you are lacking and earn a grade of C or better in each one. (The University will waive up to two units of the required high school course-work except in mathematics and English.)
 - c. Complete one college course in mathematics, one in English, and one selected from either U.S. history, laboratory science, or foreign language. You must earn a grade of C or better in each course. All courses, with the exception of the required mathematics course, must be transferable. The course in mathematics must assume a proficiency level equivalent to three years of high school mathematics (i.e., elementary algebra, advanced algebra, and geometry). The course may be trigonometry or a more advanced course in mathematics or statistics for which advanced algebra is a prerequisite.

TRANSFER CORE CURRICULUM

Beginning with applicants to the fall term 1989, transfer students may fulfill the lower division breadth and general education requirements by completing the Transfer Core Curriculum. The Transfer Core Curriculum consists of a series of subject areas and types of courses which, if completed prior to transfer, will satisfy the breadth and general education requirements at any campus of the University of California. You have the option, however, to fulfill the breadth and general education requirements by either completing the Transfer Core Curriculum or the specific lower division breadth and general education requirements of the school or college of the campus to which you intend to transfer.

If you do not complete the breadth and general education requirements or the Transfer Core Curriculum before transferring to the University, you will be subject to the regulations regarding breadth and general education requirements of the school or college of the campus to which you have been admitted.

Listed below is the pattern for the Transfer Core Curriculum at any campus of the University of California. A specific course list and outline is available in the Counseling Center.

1. Foreign Language: This requirement may be fulfilled by completion of two years of a foreign language in high school with a grade of C or better, or equivalent

proficiency demonstrated by college courses or performance on tests.

Requirement: Proficiency

2. English Composition: The English Composition requirement must be fulfilled by completion of a one-year lower division English composition sequence.
Requirement: 2 semesters and 6 semester units minimum
3. Mathematics/Quantitative Reasoning: One semester course in mathematics or mathematical statistics. Courses on the application of statistics to particular disciplines may not be used to fulfill this requirement.
Requirement: 1 semester and 3 semester units minimum
4. Arts and Humanities: Courses in drama, music, dance or the visual arts history, literature, classical studies, religion, and philosophy may fulfill this requirement. At least one course must be in the arts and one in the humanities. Courses in the arts may include performance or studio components; however, courses that are primarily performance or studio art courses cannot be used to satisfy this requirement.
Requirement: 3 semesters and 9 semester units minimum
5. Social and Behavior Sciences: Courses in anthropology, economics, ethnic studies, political sciences, psychology, sociology, or from an interdisciplinary social science sequence.
Requirement: 3 semesters and 9 semester units minimum
6. Physical and/or Biological Sciences: Courses in general biology, general chemistry, basic physics, or physical sciences (with the exception of mathematics). At least one of the courses must include a laboratory.
Requirement: 2 semesters and 7 semester units minimum

PRIVATE COLLEGES AND UNIVERSITIES

There are many independent four-year colleges and universities throughout the country. Customarily, they accept all general education courses designated for transfer by community colleges. Other transfer-level courses are evaluated on the basis of the program of studies being pursued.

Some four-year institutions specify a minimum number of units that a student must take before transfer. Others will accept students at any time.

If you plan to transfer to an independent four-year college or university, secure a copy of the catalog of the school you want to attend and study it carefully. The catalog may be available in the College Library or the Counseling Office. If not, contact the Office of Admissions of the institution you hope to attend. Catalogs are usually sent upon request.

Most Crafton students who transfer to an independent four-year institution choose the University of Redlands. Therefore, it has been selected as an example both as a convenience for those students and to illustrate for others the somewhat different core requirements encountered at independent institutions.

THE UNIVERSITY OF REDLANDS

Students working toward a Bachelor of Arts or Bachelor of Science degree from the University of Redlands are required to complete one approved course of at least three semester units from each of eight categories of a core curriculum. The categories are as follows:

1. Written Communication
2. Mathematics or Foreign Language
3. Natural Science
4. Creativity in the Arts
5. Personal Commitment and Ethics
6. Social Priorities
7. American Institutions
8. Cultural and Historical Perspectives

A key word is "approved" If you are planning to transfer to Redlands, make sure that the courses you take at Crafton substantively match those offered at Redlands. An approved list of courses, applicable to the Core requirements, is available in the Counseling Center. If questions arise, the final decision on whether a course is actually transferable to Redlands is made by the Registrar at that institution. You may transfer up to 66 lower division units to the University of Redlands.

FACULTY

The dates in parentheses indicate the year of appointment to the San Bernardino Community College District.

ALVERSON, SYLVIA M. (1981) Emergency Medical Services
Associate Professor
 A.A., College of the Desert
 B.S., Southern Illinois University

ANDREWS, SANDRA (1985) Emergency Medical Services
Assistant Professor
 A.S., Weber State College

BISI, JAMES G. (1968) Counseling
Professor
 B.S., California State College (PA)
 M.A., California State University, San Jose
 EdD., Nova University

BLUME, HARRIET C. (1979) Foreign Language
Associate Professor
 B.A., Oberlin College, Oberlin, Ohio
 Diplome de litterature, Francaise Contemporaine, University of Paris
 M.A., University of Redlands

BOOTH, RICHARD (1972) English
Professor
 B.A., University of California, Santa Barbara
 M.A., California State University, San Diego
 M.A., University of Birmingham
 M.F.A. University of Southern California

- BRAINARD, TONY** (1976) Respiratory Care
Associate Professor
B.A., University of Redlands
- BRYSON, KENNITH L.** (1979) Respiratory Care/Radiological Technology
Associate Professor
B.V.E., California State College, San Bernardino
- BYRON, ELIZABETH J.** (1979) Library
Associate Professor
B.A., University of Redlands
M.S., California State University, Fullerton
- CABANILLA, CLIFFORD D.** (1966) Theatre Arts
Professor
B.S., MA, Brigham Young University
- CARTER, MARIAN T.** (1970) Reading/ Speech/Psychology
Associate Professor
B.A., M.S., University of Omaha
- CLOPINE, GORDON A.** (1961) Geology/Anthropology/
Geography/Oceanography
Professor
B.S., University of Redlands
M.S., University of Houston
Registered Geologist, State of California
- COLVEY, KIRSTIN** (1981) Handicapped Services
Associate Professor
B.A., University of California, Santa Cruz
M.S., Pepperdine University
- DEMING, MERRILL** (1978) Learning Resource Center
Associate Professor
B.A., The George Washington University
M.A., California State University, San Bernardino
- DE SALLIERS, DEBORAH** (1976) Physical Education
Associate Professor
B.S., Pepperdine University
M.S., University of California. Los Angeles
- EDWARDS, JAY C.** (1982) Computer and Information Sciences
Associate Professor
B.G.S., University of Nebraska

- FRANKLIN, BRADLEY H. (1979)** Respiratory Care
Assistant Professor
B.S., University of Missouri
- GALBRAITH, ROBERT T. (1967)** Biology/Oceanography
Professor
B.A., University of California, Santa Barbara
M.A., California State University, Long Beach
- GIACONA, JUDITH A. (1981) (Part-time)** College Nurse
Assistant Professor
B.S., Walla Walla College, Washington
- GOMEZ, LUIS (1976)**
Assistant Dean, Student Services
B.A., M.A., California State University, San Bernardino
Ed.D., University of Southern California, Los Angeles
- GONZALEZ, RAYMOND (1972)** Foreign Language
Professor
B.A., M.A., University of California, Riverside
- GRIFFITH, BARTON L (1976)** Marketing & Business Administration
Professor
B.S., University of Denver
M.A., Northern Colorado State University
- HOLBROOK, JAMES (1984)** Emergency Medical Services
Assistant Professor
National Registry Emergency Medical Paramedic, Loma Linda University
- HOLTKE, GERALD A. (1975)** Accounting
Professor
B.B.A., University of Cincinnati
M.B.A., University of Santa Clara
- HULTEN, GARY A. (1977)** Respiratory Care
Assistant Professor
B.V.E., California State University, San Bernardino
- JONES, RICHARD A. (1981)** English
Professor
A.A., San Bernardino Valley College
B.A., San Jose State University
M.A., San Jose State University
Ed.D., University of California, Los Angeles

- KADOW, EUGENE V.** (1966)
 Director, Continuing Education
 A.B., M.A., Fresno State College
- KIBBY, RONALD O.** (1977)
 Assistant Dean, Occupational Education
 A.A., Stockton College
 AB., University of Southern California
 MA., University of Redlands
- KLING, FRANCIS J.** (1965) Sociology
 Professor
 B.A., California State College, Stanislaus
 M.A., San Diego State University
- KOSMATKA, ARNOLD L.** (1978) Respiratory Care
 Assistant Professor
 B.A., University of Redlands
- LESIGHT, KENNETH** (1979) Music
 Associate Professor
 B.S., The Pennsylvania State University
 M.A., Stephen F. Austin State University
- LICERIO, MAMERTO D.** (1979) Handicapped Services
 Associate Professor
 B.A., M.S., San Francisco State University
- McCUNE, RONALD M.** (1977) Allied Health/Anatomy/Physiology
 Assistant Professor
 B.A., Pepperdine University
- MICHAELIS, KENNETH** (1973) Anatomy/Physiology
 Associate Professor
 B.A., Columbia Union College
 M.A., Walla Walla College
- MILLOY, WAYNE** (1976) Mathematics
 Professor
 B.S., M.A.T., University of Redlands
 Ed.D., Nova University

- NEUMAN, VIOLET H. (1976)** Counseling
 Professor
 B.S., Northern Illinois University
 M.A., California State College, San Bernardino
- ORR, BILL (1971)** Mathematics
 Professor
 B.S., California State Polytechnic University, Pomona
 M.S., University of Oregon, Eugene
 Ed.D., Nova University
- PEREZ, MARIO A. (1974)** History
 Assistant Professor
 A.A., San Bernardino Valley College
 B.A., M.A., University of California, Riverside
- RIOS, AGUSTIN J.** EOPS Coordinator
 Assistant Professor
 B.A., University of California, Riverside
- SCHMIDT, ROGER L. (1963)** Philosophy/Religious Studies
 Professor
 B.A., University of Redlands
 M.A., Claremont Graduate School
- SHAW, RAYMOND W. (1983)** Fire Technology
 Assistant Professor
 A.A., San Bernardino Valley College
- SINGER, DONALD L. (1982)**
 President
 B.A., M.S., M.A., PhD., University of Southern California
- SNOWHITE, MARK S. (1967)** English
 Professor
 B.A., University of Maryland
 M.A., University of California, Riverside
- STEFFY, SHARON (1986)** Emergency Medical Services
 Instructor
 B.S.N., California State College, Long Beach
- STODDARD, JOAN G. (1980)**
 Dean of Instruction
 AB., Occidental College
 M.A., California State University, Long Beach
 PhD., Northwestern University

TAYLOR, KATHARYN K. (1979) Assistant Professor B.S., California State Polytechnic University, Pomona	Respiratory Care
THOMERSON, C. BENSON (1969) Professor A.B., M.A., California State University, San Diego	English
THURMAN, LAURENS K. (1972) Professor B.A., M.A., University of California, Riverside	Physics/Astronomy
TUNG, LINDA P. (1972) Professor B.S., Chiao-tung University B.S., Hong Kong Baptist College M.S., California State University, Los Angeles PhD., University of California, Riverside	Mathematics
VAJNA, SUSAN (1986) Instructor A.A., San Bernardino Valley College B.A., California State University, San Bernardino	Office Administration
WINNINGHAM, LAURA Assistant Professor B.A., B.S., California State Polytechnic University MA., University of Southern California	Library
WIRZ, DONALD R (1972) Professor B.S., University of Redlands M.S., PhD., Wayne State University	Chemistry
WRIGHT, WILLIAM R. (1977) Professor B.V.E., MA., California State University, Los Angeles	Work Experience
WURMBRAND, MARC (1972) Associate Professor B.F.A., Cooper Union M.F.A., Yale University	Art

PROFESSORS EMERITI

JOSEPH T. ALLEN (1954-1984)	Geology
H.D. ANDERSON (1946-1978)	Foreign Language
ROGER C. ANTON (1946-1976)	President
Named Professor Emeritus (posthumously) by the Board of Trustees, June 3, 1977.	
GEORGE ASHTON (1957-1978)	History
OLEN BAGGETT (1965-1986)	Physical Education
DORIS BOARDMAN (1961-1982)	Library
JOSEPHINE E. BROHOLM (1947-1975)	Speech
EDWARD L. CHAPIN, JR (1953-1987)	Assistant Dean, Continuing Education and Community Services
RICHARD H. GATCHEL (1971-1987)	Philosophy/Religious Studies
VIRGINIA M. GAUSTAD (1970-1987)	Office Administration
KENNETH L. GRUB (1965-1982)	History
WILLIAM H. HOYT (1955-1987)	Physical Education
CLARENCE D. LAMBERT (1965-1987)	Chemistry
ARTHUR F. MILLER (1974-1989)	Psychology
HAROLD B. PIGOTT (1946-1975)	English
SYLVESTER L. PATRICK (1964-1987)	Counseling
WALTER C. SCHUILING (1964-1984)	History and Politics
V. DEAN STEWART (1950-1981)	Chemistry

DEAN EMERITUS

DON A. YOWELL (1972-1987)	Dean, Student Personnel Services
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INDEX

A

Academic Probation	24
Academic Renewal	26
Accounting	32
Accreditation Statement	Title Page
Administration of Justice	33
Admissions Procedures	9
Allied Health Sciences	34
Alumni Association	29
Anatomy/Physiology	35
Anthropology	35
Application Procedures	10
Art	36
Associate Degree Programs	91
Associate in Arts Degree	27
Associate in Science Degree	29
Associated Student Body	17
Astronomy	37
Athletics	18

B

Background of the College	7
Biology	37
Bookkeeping	32
Bookstore	20
Business Administration	38
Business Management	39

C

California Fire Officer Training	106
California Residency	10
California State University - General Education Requirements	118
Career Planning	15
Certificates	103
Chemistry	39
Child Development	40
Class Attendance	24
Clerical Assistant	106
Community Services	19
Computer and Information Sciences	107
Computer-Assisted Instruction	20
Conduct, Code of	26
Continuing Education	18
Continuous Attendance and Graduation	29

Costs at Crafton Hills College	13
Counseling	15, 25
Course Descriptions	31
Course Transferability	32
Crafton Hills College Administration	2
Crafton Hills College Foundation	4
Credit/No Credit	22
Credit by Examination	23
Credit for Military Experience	21

D

Developmental Education	19
Disabled Student Services	17
Dismissal, Standards for	25
District Administration	2
District Residency	10

E

Economics	42, 95
Educational Philosophy of the College	8
Elementary Teaching	98
Eligibility for Admission	9
Emergency Medical Services	43, 107
Emergency Medical Technician I	44, 107
Emergency Medical Technician II	44, 107
Emergency Medical Technician - Paramedic	44, 108
English	48, 95
Examinations	24
Extended Opportunities Programs and Services	17

F

Faculty - Crafton Hills College	123
Family Educational Rights and Privacy Act	27
Financial Aid	15
Fire Academy	109
Fire Technology	49, 109
Four-Year Colleges and Universities - Transfer Requirements	117
French	56, 95

G

General Education	18
General Education Requirements for the Associate Degree	27
General Information	7
Geography	57, 95
Geology	58, 95
German	59, 95
Grade Changes	24
Grading System	24

Graduation Requirements	27
-------------------------	----

H

Health Education	60
Health Services	16
High School Students - Admission	9
History	60, 96
Housing	16

I

Incompletes	22
Independent Colleges and Universities - Transfer Requirements	121
Instructional Broadcasting Services/Television	19
Instructional Programs and Services	18
Interdisciplinary Studies	60
International Students - Admission	13, 14
International Students - Deadlines	14
International Students - Required Materials	14
International Students - Rules	14

J

Job Placement	15
---------------	----

L

Learning Resource Center	20
Legal Secretary	109
Liberal Studies	27, 96
Library	20

M

Majors	91
Map of the Campus	Inside Back Cover
Marketing	61, 96
Marketing Management	110
Mathematics	61, 96
Mathematics Proficiency for Graduation	27
Medical Records Coding	110
Medical Secretary	111
Microbiology	63, 97
Mobile Intensive Care Nurse	111
Music	63, 97

N

Nondiscrimination	21
Nonresident Tuition Fees	13
Numbering of Courses	32

O

Objectives and Functions of the College	8
Occupational Certificate Programs	103
Occupational Programs	18
Oceanography	66
Office Administration	66, 97
Open Classes	21

P

Philosophy	71, 97
Physical Education	71, 97
Physics	73, 97
Placement Examinations	15
Political Science	74, 98
Pre-Chiropractic	98
Pre-Dentistry	98
Pre-Education	98
Pre-Engineering	99
Pre-Forestry	99
Pre-Legal	99
Pre-Majors	98, 100
Pre-Medicine	100
Pre-Nursing	100
Pre-Optometry	100
Pre-Pharmacy	100
Pre-Physical Therapy	100
Pre-Veterinary Medicine	101
Private Colleges and Universities	121
Probation, Standards for	24
Progress Probation	25
Psychology	74, 101

R

Radiologic Technology	76, 101, 111
Reading and Study Skills	79
Reading Competency for Graduation	27
Re-admission After Dismissal	25
Re-admission and Graduation	29
Real Estate	80
Religious Studies	81, 101
Repeating Courses	26
Residency - California	10
Respiratory Care	81, 101
Respiratory Care Technician	112

S

Secondary Teaching	98
Secretarial	113
Sociology	84, 102
Spanish	84, 95
Speech	86, 102

Student Activities	17
Student Central Council	17
Student Classification	22
Student Grievance Procedure	16
Student Services	15
Supervision	87, 113

T

Table of Contents	3
Television Courses	19
Theatre Arts	87, 102
Transfer Programs	18
Transfer Requirements	117
Transfer Students - Admission	10
Transfer Students - Graduation	29
Transfer Students - Credit for Courses	18

U

Unit Limitations	21
Unit of Credit	21
University of California	119
University of California - Advanced Standing	119
University of California - Transfer Requirements	120
University of Redlands	122

V

Veterans' Services	16
--------------------	----

W

Wildland Fire Science	114
Withdrawal	22
Word/Information Processing	115
Work Experience	89
Writing Competency for Graduation	27

NOTE: Parking Controls are in effect in all Parking Lots and along all streets.
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FRIDAY
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CRAFTON HILLS COLLEGE



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 YUCAIPA, CA 92399
 (714) 794-2161

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 ARTS CENTER

CLASSROOM
 BUILDING

LIBRARY

STUDENT SERVICES

COLLEGE
 CENTER

GARDEN
 HALL

CRAFTON HILLS
 COLLEGE MARQUEE

CRAFTON HILLS
 COLLEGE MARQUEE

GYMNASIUM

HEALTH
 SERVICES

TENNIS
 COURTS

BASKETBALL
 COURTS

TRACK/
 GOLF DRIVING RANGE

CRAFTON
 HILLS

SHIPPING
 AND/
 RECEIVING

