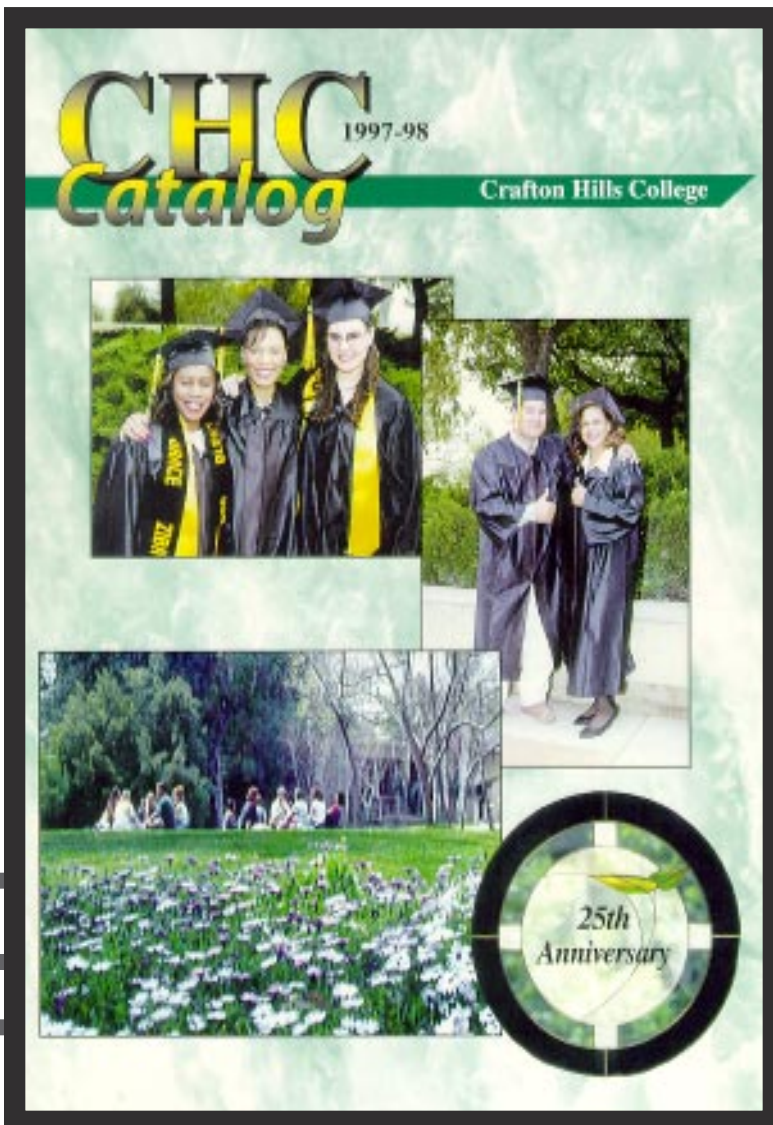




Crafton Hills College

1997-98 Catalog

CollegeSource

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It is the policy of Crafton Hills College to make our services, facilities, programs, and accommodations accessible to all people, including people with disabilities, and comply fully with the provisions of the Americans with Disabilities Act of 1990.

If a disability prevents you from fully using our facility or enjoying our services and programs, we would like your input and ideas on how we can serve you better.

Any concerns, comments, or suggestions should be directed to the Campus ADA-Coordinator, at the Administrative Services Office, LA-300E, (909) 389-3210.

CRAFTON HILLS COLLEGE

A Public Community College in California

CATALOG 1997-1998

The purpose of this catalog is to provide information about Crafton Hills College, its philosophy, objectives, programs 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 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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Dear Student,

Crafton Hills College is celebrating its silver anniversary marking a quarter century of growth, progress, service, and quality education!

The College opened September 11, 1972 with a full-time faculty of 26 and a student body of 1,250. The new campus showed great promise offering 33 majors within a comprehensive curriculum, 10 pre-professional programs, and eight vocational certificate plans. Twenty-five years later CHC has grown to 62 full-time and 105 adjunct faculty and 5,500 students. It now offers 38 majors, 14 pre-professional preparation programs, and 14 occupational certification plans.

Our campus philosophy is "... dedicated to the principles of a democratic society that firmly believes that the worth and dignity of each individual can best be served by recognizing individual differences and that all youth and adults should be given equal opportunity for an education commensurate with their abilities interests, goals, and needs." After two and a half decades, the College continues to subscribe to that philosophy, and is reflected in our mission statement:

The mission of Crafton Hills College is to promote the discovery and application of knowledge, the acquisition of skills, and the development of intellect and character in a manner which prepares students to contribute effectively and ethically as citizens of a rapidly changing and increasingly technological world. This mission is carried out in an environment which encourages intellectual development, enhances personal growth, and fosters an openness to a wide range of ideas, culture and people.

Over the last ten years, the transfer program is one that prepares students well for the four-year colleges and universities. Yearly reports from the California State University and College System show our students earn higher grade point averages than native students. The number of graduates receiving two-year Associate in Arts or Associate in Science Degrees has increased by more than 1,000 percent. Occupational education programs such as Radiologic Technology, Respiratory Therapy, and Computer and Information Science have come into their own. Emergency Medical Services and Fire Technology have earned regional training center status and are heavily subscribed. Cultural enrichment programs such as the Summer Redlands Theatre Festival and the annual CHC Baroque Festival have become mainstays of the College.

The last five years have been particularly exciting, gratifying, and successful in the quest to fulfill the college mission. A state-of-the-art Meridian Modular Telephone System was installed campus-wide; Technology 2000, a high technology plan, was implemented so the College will be at the cutting edge of the computer age before the turn of the century; the Child Development Center was completed and is fully operational in partnership with Child Care America, private firm; the original lighting system in the Performing Arts Center was replaced with the latest model; a new Student Senate was recently constructed and furnished to accommodate our emerging leaders in student government; and the installation of the CHC Carillon Bells recently occurred bringing back tradition and great joy to the campus.

Our silver anniversary is the time to acknowledge the commitment, dedication and hard work of the faculty, staff, and administrators who have contributed so much to CHC's Mission and to praise the progress of the more than 70,000 students who have chosen the College as the place to pursue their dreams.

We look forward with anticipation to the next quarter century of growth, progress, service, and quality education within that vibrant, dynamic institution we know as Crafton Hills College!

Sincerely,

Luis S. Gómez
President

SECTION I

GENERAL INFORMATION

ABOUT THE COLLEGE

Crafton Hills College (CHC) is one of 106 campuses in the California Community College system, the largest college system of higher education in the world. Since its opening in 1972, learners of all ages, interests and backgrounds have passed through the doors of CHC, taking advantage of this first step to higher learning. As new businesses and industries settle in this region, CHC continues to increase in importance as a source for a college education and employee training. Crafton Hills currently serves approximately 5,500 students and offers both day and evening classes. The Western Association of Schools and Colleges, the accrediting body for California and the Western Pacific, recently reaffirmed CHC's accreditation through the year 2002.

Located on rolling hills above the Yucaipa Valley and surrounded by an undisturbed natural environment, Crafton Hills offers more than 50 majors in the liberal arts and sciences, vocations and technical studies. With its imaginative architecture, manicured grounds and spectacular surroundings, the atmosphere of the college is one of serenity — right for reflection, growth and for learning.

What sets the campus apart from many others is that, in addition to quality instruction, many of the professors are experts in their field outside the classroom. Also, the small size of the college allows for much more one-on-one communication between instructors and students. The CHC instructors are noted for being accessible and caring about the students as individuals. If you're just getting started at the college, CHC has an experienced and caring counseling staff to help you. The counselors are available for consultation throughout your college experience here. At CHC, there is still that personal touch.

An important priority at the campus is high technology. The campus's High Technology Committee, comprised of faculty and administrators, established Technology 2000, a plan to keep pace with the ever changing needs of the modern classroom. During the past two years, the college has purchased more than 150 new computers and state-of-the art software for classrooms and college-wide computer labs. The college will continue to upgrade its computer technology each year.

In addition to student-centered classes and an able counseling and career guidance staff, CHC provides a variety of cultural, social and recreational opportunities. Each year, the college presents its Annual Baroque Festival, which features the art, music, dance and history of the world during the era of the Baroque. CHC also has a highly regarded Theatre Arts Department, which is renown for its excellent productions of award-winning Broadway plays, musicals, and the classics. CHC's jazz band is also highly respected. Its trumpet playing director pulls together musical greats from all over the region, as well as up-and-coming talent from among CHC students.

Students have extra-curricular opportunities to explore their interests in clubs, student government and educational field trips to various locations in the world. For recreational activities, the college's P.E. Department oversees a six-hole golf course, outstanding gym facilities, and tennis courts.

Above all, CHC is a place for learning and personal growth. It has established a reputation for quality and a willingness to respond quickly and reasonably to community needs.

CHC operates on the semester system. Fall semester begins in August, spring term starts in January, and summer session opens in June.

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.

MISSION STATEMENT

The mission of Crafton Hills College is to promote the discovery and application of knowledge, the acquisition of skills, and the development of intellect and character in a manner which prepares students to contribute effectively and ethically as citizens of a rapidly changing and increasingly technological world.

This mission is achieved by providing to the students and communities we serve high quality, effective and accountable instructional programs and services in the following areas:

- Transfer education programs that ensure the greatest possibility of success in baccalaureate programs.
- General education designed to give students a substantial and coherent exposure to the major broad domains of higher education.
- Vocational/Technical education programs that offer opportunities in training, retraining, and skill building to provide business, industry and government with a qualified work force and that support economic development.
- Comprehensive support services, enhanced by the matriculation, that provide for counseling and guidance to encourage student growth and development through assessment, academic planning, career planning and personal development.
- A developmental program that provides underprepared students with the skills they need to enter transfer, general education or vocational/technical programs.
- Programs and services that provide disabled and disadvantaged students the opportunity for equitable access to the educational offerings of the college.
- A community services program that offers lifelong learning through education, cultural enrichment and recreational programs.
- A variety of delivery methods to meet the needs of a diverse student population.

This mission is carried out in an environment which encourages intellectual development, enhances personal growth, and fosters an openness to a wide range of ideas, culture and people.

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 colleges and 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 may 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 76001)

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.

PRE-ENROLLMENT ASSESSMENT

As a result of State of California legislation, new students entering CHC who intend to complete any program offered at the College shall be assessed for competencies in English, Reading, and Math skills prior to enrollment with the following exceptions:

1. Completion of an Associate of Arts Degree or higher.
2. Provision of scores from the ACT, APS, ASSET, CGP, CPTs, MDTP, SAT, or SCAT.
3. Presentation of CHC testing scores (Nelson-Denny Reading Test, English Placement Test, and Math Proficiency Test).
4. Taking one or a combination of the following courses: P.E., Applied Arts, Applied Music during a semester up to a cumulative total of 12 semester units.
5. Requires assessment through DSP&S.
6. Requires language assisted registration if English not primary language.

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 (CPT) at the Admissions and Records Office.
3. Submit official high school or college transcripts if you are a matriculated student.
4. Take any placement examination that may be recommended for admissions into special programs.

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 first day of instruction for 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 on active duty in this state, shall be entitled to residency classification.
- 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)

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 and intent to make California their home for other than a temporary purpose. To accomplish this, the following individual information may 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:

May 1	for Fall Semester
November 1	for Spring Semester
March 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 500 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 a prominent person in your community, verifying character, background, and ability, must be submitted.
- 4. A non-refundable application processing 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 within the first month of attendance.

8. An affidavit of financial support.
9. When all requirements have been met, a letter of acceptance will be mailed. An I-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 I-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 1 for Fall Semester and January 4 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 fees at the time of registration.
5. You may attend Crafton Hills College for a maximum of six 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.

MATRICULATION

The matriculation program at Crafton Hills College is intended to assist students establish appropriate educational goals and to provide support services to help them achieve these goals. Students eligible for matriculation will be provided an evaluation of basic skills, orientation, counseling, completion of an education plan and follow-up services.

ORIENTATION

Each semester, a required orientation course for new, non-matriculated 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/ LOANS, GRANTS, AND EMPLOYMENT

If you need help with the costs of attending Crafton Hills College, the Financial Aids Office, located in the Lab Administration Building, may be able to help you.

No student should be denied access to the educational experience at CHC because of lack of funds. The Financial Aids Office makes limited funds available to needy students in an equitable manner. The distribution of these funds is closely regulated by laws designated to direct educational support funds to those who need them most.

The Financial Aids Office has detailed information on the following:

- PELL Grant
- California State Grants
- College Work Study
- Student Loan Programs
- Perkins Loans
- Fee Waivers

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. A completed application for admission;
2. Two certified copies of your DD-214, if this is your initial enrollment;
3. Official transcripts from all colleges / military schools you have attended;
4. A Veterans Enrollment Approval 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 AND WELLNESS 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 goals. 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 include but are not limited to the following: (a) Health education and counseling programs; (b) Assessment, intervention, and referral services which include health appraisal, screening, first aid and urgent care, nursing services, mental health counseling and crisis intervention; (c) Health promotion activities; (d) Communicable disease surveillance and control programs; (e) Illness and injury prevention programs and services; (f) Advisory and consultative activities for promotion of a safe and healthful campus environment.

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 PROGRAMS AND SERVICES (DSP&S)

Crafton Hills College offers a comprehensive program of support services to students with a disability. Students who have a hearing impairment, visual impairment, physical disability (permanent or temporary), or a learning disability are eligible for the services which are provided according to individual need.

Support services are provided as appropriate. Examples are priority registration, special parking, tram service, notetakers, tutors, and interpreters for the deaf. 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, academic counseling, and financial aid assistance and other college related expenses. Crafton Hills College admits 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. Eligibility guidelines addressing annual family income levels are established by State regulations. Please check with the EOPS office or the current class schedule for the most recent income guidelines.

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 (909) 389-3239.

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 Senate. The Senate 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 Institution—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

General Education courses provide a fundamental learning foundation for all instructional programs offered by the college. These courses are designed to stimulate the student's intellectual curiosity, to introduce the student to the major broad domains of higher education, to develop the student's awareness of societal concerns

and of the responsibilities of citizenship. All programs leading to the Associate Degree include a general education component.

CONTINUING EDUCATION

The Continuing Education Program at Crafton Hills College offers classes during the evening hours. Evening hours 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 toward 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.

DISTANCE LEARNING

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 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 (909) 888-6511 or (909) 825-3104, Extension 1131.

ON-LINE COMPUTER COURSES

With access to a computer, students can take an on-line computer course at home, at work, or in a library. Such courses are the college's attempt to further explore computer technology as a

teaching tool. Check the current class schedule or the Distance Learning schedule regarding on-line courses being offered.

COMMUNITY EDUCATION AND SERVICES

Community Education and Services offers a program of personal and professional development, job training, and skills improvement. This program is offered in addition to the college's instructional program. The courses offered are not academic equivalents or regular credit classes.

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 Finkelstein 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 198 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 aca-

demic 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 a.m.-7:00 p.m. Monday-Thursday and 7:45 a.m.-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 IX prohibiting sex discrimination in schools and colleges, is the Vice President of Student Services in Room SS-306, ext. 3355. 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 Ameri-

can 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 nineteen (19) 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, 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 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 will be charged a fee in accordance with Board Policy 7180.

Upon approval of the application by the Vice President of Instruction and payment of fees, approval will be forwarded to appropriate instructors to administer examinations and submit grades. Grades will be consistent with the 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 excessive absences. Reinstatement is the prerogative of the instructor.

GRADE CHANGES

Individual course instructors are responsible for assigning grades. All grades are final. As per Board Policy 5040, grades will not be changed for any reason or under any circumstance after three years from the end of the term in which the grade was assigned.

GRADING SYSTEM

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

Evaluative Symbols	Definition	Grade Points
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 Symbols	Definition	Comments
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 intersessions 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 **NC**'s, **I**'s and **W**'s in all units in which he/she has been enrolled.

COUNSELING REQUIREMENTS

When a student earns a grade point average of less than 2.00 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 1994-95 followed by the fall semester 1995-96 shall be considered consecutive if the student was not enrolled in the spring semester of 1994-95.)

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 2.0 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

Courses in which a substandard grade was issued (D, F, NC) may be repeated one time. Only the units and the grade for the course taken the second time will 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

Students of Crafton Hills College may alleviate certain previous substandard academic and skills training performance which is not reflective of present demonstrated abilities in accordance with the following educational principles and procedures.

Academic renewal without course repetition may be accomplished by submission of a petition to the appropriate campus committee. A student may petition to have any substandard grades for courses taken during two consecutive semesters of attendance at any accredited college eliminated from the computation of the total grade point average not to exceed a total of thirty (30) units.

Students submitting such petitions must have been enrolled and must have completed 24 units of college work at any accredited college with a grade point average of 2.5 or better, subsequent to the semester being petitioned. The semester(s) under consideration must have been completed at least two semesters prior to the time of submitting the petition.

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.

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

COLLEGE POLICY ON CHEATING AND PLAGIARISM

It is the belief at Crafton Hills College that students are entitled to the best education that the College can make available to them and that they, their instructors and their fellow students share responsibility for seeing that their education is honestly attained.

In keeping with this philosophy, each student is expected to exert an entirely honest effort toward attaining an education.

Every instructor has the responsibility and authority for dealing with such instances of cheating or plagiarism as may occur in class.

Cases of this nature may be heard by a grievance committee under the provisions of Board Policy 6090.

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 in 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. See the course numbering system in the current catalog.
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 and lower division 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; a reading score at the 50th percentile, or higher, on the CPTs; or the completion of any reading course numbered 1-99 with a grade of “C” or better.
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 scores from this test as early as possible in their college career.
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 requirements.
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. A maximum of 6 units of Reading and Study Skill courses may be applied.
 - d. 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 degree applicable courses in that discipline may be used to meet the general requirements except those noted in 7c above.
 - a. **English** (3-4 units) 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
 Chemistry
 Geography 110, 111, 114, 126 (only)
 Geology
 Microbiology
 Oceanography
 Physics

d. Humanities (3-6 units) Students must take at least one course from section i:

- i. Anthropology 110
Art 100, 102, 105
English
(except 901, 902, 908AB, 909AB, 916, 015, 101, 102, 144, 232, 233)
Foreign Languages
History 160, 161, 164, 165, 170, 171 (only)*
Interdisciplinary Studies 101, 102, 108, 140
Music 100, 103, 120, 134
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, 103, 120 and 134
Theatre Arts: All courses may apply except 100, 108 and 109

e. Social Sciences (3-6 units)

Anthropology
Economics
Geography (except 114)
History**
Political Science
Psychology (except 955)
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, 102, 144
Mathematics (except 942, 952)
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

Requirements for 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.

* A minimum of one life science with lab and one physical science with lab is 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.

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PREREQUISITES, COREQUISITES, AND DEPARTMENTAL RECOMMENDATIONS

When registering for classes, students are required to adhere to enrollment policies which relate to prerequisites, corequisites, and departmental recommendations.

1. A **prerequisite** means a condition of enrollment that a student is required to meet in order to demonstrate readiness for enrollment in a course or educational program. Students registered in a class without having completed the prerequisite(s) may be dropped from the class. Prerequisite courses must be completed with a grade of C or higher. Prerequisite courses completed with a grade of D or F indicate unsatisfactory performance in the course and do not satisfy the prerequisite.
2. A **corequisite** means a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.
3. A **prerequisite/corequisite** means a condition of enrollment consisting of a course that a student must either have taken previously or be taking simultaneously in order to enroll in another course.
4. A **departmental recommendation** means a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or education program.

SECTION II

COURSE DESCRIPTIONS

Accounting	Interdisciplinary Studies
Administration of Justice	Marketing
Allied Health Sciences	Mathematics
Anatomy / Physiology	Microbiology
Anthropology	Music
Art	Oceanography
Astronomy	Philosophy
Biology	Physical Education
Business Administration	Physics
Business and Office Technology	Physiology
Chemistry	Political Science
Child Development	Psychology
Computer and Information Sciences	Radiologic Technology
Economics	Reading & Study Skills
Emergency Medical Services	Real Estate
English	Religious Studies
Fire Technology	Respiratory Care
French	Sociology
Geography	Spanish
Geology	Speech
German	Theatre Arts
Health Education	Work Experience
History	
Human Services	

NUMBERING OF COURSES

010-099 Multipurpose courses, but not generally applicable to the Baccalaureate degree.

100-299 Basic lower division courses usually applicable to both the Associate and the Baccalaureate degrees.

900-999 Courses not applicable to the Associate degree.

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.

California Articulation Number (CAN)

The California Articulation Number (CAN) System identifies many transferable, lower division, preparation courses commonly taught on California college and University campuses.

The system assures students that CAN courses on one participating campus will be accepted “in lieu of” the comparable CAN courses on another participating campus. For example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on every other participating campus. Each campus retains its own numbering system, but adds the CAN designation parenthetically in its publications.

Check with counseling offices, departmental offices, or articulation officers for current listings of CAN courses and campuses participating in the CAN System. A CAN CATALOG listing campuses and courses is published biannually.

ACCOUNTING

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.

198 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.

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, (CAN BUS 2)

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. Also includes coverage of the relationship of accounting to the economic environment and accounting information systems. Emphasis will be on case learning reflecting a users' perspective and on developing team learning and decision-making skills.

211 PRINCIPLES OF ACCOUNTING COMPUTER LABORATORY 1 UNIT

UC, CSU, (CAN BUS 2)

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 processes; application of these concepts in the fields of cost, income tax, stockholder's equity, funds statements and financial statement analysis including the statement of cash flows. In addition, coverage of the conversion cycle, budgeting and the administrative cycle in accounting. Emphasis will be on case learning reflecting a user's perspective and on developing team learning and decision-making skills.

221 PRINCIPLES OF ACCOUNTING COMPUTER LABORATORY 1 UNIT

UC(CAN 2), CSU(CAN 2),

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. Emphasis will be on case learning reflecting a users' perspective and on developing team learning and decision-making skills.

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. Emphasis will be on case learning reflecting a users' perspective and on developing team learning and decision-making skills.

230 ABCD STATE AND FEDERAL INCOME TAX ACCOUNTING 4 UNITS

CSU, Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Departmental Recommendation: Accounting 205 and/or Accounting 210.

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

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

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 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.

198 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.

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.

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.

119 ABCD SELECTED TOPICS IN ALLIED HEALTH SCIENCES .5-3 UNITS

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: .5-3 hours per week and/or

Laboratory: 1.5-9 hours per week

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

198 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.

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 ESSENTIALS OF HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

This is a combined lecture and laboratory course emphasizing the basic structural, functional and developmental stages and clinical aspects of the human body. The course is an introductory survey of the human body in one semester. The essentials of structure and function will be included in each of the eleven body systems covered, as well as the concepts of homeostasis.

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.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

This is a combined lecture and laboratory course emphasizing an advanced understanding of the structural and functional aspects of the human body. This course is of a two semester course offering in Human Anatomy and Physiology. The course will cover the introduction to human anatomy and physiology, biochemistry, cytology, cellular metabolism, histology, integumentary system, osteology, articulations, myology, and the introduction to neurology.

151 HUMAN ANATOMY AND PHYSIOLOGY 4 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Laboratory: 3 hours per week

This is a combined lecture and laboratory course emphasizing an advanced understanding of the structural and functional aspects of the human body. This course a semester course offering in Human Anatomy and Physiology. The course will cover the divisions of the nervous system, somatic and special senses, endocrine system, blood, cardiovascular, lymphatic, and immunity systems, as well as digestive, nutritional, respiratory, urinary and reproductive systems. Fluid and acid/base balance will also be covered.

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. (CAN ANTH 4)

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. (CAN ANTH 2)

107 THE UNITED STATES AND THE NORTH AMERICAN INDIANS 3 UNITS*UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

History of the North American Indian from first contact through conquest and reservation life to the present; examination of modern Indian communities, including red power, urban life and current problems, including material on traditional Indian culture. (Also listed as History 107.)

110 PRIMITIVE RELIGIONS 3 UNITS*UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Comparative study of supernaturalism in primitive societies, both past and present, including witchcraft, magic, totemism, mythology and ritual nativistic movements, and the religious context of drug usage. Prehistoric religion will be examined, as well as the belief systems of selected tribal peoples. (Also listed as Religion 110.)

246ABCD SPECIAL PROBLEMS IN ANTHROPOLOGY 1 UNIT*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.**Departmental Recommendation: Art 100-102.**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 1.5 -3 UNITS**120B BASIC DESIGN II 1.5 -3 UNITS****120C BASIC DESIGN III 1.5 -3 UNITS****120D BASIC DESIGN IV 1.5 -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.

124#4 DRAWING 3 UNITS*UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 2 hours per week and**Laboratory: 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. This course may be taken four times. (Formerly ART 124ABCD)

126A PAINTING I	1.5 -3 UNITS
126B PAINTING II	1.5 -3 UNITS
126C PAINTING III	1.5 -3 UNITS
126D PAINTING IV	1.5 -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

Painting in watercolor and oils; still life, landscape, and figure painting.

132#4 LIFE DRAWING 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 2 hours per week

Laboratory: 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. This course may be taken four times. (Formerly ART 132ABCD)

175#4 SCULPTURE 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 2 hours per week and

Laboratory: 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. This course may be taken four times. (Formerly ART 175ABCD)

200#4 PRINTMAKING 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 2 hours per week and

Laboratory: 4 hours per week

Focus on techniques and skills of printmaking. Areas to be covered: linoleum, woodcuts, silk screening and stenciling. This course may be taken four times. (Formerly ART 200ABCD)

SPECIAL PROJECTS IN ART

246ABCD	1 UNIT
247ABCD	2 UNITS
248ABCD	3 UNITS
249ABCD	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.

275#4 CONTEMPORARY SCULPTURE TECHNIQUES 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: Art 175#4.

Lecture: 2 hours per week and

Laboratory: 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. This course may be taken four times. (Formerly ART 275ABCD)

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 .25 -4 UNITS

UC, 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 anatomy and physiology, animal and plant structure and function, genetics, evolution and ecology. The use of the scientific method to gather and evaluate information and form conclusions regarding living organisms is also covered. (Course 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

Study of the basic concepts of ecology including the physical environment, ecosystems, energy production and transfer, and the impact of humans on ecosystems. Environmental considerations include renewable and non-renewable energy, food resources, pest control, waste management, maintenance of air and water quality, sustaining the biodiversity of ecosystems, global climate, and political and economic considerations.

127-128 SUBTIDAL MARINE BIOLOGY 129

2 UNITS

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 POPULATIONS AND ORGANISMS

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 152

1.5 -3 UNITS

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.

SPECIAL PROBLEMS IN BIOLOGY

246AB

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 BUSINESS COMPUTATIONS**3 UNITS***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**.25-3 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 4-48 hours per semester*

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

100 INTRODUCTION TO BUSINESS**3 UNITS***UC, 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.

104 INTRODUCTION TO FINANCIAL MANAGEMENT**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: None. Busad 100 recommended.**Lecture: 3 hours per week*

Introduction to finance. Topics include taxes, present value analysis, valuation, risk-return trade-off, ROI, financial analysis, forecasting, budgeting, working capital management, capital budgeting, sources of financing, leverage, capital structure, dividend policies, and international financing.

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.

108 PERSONAL FINANCE**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Preparation for managing personal finances, including budgeting, borrowing, insurance, investments and home ownership.

145 BUSINESS COMMUNICATIONS**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: B&OT 144 or ENGL 144 or ENGL 015 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 B&OT 145.)

198 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.

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.

230 USING COMPUTERS FOR BUSINESS**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: Acct 205 or Busad 100 or equivalent.**Lecture: 3 hours per week**Laboratory: 1 hour 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.

BUSINESS & OFFICE TECHNOLOGY

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.

090ABCD SELECTED TOPICS IN BUSINESS AND OFFICE TECHNOLOGIES .5-3 UNITS

Associate Degree Applicable

Prerequisite: None

Lecture: .5-3 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.

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.

101 INTERMEDIATE KEYBOARDING/FORMATTING 1-3 UNITS

Associate Degree Applicable

Prerequisite: B&OT 100 or B&OT 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 material using the computer; continued emphasis on accuracy and speed; preparation of letters, reports, tables, and a large volume of other diversified business documents. Designed to develop a minimum keyboarding speed of 40 words a minute.

102 ADVANCED KEYBOARDING/DOCUMENT PRODUCTION 1-3 UNITS

Associate Degree Applicable

Prerequisite: B&OT 101 or B&OT 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.

103ABCD BEGINNING WORD PROCESSING APPLICATIONS: MICROSOFT WORD 2 UNITS

Associate Degree Applicable

Prerequisite: B&OT 100 or 100A or 100B or 119 or equivalent.

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

Development of marketable skills in word processing using IBM or compatible microcomputers and Microsoft Word for DOS or Microsoft Word for Windows 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.

104ABCD ADVANCED WORD PROCESSING APPLICATIONS: MICROSOFT WORD 2 UNITS

Associate Degree Applicable

Prerequisite: B&OT 103A or 103B or 103C or 103D.

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

Development of marketable skills in word processing using Microsoft Word for DOS or Microsoft Word for Windows 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.

105ABCD BEGINNING WORD PROCESSING APPLICATIONS: WORDPERFECT 2 UNITS

Associate Degree Applicable

Prerequisite: B&OT 100 or 100B or 119 or equivalent.

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

Development of marketable skills in word processing using IBM or compatible microcomputers and WordPerfect for DOS or WordPerfect for Windows 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.

106ABCD ADVANCED WORD PROCESSING APPLICATIONS: WORDPERFECT 2 UNITS

Associate Degree Applicable

Prerequisite: B&OT 105A or 105B or 105C or 105D

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

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

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

**108 ADVANCED PC/MS DOS
(DISK OPERATING SYSTEM)****2 UNITS***Associate Degree Applicable**Prerequisite: B&OT 107.**Lecture: 4 hours per week (8-week course)*

Study of advanced DOS techniques (program overlays; how DOS and programs use RAM; optimizing computer performance with extended memory, expanded memory, RAM disk, and disk caching). Survey of CONFIG.SYS commands and device drivers. Discussion of solutions to common problems (software, hardware, and data incompatibility; hard disk, efficiency; defragmenting disks; computer viruses). Exploration of the DOS Shell. Comparison of commercial utility programs.

109 USING MICROSOFT WINDOWS**2 UNITS***Associate Degree Applicable**Prerequisite: B&OT 108 or equivalent.**Lecture: 4 hours per week (8-week course)*

Study of computer software and hardware necessary to understand and use Microsoft Windows graphical user interface. While gaining a working knowledge of Microsoft Windows, students will learn to use some of the more important advanced features of Windows, such as running multiple applications, transferring information between applications, and managing the files and subdirectories on a hard disk or diskette.

110 WORD/INFORMATION PROCESSING CONCEPTS**3 UNITS***Associate Degree Applicable*

Prerequisite: B&OT 100 or B&OT 100B or equivalent Corequisite: B&OT 103A or 103B or 103C or 103D and B&OT 104A or 104B or 104C or 104D.

Lecture: 3 hours per week

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

112ABCD FUNDAMENTALS OF SPREADSHEET APPLICATIONS**2 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 4 hours per week (8-week course)*

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

113ABCD FUNDAMENTALS OF DATABASE APPLICATIONS**2 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 4 hours per week (8-week course)*

Business applications and principles of creating, maintaining, and manipulating records of data for business applications; editing, appending, and deleting records from the database; sorting and indexing records; searching for particular records in the database; producing reports.

114ABCD BEGINNING BUSINESS DESKTOP PUBLISHING**2 UNITS***Associate Degree Applicable*

Prerequisite: B&OT 104A or 104B or 104C or 104D or B&OT 106A or 106B or 106C or 106D and B&OT 109.

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.

115ABCD ADVANCED BUSINESS DESKTOP PUBLISHING**2 UNITS***Associate Degree Applicable**Prerequisite: B&OT 114A or 114B or 114C or 114D.**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.

116 TELECOMMUNICATIONS FOR BUSINESS**3 UNITS***Associate Degree Applicable**Prerequisite: Busad 230 or B&OT 110 or equivalent.**Lecture: 3 hours per week*

Thorough examination of telecommunications technology, terms and concepts of transmission, applications, major issues, benefits and drawbacks. Description of basic network configurations; how companies utilize and manage networks; microwave and satellite communications systems; electronic mail; voice processing technology; facsimile transmission; evolution of videotext and teletext; teleconferencing; mobile communication service.

119 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.

140 GENERAL OFFICE PROCEDURES**3-6 UNITS***Associate Degree Applicable**Prerequisite: B&OT 100 or equivalent.**Lecture: 2 1/2-5 hours per week**Laboratory: 1-3 hours per week*

Knowledge and experience in office procedures and secretarial skills necessary for success in the modern office; emphasis and experience in the use of transcription equipment, electronic typewriters, and computers for completion of typical office tasks; understanding manual and electronic records management standards; review of language arts skills; experience in resume preparation and interviews.

140AB GENERAL OFFICE PROCEDURES**3 UNITS***Associate Degree Applicable**Prerequisite: B&OT 100 or equivalent.**Lecture: 2.5 hours per week**Laboratory: 1.5 hours per week*

Knowledge and experience in office procedures and secretarial skills necessary for success in the modern office; emphasis and experience in the use of transcription equipment, electronic typewriters, and personal computers applied in the completion of typical office tasks; experience in resume preparation and interviews; review language arts skills.

141 RECORDS AND DATABASE MANAGEMENT 2 UNITS*Associate Degree Applicable**Prerequisite: None**Lecture: 4 hours per week (8-week course)*

Development of skills for managing paper, film, and computer records; application of Association of Records Managers and Administrators (ARMA) rules to standard indexing techniques; practice in basic numeric, subject, and geographic filing procedures; design and analysis of records management systems.

144 BUSINESS ENGLISH 3 UNITS*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 English 144.)

145 BUSINESS COMMUNICATIONS 3 UNITS*Associate Degree Applicable**Prerequisite: B&OT 144 or Engl 144 or Engl 015 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 Busad 145.)

146 HUMAN RELATIONS IN THE OFFICE ENVIRONMENT 1-3 UNITS*Associate Degree Applicable**Prerequisite: None.**Lecture: 1-3 hours per week*

Examination of the human relations problems encountered in the business office, especially those concerning the new employee, in dealing with employers, with peers and with the general public.

162 MEDICAL TERMINOLOGY AND TRANSCRIPTION I 1-6 UNITS*Associate Degree Applicable**Prerequisite: B&OT 100 or equivalent.**Lecture: 1-6 hours per week**Laboratory: 1 hour per week*

Instruction in medical terminology and utilization of word processing software as they relate 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 separately; e.g., history and physical examination first, radiology second, etc.

163 MEDICAL TERMINOLOGY AND TRANSCRIPTION II 1-6 UNITS*Associate Degree Applicable**Prerequisite: B&OT 162.**Lecture: 1-6 hours per week**Laboratory: 1 hour per week*

Instruction in medical terminology and utilization of word processing software as they relate 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.

198 BUSINESS AND OFFICE 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.

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 refining, 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

100 INTRODUCTION TO CHILD DEVELOPMENT **3 UNITS**

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Introduction to the field of children's studies; designed to familiarize students with the broad aspects of the profession, philosophy, and principles of caring for children in a variety of settings.

101 ADULT-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. Family dynamics, communication and discipline are explored.

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, with an emphasis on individual, physical, cognitive, and socioemotional needs of children. Practical experience observing and interacting with children.

106 INTERNSHIP IN EARLY CHILDHOOD EDUCATION **4 UNITS**

Associate Degree Applicable

Prerequisite: CD 105.

Lecture: 1.5 hours per week

Laboratory: 7.5 hours per week

Supervised experience and participation in a group program for preschool children at the CHC Child Development Studies Center. Emphasis is on curriculum planning and evaluation, discipline, guidance techniques, instructional method, cooperative relationships with staff, parents, and children, and professional ethics. (Required for CHC Child Development Certificates for an Associate Teacher, Teacher, Master Teacher and Site Supervisor.)

107 ADVANCED INTERNSHIP IN EARLY CHILDHOOD EDUCATION **4 UNITS**

Associate Degree Applicable

Prerequisite: CD 106.

Lecture: 1.5 hours per week

Laboratory: 7.5 hours per week

Supervised experience and participation in a group program for preschool children at the CHC Child Development Studies Center. Emphasis is on independent mastery of skills for curriculum planning, assessment, discipline, guidance techniques, instructional methods, cooperative relationships, ethics and job search skills.

115 HEALTH, WELFARE, AND NUTRITION FOR CHILDREN **3 UNITS**

Associate Degree Applicable

Prerequisite: None.

Departmental Recommendation: CD 105.

Lecture: 3 hours per week

Training in health, nutrition, disaster preparedness, children with special needs, child abuse identification and prevention, and caring for the mildly ill child. (This course meets the recommended training requirements of county and state licensing agencies.)

116 PEDIATRIC CPR, FIRST AID, AND SAFETY FOR CHILDREN **2 UNITS**

Associate Degree Applicable

Prerequisite: None.

Lecture: 1.5 hours per week

Laboratory: 1.5 hours per week

Training and certification in pediatric CPR, pediatric first aid, prevention of the spread of infectious disease, immunizations, child safety, and injury prevention. (Meets county and state licensing requirements for child care workers.)

124 ADMINISTRATION OF CHILDREN'S PROGRAMS I **3 UNITS**

Associate Degree Applicable

Prerequisite: CD 105, 126 and two of the following: CD 130, 131, 137, or 229.

Lecture: 2 hours per week

Laboratory: 3 hours per week

Budgeting, licensing, planning, organizing and managing a variety of programs for young children. The administrator's role, site development, ongoing organization, personnel program components, working with staff, parents and volunteers will be included in the course. (Designed to meet California State Child Development Permit requirements for a Site Supervisor and Title 22 requirements for a Child Care Center Director.)

125 ADMINISTRATION OF CHILDREN'S PROGRAMS II **3 UNITS**

Associate Degree Applicable

Prerequisite: CD 124.

Lecture: 2 hours per week

Laboratory: 3 hours per week

This course explores the overall operations and human relations aspect of administering children's programs. Funding, business management practices, community relations, professional responsibilities and growth, labor relations and staff management will be addressed. (Designed to meet California State Child Development Permit requirements for Site Supervisor.)

126 CHILD, FAMILY, AND THE COMMUNITY 3 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Essentials and principles of early childhood education programs as they relate to the interactions between the child, parent, teacher, family and community. Includes types and quality of early childhood programs, basic licensing regulations, services available to families and positive guidance techniques used with children.

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.

130 MUSIC AND MOVEMENT FOR CHILDREN 3 UNITS*Associate Degree Applicable**Prerequisite: None.**Departmental Recommendation: CD 105.**Lecture: 3 hours per week*

Study of music and movement growth and development of children. Philosophy, theory, technique and application of musical concepts used with children are explored. The basic elements of music are investigated with an emphasis on planning and facilitating developmentally appropriate music and movement experiences with children.

137 PLAY AND MATERIALS IN EARLY LEARNING 3 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Departmental Recommendation: CD 105.**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.

198 CHILD DEVELOPMENT 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.

229 SCIENCE FOR THE CHILD 3 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Departmental Recommendation: CD 105.**Lecture: 3 hours per week*

Study of basic scientific theories and practices for teaching young children simple methods and processes of science. Classifying, simple reasoning, observing, making hypotheses, testing, generalizing cause and effect using energy, matter, and living things are explored.

230 LANGUAGE AND LISTENING, LITERACY AND LITERATURE EXPERIENCES FOR CHILDREN 3 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Departmental Recommendation: CD 105.**Lecture: 3 hours per week*

Study and application of whole language, listening, literary and literature experiences for children. Use of conversations, literature, storytelling, flannel boards, finger plays, dramatic play and other varied media. Developmentally appropriate whole language reading and writing activities for children.

235 MENTOR TEACHER/ADULT SUPERVISION 3 UNITS*Associate Degree Applicable**Prerequisite: CD 105.**Lecture: 2 hours per week**Laboratory: 3 hours per week*

Methods and principles of supervising student teachers in early childhood educational settings. Emphasis on the role of experienced classroom teachers who function as mentors to new teachers while simultaneously addressing the needs of children, parents and other staff. (A required course for Master Teacher level of the Child Development Permit.)

COMPUTER AND INFORMATION SCIENCES

100 COMPUTER LITERACY 1.5-3 UNITS*UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 1.5-3 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 INTRODUCTION TO COMPUTERS AND INFORMATION TECHNOLOGY 3 UNITS*Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Introduction to computer and information technology including the history, terminology, components, and operation of computer systems. Includes an overview and use of selected software applications. Includes program development using a high-level language. Discusses the impact of computers in the changing work place and on society. (No previous computer background required.)

102 BASIC LANGUAGE**3 UNITS***UC, CSU, Associate Degree Applicable**Prerequisite: C&IS 101.**Lecture: 3 hours per week*

Fundamentals of computer programming and problem solving using the BASIC Language. Students will complete homework assignments to include writing, debugging, and running programs in the interactive computer system to solve both numerical and nonnumerical problems.

103 PROGRAMMING IN VISUAL BASIC**3 UNITS***Associate Degree Applicable**Prerequisite: C&IS 102.**Lecture: 3 hours per week*

Introduction to standards and conventions of programming a graphical user interface using Visual Basic. Emphasis on understanding proper design, placement, and coding of the graphical features of the interface. Similarities and differences of Visual Basic and traditional programming languages will be explored. Microsoft Visual Basic will be utilized to develop programs.

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.

105 DATABASE CONCEPTS AND DESIGN**3 UNITS***UC, CSU, Associate Degree Applicable**Prerequisite: C&IS 101.**Lecture: 3 hours per week*

Fundamentals of database concepts with an emphasis on the design and creation of relational databases. Includes data querying, sorting, inserting, deleting, and report design and generation. Entity relationship diagrams, normalizing of database tables, implementing integrity rules, and developing data dictionaries will be emphasized. Microsoft Access or current database management software will be used to develop projects.

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.

**107 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 B&OT 107).

108 ADVANCED PC/MS DOS (DISK OPERATING SYSTEM)**2 UNITS***CSU, Associate Degree Applicable**Prerequisite: 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.

109 OPERATING SYSTEMS AND ENVIRONMENTS**3 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

An intensive study of a current operating system (WINDOWS 95 or newer versions as they are released) as it relates to personal users, business users, and computer programmers in a hands-on environment. Emphasis on system components, functions, and commands to include disk file management, system utilities, command line prompt, text editor, word processor, communications accessories, multimedia, graphics creation, data protection, printer control, desktop customizing, memory management (RAM), plug and play, and hardware configuration.

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.

115 PROGRAMMING IN C**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: C&IS 102.**Lecture: 3 hours per week*

Fundamentals of computer programming and problem solving using the C Language. Includes writing, debugging, and running programs in an interactive computer system to solve both numerical and nonnumerical problems. Microsoft C/C++ will be utilized to develop programs.

120 MINI-COMPUTER CONCEPTS, CHARACTERISTICS, AND COMPONENTS**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: C&IS 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.

**121A BEGINNING COMPREHENSIVE ELECTRONIC OFFICE (CEO)
WORD PROCESSING****1.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 24 hours per semester*

Development of word processing skills on the Data General Mini-Computer. Training in basic functions such as executing commands, understanding the document screen, entering and editing text, formatting text and saving and printing documents.

**121B ADVANCED COMPREHENSIVE ELECTRONIC OFFICE (CEO)
WORD PROCESSING 1.5 UNITS***Associate Degree Applicable**Prerequisite: C&IS 121A.**Lecture: 24 hours per semester*

Development of advanced word processing skills on the Data General Mini-Computer. Training in advanced functions such as working with list functions, function keys, calendars and personal user profiles.

**122 COMPREHENSIVE ELECTRONIC OFFICE (CEO) CONNECT
.5 UNIT***Associate Degree Applicable**Prerequisite: None.**Lecture: 8 hours per semester*

Introduction to the process of connecting microcomputers to a Data General MV series Mini-Computer. Develops skills in the use of Data General CEO Connect software. Introduce students to the system concepts and information transfer techniques necessary to link micro and mini computers via telephone lines.

**198 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.

**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**Prerequisite: 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*UC, 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 (MACRO) 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. (CAN ECON 2)

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. (CAN ECON 4)

SPECIAL PROBLEMS IN ECONOMICS**246****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

020 EMERGENCY MEDICAL TECHNICIAN - I**6 UNITS***Associate Degree Applicable**Prerequisite: Must be 18 years of age as required by Title 22 of the Health and Safety Code.**Departmental Recommendation: Good dexterity and coordination; with ability to work in small areas, on the ground or floor, and ability to lift up to 150 pounds.**Lecture: 68 hours per semester**Laboratory: 68 hours per semester**Clinic: 16 hours per semester**Field: 16 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 Systems in the field. Includes OSHA approved Hazardous Materials Awareness Level, Blood Borne Pathogens for Health Care Workers, state mandated SIDS Education and an introduction to Pharmacology for the EMT-I. (Formerly 020 ABCD)

050 INTEGRATED SCIENCE AND BASIC MEDICAL LANGUAGE FOR PARAMEDICS**3 UNITS***Associate Degree Applicable**Prerequisite: Must be pre-selected into the Paramedic Program.**Lecture: 48 hours per semester.*

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**.75-4 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**.25-4 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*

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**.25-4 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.

102 EMERGENCY DEPARTMENT NURSING**3 UNITS***Associate Degree Applicable**Prerequisite: Currently licensed as an RN.**Lecture: 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**2.25 UNITS***Associate Degree Applicable**Prerequisite: A current California R.N. license, one year**experience as a registered nurse, 800 hours experience as a nurse in the Emergency Department, current ACLS certification, proof of a cardiac dysrhythmia course, current employment in a base station hospital in San Bernardino or Riverside county and the ability to complete a screening written examination with 80% accuracy.**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.

105 PHYSICAL ASSESSMENT**2.25 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 24 hours per semester**Laboratory: 40 hours per semester*

Instruction in medical and trauma patient assessment geared toward the entry level pre-hospital care provider.

110ABCD ADVANCED CARDIAC LIFE SUPPORT— PROVIDER**1 UNIT***Associate Degree Applicable**Prerequisite: EMS 910 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.

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.

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.

**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, 153, 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**3 UNITS***Associate Degree Applicable**Prerequisite: EMS 050 or equivalent; must be pre-selected into the Paramedic program.**Corequisite: EMS 151, 152, 153, 154.**Laboratory: 120 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**2 UNITS***Associate Degree Applicable**Prerequisite: EMS 151, 152, 153, 154, 155.**Clinic: 162 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**7.5 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.

198 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.

200ABCD SELECTED TOPICS IN EMERGENCY MEDICAL SERVICES**.25 -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**.25 -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.

910ABCD BASIC CARDIAC LIFE SUPPORT — PROVIDER .25 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, life-guards, rescue workers, high-risk industry workers, families of heart patients and others interested in rendering emergency cardiac care.

911ABCD BASIC CARDIAC LIFE SUPPORT — PROVIDER (RECERTIFICATION)**.125 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 910.**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.

912ABCD BASIC CARDIAC LIFE SUPPORT — INSTRUCTOR**.25-.75 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 910.**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.

913ABCD BASIC CARDIAC LIFE SUPPORT — INSTRUCTOR (RECERTIFICATION)**.25 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 912.**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.

914ABCD STANDARD FIRST AID/MULTIMEDIA — PROVIDER**.25 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.

915ABCD STANDARD FIRST AID/MULTIMEDIA — PROVIDER (RECERTIFICATION)**.25 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 914.**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.

916ABCD STANDARD FIRST AID/MULTIMEDIA — INSTRUCTOR**.50 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 914.**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.

**917ABCD ADVANCED FIRST AID AND
EMERGENCY CARE — PROVIDER 2.25 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.

**918ABCD ADVANCED FIRST AID AND EMERGENCY CARE —
PROVIDER (RECERTIFICATION) .50 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 917.**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.

**919ABCD ADVANCED FIRST AID AND
EMERGENCY CARE — INSTRUCTOR 1 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 917.**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.

**921ABCD EMERGENCY MEDICAL TECHNICIAN I-A
(RECERTIFICATION) 1.25 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.

**923ABCD ADVANCED CARDIAC LIFE SUPPORT — INSTRUCTOR
(RECERTIFICATION) .25 UNIT***Not Applicable to the Associate Degree**Prerequisite: EMS 112.**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.

**931ABCD ADVANCED CARDIAC LIFE SUPPORT — PROVIDER
(RECERTIFICATION) .25 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.

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.

050AB EXPERIENCES IN LITERATURE 3 UNITS

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of literature, emphasizing a specific author, genre or literary theme. The specific content of each section of the course will be announced in the class schedule. Assigned readings, class discussions and essay exams. No more than six units of credit may be earned in ENGL 050AB and/or ENGL 150AB (see ENGL 150AB).

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

(CAN ENGL 2)

Prerequisite: ENGL 015 with a grade of C or better or a passing score on an accepted placement test.

Lecture: 4 hours per week

Instruction in expository and argumentative writing. Includes substantial reading, as well as writing a variety of essays, including a multi-source research paper of 2,000 or more words.

102 INTERMEDIATE COMPOSITION AND CRITICAL THINKING 4 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: English 101.

Lecture: 4 hours per week

Instruction in writing compositions that reflect both critical thinking and rhetorical skills beyond the English 101 level. Students will learn techniques used in persuasive and argumentative writing. This course will contain substantial analytical reading as well as writing.

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 B&OT 144.)

150AB EXPERIENCES IN LITERATURE 3 UNITS

UC, CSU, Associate Degree Applicable*

Prerequisite: Eligibility for ENGL 101.

Lecture: 3 hours per week

Study of literature, emphasizing a specific author, genre or literary theme. The specific content of each section of the course will be announced in the class schedule. Assigned readings, class discussions and essay exams. No more than six units of credit may be earned in ENGL 050AB or ENGL 150AB (see ENGL 050AB).

152 FRESHMAN COMPOSITION AND LITERATURE 3 UNITS

UC, CSU, Associate Degree Applicable

(CAN ENGL 4)

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 the basic elements of filmmaking, including script, image, editing, sound, directing, and acting. Students also learn to criticize and evaluate the classic and contemporary films they view as part of the course.

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.

901-902 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.

908AB 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.

909AB PATTERNS OF CONTEMPORARY ENGLISH **3 UNITS**
Not Applicable to the Associate degree
Prerequisite: English 908B with a grade of "C" or better. Courses must be taken in sequence.
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.

914 BASIC ENGLISH **3 UNITS**
Not Applicable to the Associate Degree
Prerequisite: None.
Departmental Recommendation: For ESL students, English 908/909.

Lecture: 3 hours per week

Instruction in the fundamentals of writing. This course will provide instruction in practical grammar, punctuation, mechanics, spelling, sentence structure, and paragraph writing.

916ABCD 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.

FIRE TECHNOLOGY

050-061ABCD SELECTED TOPICS IN FIRE TECHNOLOGY
.25 -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.

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-1 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 **10 UNITS**
Associate Degree Applicable
Prerequisite: EMS 020, Firet 100, Firet 101, or equivalent.
Lecture: 100 hours per semester
Laboratory: 260 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.

078 FIRE INSPECTION ACADEMY**11 UNITS***Associate Degree Applicable**Prerequisite: None. Firet 100 and Firet 101 recommended.**Lecture: 176 hours per semester*

Preparation of an entry-level fire inspector for conducting fire inspections in new and existing buildings, in the use of effective written and oral communications, and in effective public relations methods.

079 DRIVER/OPERATOR 1 ACADEMY**3 UNITS***Associate Degree Applicable**Prerequisite: Firefighter 1 Certification. Firet 106 recommended.**Lecture: 32 hours per semester**Laboratory: 48 hours per semester*

Information on driver techniques for emergency vehicles and techniques of basic inspection and maintenance for emergency vehicles, including actual driving exercises under simulated emergency conditions. This is a State Certified course.

080 FIRE INSTRUCTOR 1A**2.5 UNITS***Associate Degree Applicable**Prerequisite: None**Lecture: 40 hours per semester*

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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

Study of fire prevention; focus on code use, improvement, enforcement and fire cause; consideration of flammable liquid, 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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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 1A**2.5 UNITS***Associate Degree Applicable**Prerequisite: None.**Lecture: 40 hours per semester*

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.

088 FIRE INVESTIGATION 1B **2.5 UNITS**
Associate Degree Applicable
Prerequisite: Firet 087.

Lecture: 40 hours per semester

Study of the principles of evidence collection and preservation, report writing, the juvenile firesetter, Penal Code, and other statutory provisions. Further develops principles learned in Fire Investigation 1A.

089 FIRE PREVENTION 1C **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.

Lecture: 40 hours per semester

Principles of the basic hazards associated with flammable and combustible liquids and gases. Bulk storage, handling and transportation of gases and liquids.

090-097 ABCD SELECTED TOPICS IN FIRE TECHNOLOGY **.25-4 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.

100 FIRE PROTECTION ORGANIZATION **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 FIRE PREVENTION TECHNOLOGY **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.

102 FIRE BEHAVIOR AND COMBUSTION **3 UNITS**
Associate Degree Applicable
Prerequisite: Firet 100.
Lecture: 3 hours per week

Fundamental information and knowledge of the physical and chemical characteristics of matter, fire hazardous materials, and basic extinguishment theory.

103 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.

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.

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.

109 INTRODUCTION TO HAZARDOUS MATERIALS **3 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

Basic information about the properties of hazardous materials and the methods that are most appropriate for handling various kinds of accidents that can occur during fixed facility or transportation emergencies.

116 BUILDING CONSTRUCTION FOR FIRE PROTECTION **3 UNITS**
Associate Degree Applicable
Prerequisite: Firet 101.
Lecture: 3 hours per week

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

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 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 termination.

149 BASIC INCIDENT COMMAND SYSTEM **1 UNIT**
Associate Degree Applicable
Prerequisite: None.
Lecture: 16 hours per semester

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.

170 BASIC WILDLAND FIRE FIGHTING **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
Introduction to wildland fire suppression; overview of commonly used concepts and practices of fire fighting.

174 WILDLAND FIRE PREVENTION **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
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 **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
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 **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
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: 36 hours per semester
Laboratory: 54 hours per semester
Field: 90 hours per semester
Examination of the principles of fire control through the use of manpower, equipment, and extinguishing agents in the classroom, laboratory and field.

180 OIL AND GAS FIRES **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
Study of the proper tactics and methods for response to oil and gas fires.

182 STRUCTURAL FIRES **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
Study of how building construction influences fire behavior.

183 AIRCRAFT ACCIDENTS **2.5 UNITS**
Associate Degree Applicable
Prerequisite: None.
Lecture: 40 hours per semester
Study of the methods and tactics used in response to potential or active aircraft fire.

198 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.

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.

203 FIRE COMPANY OFFICER'S ACADEMY **5 UNITS**
Associate Degree Applicable
Prerequisite: None. Firet 084 recommended.
Lecture: 80 hours per semester
A preparation of Fire Company Officers in managing a fire company, including motivation as a positive tool, stress management, group communications, problem solving, individual and group behavior, conflict resolution, risk management, officer liability, and a variety of situation simulations.

220-245ABCD SELECTED TOPICS IN FIRE TECHNOLOGY **.25-4 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 **.25-4 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 DRIVER OPERATOR 1A **2.5 UNITS**
Associate Degree Applicable
Prerequisite: Contract, paid-call, or documented volunteer fire fighting experience.
Lecture: 40 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 DRIVER OPERATOR 1B 2.5 UNITS*Associate Degree Applicable**Prerequisite: Firet 275.**Lecture: 40 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.

277 HAZARDOUS MATERIALS FIRST RESPONDER 1.5 UNITS*Associate Degree Applicable**Prerequisite: None**Lecture: 24 hours per semester*

Instruction in safe and competent response techniques for probable first responders to hazardous materials incidents. Includes instruction in safe containment techniques and protective actions designed to mitigate the incident as far as possible.

279 FIRE TRUCK COMPANY OPERATIONS 5.5 UNITS*Associate Degree Applicable**Prerequisite: None**Lecture: 88 hours per semester*

Review of fire truck operations and the skills and techniques required in the use of apparatus, tools and equipment under emergency conditions.

901 FIRE SERVICE CAREER PREPARATION 3 UNITS*Not Applicable to the Associate Degree**Prerequisite: None**Corequisite: Firet 100 recommended.**Lecture: 3 hours per week*

Preparation of students to successfully compete for a position in the Fire Service. Includes academic skills testing, taking written, oral and physical agility tests and how to market skills.

902 FIREFIGHTER FITNESS (PHYSICAL AGILITY PREPARATION) 2.5 UNITS*Prerequisite: None**Corequisite: Firet 901 recommended.**Lecture: 1 hour per week**Laboratory: 2 hours per week*

Preparation of pre-entry level fire technology students to successfully pass a job related physical agility examination. Instruction through assessment and physical development.

FRENCH

015AB-016AB 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) 2.5 UNITS*UC*, CSU*, Associate Degree Applicable**Prerequisite: None.**Lecture: 2.5 hours per week**Laboratory: .5 hour per week*

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

101B COLLEGE FRENCH I (PART 2) 2.5 UNITS*UC*, CSU*, Associate Degree Applicable**Prerequisite: French 101A.**Lecture: 2.5 hours per week**Laboratory: .5 hour per week*

Continuation of French 101A. (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) 2.5 UNITS*UC*, CSU*, Associate Degree Applicable**Prerequisite: French 101B or French 101, or one year of high school French.**Lecture: 2.5 hours per week**Laboratory: .5hour per week*

Continuation of French 101B or French 101.

102B COLLEGE FRENCH II (PART 2) 2.5 UNITS*UC*, CSU*, Associate Degree Applicable**Prerequisite: French 102A.**Lecture: 2.5 hours per week**Laboratory: .5 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 IV **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 equivalent proficiency.

Lecture: 1-3 hours per week

Laboratory: 2 hours per week per unit of independent 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 combination 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**
UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week and field trips

Introduction to cultural geography, emphasizing 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: Geog 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 **.25-1 UNIT**
UC, CSU, Associate Degree Applicable*
Prerequisite: None.

Lecture: 1/4-1 hour per week and/or

Laboratory: 3/4-3 hours per week

Short courses in regional, physical, and cultural geography, offered on an occasional basis.

120 WORLD REGIONAL GEOGRAPHY **3 UNITS**
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

An introduction to world geography emphasizing the nature of major world culture regions, their social structure, religions, governments and economies.

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*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)**2.5 UNITS***UC*, CSU*, Associate Degree Applicable***Prerequisite:** None.**Lecture:** 2.5 hours per week**Laboratory:** .5 hour per week

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

101B COLLEGE GERMAN I (PART 2)**2.5 UNITS***UC*, CSU*, Associate Degree Applicable***Prerequisite:** German 101A.**Lecture:** 2.5 hours per week**Laboratory:** .5 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 allows 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.

263 NUTRITION AND HEALTH **3 UNITS**
CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Introduction to nutrition and health, covering basic topics ranging from digestion and absorption metabolism to herbology and holistic health. Diet therapy and menu planning will be discussed. (Also listed as PE 263.)

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.

107 THE UNITED STATES AND THE NORTH AMERICAN INDIANS **3 UNITS**
UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

History of the North American Indian from first contact through conquest and reservation life to the present; examination of modern Indian communities, including red power, urban life and current problems, including material on traditional Indian cultures. (Also listed as Anthro 107.)

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.)

139 AFRICAN-AMERICAN HISTORY II **3 UNITS**
UC, Associate Degree Applicable
Prerequisite: None.
Lecture: 3 hours per week

An historical survey of Black leadership in America since the 17th century with emphasis on the changing nature of the African-American community, the Civil Rights struggle, Black Nationalism, and the rise of Black politics in our contemporary society.

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.

151 HISTORY OF THE AMERICAS—THE NATIONAL PERIOD**3 UNITS***UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

History of the Americas both North and South from independence to the present, a survey of the Western Hemisphere including political, social, economic and cultural development, and the foreign relations of American republics.

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**(160: CAN HIST 2) - (161: CAN HIST 4)**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.

170-171 WORLD CIVILIZATIONS**3 UNITS***UC, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Study of cross-cultural history emphasizing the art, music and literature, philosophy and religion, family and society, as well as the political economic and technological contributions of the world's civilizations from the earliest societies through the classical and modern ages to the present. The first semester focuses on the ethno-cultural traditions of classical Asia, the Middle East, Greece, Rome and early Europe and briefly introduces the early African and American societies. The second semester focuses on modern western and non-western history, culture and socio-political structures and the impact of modern technology, colonialism and revolution in the world.

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.

HUMAN SERVICES

175 INTRODUCTION TO EATING DISORDERS**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Introduction to the description, explanation, and treatment of the eating disorders (e.g., bulimia, anorexia). Patterns of compulsive eating and chronic dieting are also included. The history and background of attitudes toward such disorders are surveyed. Biological, psychoanalytic, behavioral, and other theoretical perspectives are explored. Treatment approaches are described.

181 ALCOHOL/DRUG STUDIES: INTRODUCTION**3 UNITS***CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Exploration of the causes and effects of alcohol/drug abuse (psychological/sociological/physical), investigation and interpretation of various prevention, treatment and recovery modalities; examination of "myths", images and stereotypes about substance abusers, and familiarization of terms.

INTERDISCIPLINARY STUDIES

080 GROUP LEADERSHIP SKILLS**3 UNITS***Prerequisite: None.**Lecture: 1 hour per week**Laboratory: 6 hours per week*

Principles and practices for effective work in groups, group processes, and group leadership. Topics include parliamentary procedure, goal setting, planning and implementation of group objectives, budget development and management, interpersonal communication, group dynamics, public speaking, and responsibilities of membership. Students will be asked to apply knowledge through active participation in student organizations and activities.

081 GROUP LEADERSHIP SKILLS**3 UNITS***Prerequisite: None.**Lecture: 1 hour per week**Laboratory: 6 hours per week*

Continuing study of the principles and practices for effective group leadership. Topics include a review of parliamentary procedure, goal setting, planning and implementation of group objectives. Additional topics include group dynamics, consensus building, conflict management, ethics, leadership and public speaking. Students will be asked to apply knowledge through active participation in student organizations and activities.

101-102 THE HUMANITIES**3 UNITS***UC, CSU, 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

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 1 hour per week

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.

108 OUR GLOBAL FUTURE

3 UNITS

UC, CSU, Associate Degree Applicable*

Prerequisite: None.

Lecture: 3 hours per week

Study of the world's most significant problems, with input provided by experts from a variety of disciplines. The areas of study will vary each semester as new problems arise and others are solved. However, the environment and the preservation of the ecosystem will be principal concerns. Lectures and discussions, augmented by videos, will focus on global crisis, but special emphasis will be placed on the continuing search for effective solutions. Disciplines most apt to be included in the curriculum include biology, economics, geology, political science, philosophy (ethics), sociology, psychology, and history.

122 ABCD SELECTED STUDIES IN SIGN LANGUAGE 1-2 UNITS

CSU, Associate Degree Applicable

Prerequisite: INTDIS 106.

Lecture: .5-1 hour per week

Laboratory: 1.5-3 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.

151 CREATIVE PROJECTS: DIRECTED INDEPENDENT STUDY

1-3 UNITS

UC, CSU, Associate Degree Applicable*

Prerequisite: None.

Lecture: 1 hour per week per unit

Opportunity for students with specific interests to develop projects of a creative nature, including either artistic or academic independent study.

984 PROJECT QUEST

.25-4 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.

MARKETING

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.

198 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.

MATHEMATICS

090 ELEMENTARY ALGEBRA

4 UNITS

Associate Degree Applicable

Prerequisite: Math 952 or a high school (or GED) diploma.

Lecture: 4 hours per week

This course includes basic topics of algebra: (a) operations with signed numbers and algebraic expressions, (b) algebra of integer exponents, (c) solutions of first degree, fractional, and literal equations, (d) factoring including common factors, difference of squares, sum and difference of cubes, trinomials, and grouping, (e) rational expressions, (f) first degree equations in two variables and their transformations into a graphical representation. Emphasis will be placed on factoring and rational expressions.

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 COLLEGE ALGEBRA

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 the 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.

115 THE IDEAS OF MATHEMATICS

3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: Math 095.

Lecture: 3 hours per week

Sets, propositional logic, and the applications to topics from discrete mathematics including enumeration techniques and finite probability spaces.

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 250, 251.

151 PRECALCULUS

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 binomial theorem, an introduction to analytic geometry and its proofs, and an introduction to limits.

250 SINGLE VARIABLE CALCULUS I

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 SINGLE VARIABLE CALCULUS II

4 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: Math 250 or equivalent.

Lecture: 4 hours per week

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

252 MULTIVARIABLE CALCULUS 5 UNITS

*UC, CSU, Associate Degree Applicable
(CAN MATH 22)*

Prerequisite: Math 251 or equivalent.

Lecture: 5 hours per week

Study of vectors and solid analytic geometry, functions of several variables, partial 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 homogeneous equations, applications of differential equations, series solutions of second order linear equations and systems of first order linear equations.

942 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, and percents.

952 REVIEW OF ARITHMETIC AND AN INTRODUCTION TO ALGEBRA 4 UNITS

Not applicable to the Associate Degree

Prerequisite: Math 942 or equivalent.

Lecture: 4 hours per week

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

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 diseases. Recommended for students in health occupations. Surveys of bacteria, fungi, viruses, and parasitic protozoans are included.

150 MEDICAL MICROBIOLOGY 5 UNITS

UC, CSU, Associate Degree Applicable*

Prerequisite: Chemistry 101.

Lecture: 3 hours per week

Laboratory: 6 hours per week

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

151 ADVANCED MEDICAL MICROBIOLOGY 3 UNITS

Associate Degree Applicable

Prerequisite: Micro 150.

Lecture: 3 hours per week

Advanced study of clinical microbiology. Microorganisms as agents of disease in humans and domestic animals, host-parasite relations, and chemotherapy, humoral and cell-mediated immunity, diagnosis, treatment, and the epidemiology of infectious diseases. Surveys of infectious diseases of humans and domestic animals caused by bacteria, viruses, fungi, parasitic protozoans, and helminths.

SPECIAL PROBLEMS IN MICROBIOLOGY

246AB

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: Courses must be taken in sequence.

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.

103 INTRODUCTION TO & APPRECIATION OF AMERICAN POPULAR MUSIC 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the history of American music with an emphasis on popular music of the past 80 years. Included are units on rock, jazz, and musical comedy.

105#2 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. This course may be taken two times. (Formerly Music 105AB)

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.

120 APPRECIATION OF MUSICAL LITERATURE 3 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: None.
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.

130#2 ELEMENTARY VOICE 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: Ability to match pitches.
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. This course may be taken two times. (Formerly Music 130AB)

132#4 GUITAR 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: Student must have his/her own guitar.
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. This course may be taken four times. (Formerly Music 132ABCD)

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.

135#4 PIANO 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Departmental Recommendation: Music 100
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. This course may be taken four times. (Formerly Music 135ABCD)

137#4 CLASS ORGAN 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: 2 years piano or equivalent.
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. This course may be taken four times. (Formerly Music 137ABCD)

143#4 WOODWIND, BRASS AND PERCUSSION INSTRUCTION 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: Ability to match pitches and perform basic manual skills.

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. This course may be taken four times. (Formerly Music 143ABCD)

147 AMERICAN CHORAL MUSIC 1 UNIT
UC, 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.

150#4 MIXED CHORUS 1 UNIT
UC, CSU, Associate Degree Applicable
Prerequisite: None.
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. This course may be taken four times. (Formerly Music 150ABCD)

154ABCD COLLEGE SINGERS 1-3 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: Audition with instructor.
Departmental Recommendation: Music 100.
Lecture: 5-1 hour per week
Laboratory: 2.5-5 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.

160#4 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. This course may be taken four times. (Formerly Music 160ABCD)

164#4 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. This course may be taken four times. (Formerly Music 164ABCD)

168#4 WIND INSTRUMENT ENSEMBLE **1 UNIT**
UC, CSU, Associate Degree Applicable
Prerequisite: Ability to match pitches and perform basic manual skills.

Laboratory: 2 hours per week

Study of the literature available for the particular ensemble under consideration; studies in appreciation and performance of standard works. This course may be taken four times. (Formerly Music 168ABCD)

169#4 COLLEGE CONCERT BAND **1-2 UNITS**
UC, CSU, Associate Degree Applicable
Prerequisite: Intermediate or high performance level on a traditional band instrument.

Laboratory: 2 hours per week

Study of band literature, including training and experience in traditional and contemporary repertoire. Previous band experience necessary. This course may be taken four times. (Formerly Music 169ABCD)

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 and musical plays, operettas, operas and/or oratorios for both vocalists and instrumentalists.

184ABCD BROADWAY MUSICAL PRODUCTION **2 UNITS**
UC, 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.

201-202 MUSIC THEORY III, IV **3 UNITS**
UC, CSU, Associate Degree Applicable
(See Music 101-102)

OCEANOGRAPHY

101 ELEMENTS OF OCEANOGRAPHY **3 UNITS**
UC, CSU, Associate Degree Applicable
Prerequisite: None.

Lecture: 3 hours per week

Study of the basic principles included in the physics, chemistry, biology and geology of the oceans. Topics include the structure of the earth and sea floor, the physics and chemistry of sea water, atmospheric and ocean circulation, wind, waves currents and tides, marine plants and animals, ecological concepts and environmental concerns.

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.

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: ARGUMENT AND EVIDENCE **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 relationships 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.

SPECIAL PROBLEMS IN PHILOSOPHY**246ABC 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.

070#4 HEALTH EVALUATION .25 UNIT*Associate Degree Applicable**Prerequisite: None.**Laboratory: 3 hours per week*

Identification of the health status of an individual through appraisal of cardio-vascular wellness, fitness testing, and calculations of metabolic rate and body composition. (Formerly PE-I 070ABCD)

076 PHYSICAL TRAINING FOR FIREFIGHTERS 1 UNIT*Associate Degree Applicable**Prerequisite: Admission to the Fire Academy.**Laboratory: 3 hours per week*

Advanced physical training for Fire Academy students, emphasizing running, interval training, circuit training, muscle endurance and tasks specific to the enhancement of the physical ability of firefighters.

077 HEALTH AND FITNESS TRAINING FOR FIREFIGHTERS 3 UNITS*Associate Degree Applicable**Prerequisite: None.**Lecture: 32 hours per semester**Laboratory: 48 hours per semester*

Preparation for agility testing and the physical training portion of the Fire Academy. Designed also to teach the knowledge and skills needed to maintain physical health and fitness throughout a firefighter's career.

105#4 LOW IMPACT AEROBICS .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 105ABCD)

108#4 WEIGHT TRAINING .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 108ABCD)

112#4 BODY CONDITIONING .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 112ABCD)

120#4 GOLF .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 120ABCD)

130#4 JAZZ DANCE I 1-2 UNITS*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: .5-1 hour per week**Laboratory: 1-2 hours per week*

This course may be taken four times. (Formerly PE-I 130ABCD)
(See Theatre Arts 130#4)

131#4 BALLET I .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 131ABCD)
(See Theatre Arts 180)

148#4 TENNIS .5-1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week*

This course may be taken four times. (Formerly PE-I 148ABCD)

SPECIAL ACTIVITIES

246ABCD SPECIAL ACTIVITIES IN PHYSICAL EDUCATION 1 UNIT*UC*, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 3 hours per week*

Independent, appropriate exercise for students who should not be enrolled in a conditioning class due to health concerns, physical limitations, or poor physical condition. Students will meet with the staff of the health evaluation lab to monitor progress and oversee fitness program.

TEAM ACTIVITIES

130#4 TEAM SPORTS (CO-ED)

.5-1 UNIT

UC, CSU, Associate Degree Applicable**Prerequisite: None.**Laboratory: 1.5-3 hours per week**(Specific sport announced in class schedule.)* This course may be taken four times. (Formerly PE-T 130ABCD)

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

*CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: 3 hours per week*

Introduction to nutrition and health covering topics including the basic nutrients, diet assessment and prescription, stress, and the epidemiology of disease in America. (Also listed as Health 263.)

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 250; 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.

PHYSIOLOGY

161 HUMAN PHYSIOLOGY

4 UNITS

UC, CSU, Associate Degree Applicable*

Prerequisite: Human Anatomy & Chem 101.

Lecture: 3 hours per week and

Laboratory: 3 hours per week

Introductory study of the functions of human cells, organ systems and of the human body as a whole.

POLITICAL SCIENCE

100 AMERICAN POLITICS

3 UNITS

UC, CSU, Associate Degree Applicable

(CAN GOVT 2)

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.

101ABCD 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.

204 WORLD POLITICS

3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: Polit 100 or 101 or academic equivalent.

Lecture: 3 hours per week

Study of basic principles and major elements of world politics, with a survey of their application in practice and emphasizing the concept of the modern sovereign state system. Conflict, war, nationalism, polarity of power, problems of development and competing economic systems, population pressures and a world held in check by the threat of nuclear weaponry.

PSYCHOLOGY

052 PRACTICAL PSYCHOLOGY

3 UNITS

Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Study of the principles of psychology as applied to everyday living, communication with others and effective behavior.

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

.5 UNIT

Associate Degree Applicable

Prerequisite: None.

Lecture: .5 hour per week

Laboratory: 1/2 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

(CAN PSY 2)

Prerequisite: None.

Departmental Recommendations: English 101, Math 952,

Reading: passing Nelson-Denny or comparable test at or above the 30th percentile (12th grade).

Lecture: 3 hours per week

Survey of the nature and scope of psychology as a science including the principles of neurophysiology, sensation, perception, learning, altered states of consciousness, memory, cognition, intelligence, language, creativity, emotion, motivation, personality, psychopathology, testing, treatment, attitudes, and human development.

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 PERSONAL AND SOCIAL ADJUSTMENT

3 UNITS

UC, 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, CSU, 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 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 DYNAMICS** 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.

- SPECIAL PROBLEMS IN PSYCHOLOGY**
246AB 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.

- 955 MATRICULATION, ORIENTATION, AND CAREER LIFE PLANNING** .5 UNIT

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 1 hour per week (8-week course)

Orientation to the philosophy, services and regulations at Crafton Hills College, in order to assist students in successful matriculation and in understanding the scope and function of the community college. This course provides for assessment of basic skills and interests in compliance with the State matriculation plan. It also assists students in the process of career/life planning through an interest exercise. Required of students entering college for the first time.

RADIOLOGIC TECHNOLOGY

- 100 INTRODUCTION TO RADIOLOGIC TECHNOLOGY** .75 UNITS
Associate Degree Applicable

Prerequisite: Must be pre-selected 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 RADIOGRAPHER** .5 UNIT
Associate Degree Applicable

Prerequisite: Must be pre-selected 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 TERMINOLOGY** 1.5 UNITS
Associate Degree Applicable

Prerequisite: Must be pre-selected 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 1.5 UNITS

Associate Degree Applicable

Prerequisite: Must be pre-selected 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 1.5 UNITS

Associate Degree Applicable

Prerequisite: Must be pre-selected 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 1.5 UNITS

Associate Degree Applicable

Prerequisite: Must be pre-selected 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 .5 UNIT

Associate Degree Applicable

Prerequisite: Must be pre-selected 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 1.25 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 1.25 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 1.25 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 1.25 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 1.25 UNITS

Associate Degree Applicable

Prerequisites: 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 1.25 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 1.25 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 .25 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 11.25 UNITS

Associate Degree Applicable

Prerequisites: Must be pre-selected 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 10.5 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 1.5 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 201, 202, 203, 204, 205, 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 1.5 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 202, 203, 204, 205, 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 1.5 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 203, 204, 205, 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 1.5 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 202, 204, 205, 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 1.5 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 202, 203, 205, 213A.
Lecture: 24 hours per semester
 Study of human anatomy and physiology pertinent to radiology.

205 RADIOGRAPHIC EXPOSURE LAB .5 UNIT
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 202, 203, 204, 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.

207 RADIOGRAPHIC IMAGING 1.25 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 2.75 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 1.25 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 IV 1.25 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 IV 1.25 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 1.25 UNITS
Associate Degree Applicable
Prerequisites: Radiology 200, 201, 202, 203, 204, 205, 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 10.75 UNITS
Associate Degree Applicable
Prerequisites: Radiology 107, 108, 109, 110, 111, 112, 113, 114, 115B.
Corequisites: Radiology 200, 201, 202, 203, 204, 205.
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, 213B.
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

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.

960ABCD STUDY TECHNIQUES .25 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.)

961ABCD STUDY TECHNIQUES .5 UNIT

Not Applicable to the Associate Degree

Prerequisite: None. Courses must be taken in sequence.

Laboratory: 24 hours per semester

(See description under 960ABCD.)

962ABCD 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 960ABCD.)

963ABCD 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 960ABCD.)

964ABCD 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 960ABCD.)

975ABCD 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.

976 DEVELOPMENTAL READING 2 UNITS

Not Applicable to the Associate Degree

Prerequisite: None.

Laboratory: 96 hours per semester

(See description under 975ABCD.)

977 DEVELOPMENTAL READING 3 UNITS

Not Applicable to the Associate Degree

Prerequisite: None.

Laboratory: 144 hours per semester

(See description under 975ABCD.)

REAL ESTATE

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

Prerequisite: None.

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.

RELIGIOUS STUDIES

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.

901 REAL ESTATE PRE-LICENSE 3 UNITS

Not Applicable to the Associate Degree

Prerequisite: Real Estate 100.

Lecture: 3 hours per week

Preparation for the Real Estate Salesman License examination 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.

902 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.

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.

110 PRIMITIVE RELIGIONS 3 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

Comparative study of supernaturalism in primitive societies, both past and present, including witchcraft, magic, totemism, mythology and ritual nativistic movements, and the religious context of drug usage. Prehistoric religion will be examined, as well as the belief systems of selected tribal peoples. (Also listed as Anthro. 110.)

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.)

150 INTRODUCTION TO MYTHOLOGY 3 UNITS

CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: 3 hours per week

An overview of myth and its function in culture through an introduction to origin and end-time stories from many traditions including native American, the classical mythology of Greece and the major living religions (Formerly RELIG 150A).

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.)

176 JESUS AND HIS INTERPRETERS 3 UNITS*UC*, CSU, Associate Degree Applicable**Prerequisite: A course in Religious Studies or Philosophy.**Lecture: 3 hours per week*

Study of images and interpretations of Jesus with three principle divisions: Jesus and the gospels or biblical tradition; Jesus and the historians, including the quest of historians and theologians for the Jesus of history; and Jesus and the arts, that is, Jesus in art, music, film, and the literary arts (novels, poems, and plays).

SPECIAL PROBLEMS IN RELIGIOUS STUDIES**246ABC****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: None.**Lecture: 2 hours per week*

Introduction and orientation to the field of Respiratory Care, the professional organizations, the regulatory bodies, and the policies that govern respiratory treatment. Also provides the pre-entry student with program information critical to the decision to enter the Respiratory Care Program.

101 FUNDAMENTALS OF RESPIRATORY CARE I 4 UNITS*Associate Degree Applicable**Prerequisites: Resp 050, Anat 101, Micro 102.**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, Micro 102.**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 ASSESSMENT AND TERMINOLOGY 3 UNITS*Associate Degree Applicable**Prerequisite: Acceptance into the Respiratory Care Program.**Lecture: 3 hours per week*

A special focus of this course is preparing for the patient encounter through the understanding of basic interviewing and assessment techniques essential to the safe and effective practice of respiratory care. This course offers an introduction to basic medical terminology, followed by an intense study of terms specific to pulmonary medicine. Basic interviewing techniques and physical assessment of the patient are built upon this foundation.

104 RESPIRATORY CARE CLINICAL APPLICATION I 2.25 UNITS*Associate Degree Applicable**Prerequisites: Resp 050, Anat 101, Micro 102.**Corequisites: Resp 101, 102, 103.**Lecture: 16 hours per semester and**Clinic: 126 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.**Corequisites: 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 6 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 5.25 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 1.5 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: 1.5 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 pathophysiologic basis for respiratory care.

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 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 5.25 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:** 36 hours per semester**Clinic:** 252 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 physiology.

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, 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 5.25 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, Neonatal and Intubation procedures.

211 CLINICAL MEDICINE II 1.5 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, 207, 208.**Lecture:** 1.5 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:** 3 hours per week

Preparation of the respiratory care student and other medical practitioners for clinical practice in Neonatal and Pediatric Intensive Care Units. A special focus of this class is understanding the extent to which the immature cardiopulmonary system can be augmented by the application of diagnostic techniques, equipment, medications and procedures.

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.

915ABCD 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.

**916ABCD 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.

925 ENTRY LEVEL EXAMINATION: REVIEW AND SEMINAR 1.75 UNITS

Not Applicable to the Associate Degree

Prerequisite: None.

Lecture: 1-3 hours per week

Preparation and review for the National Board for Respiratory Care (NBRC) Entry Level Examination; discussion of examination structure, content, and site requirements, and review of sample NBRC test questions for remediation. Self-evaluation practice examinations will be key features. (If a first year candidate for the Technician certificate does not successfully complete the end-of-the-year summative evaluation, successful completion of this course will be required to secure the Technician Certificate.) (Formerly 925ABCD)

926ABCD CLINICAL SIMULATION EXAMINATION REVIEW 1.5 UNITS

Not Applicable to the Associate Degree

Prerequisite: None.

Laboratory: 72 hours per semester

Preparation of Respiratory Care Practitioners for the NBRC Clinical Simulation Examination (CSE); extensive coverage of the CSE. NBRC type CSE's are available on computer discs for staff development as well as review purposes.

SOCIOLOGY

100 INTRODUCTION TO SOCIOLOGY 3 UNITS
UC, CSU, Associate Degree Applicable
(CAN SOC 2)

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

Descriptive and analytical survey of the structure and process of the family as an institution, with special emphasis on contemporary marriages and families.

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

015-016 CONVERSATIONAL SPANISH 3 UNITS
Associate Degree Applicable

Prerequisite: None. Courses must be taken in sequence.

Lecture: 3 hours per week

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

101A COLLEGE SPANISH I (PART 1) 2.5 UNITS
UC, CSU, Associate Degree Applicable*

Prerequisite: None

Lecture: 2.5 hours per week

Laboratory: .5 hour per week

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

101B COLLEGE SPANISH I (PART 2) 2.5 UNITS
UC, CSU*, Associate Degree Applicable*

Prerequisite: Spanish 101A.

Lecture: 2.5 hours per week

Laboratory: .5 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) 2.5 UNITS
UC, CSU*, Associate Degree Applicable*

Prerequisite: Spanish 101B, or Spanish 101, or one year of high school Spanish.

Lecture: 2.5 hours per week

Laboratory: .5 hour per week

Continuation of Spanish 101.

102B COLLEGE SPANISH II (PART 2) **2.5 UNITS**
UC, CSU*, Associate Degree Applicable*
Prerequisite: Spanish 102A.
Lecture: 2.5 hours per week
Laboratory: .5 hour per week
 Continuation of Spanish 102A. (Spanish 102A-102B 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 102B, or two years of high school Spanish.
Lecture: 2 hours per week
Laboratory: .5 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: .5 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: .5 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: .5 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 INTERPERSONAL COMMUNICATION 3 UNITS

CSU, Associate Degree Applicable

Prerequisite: None.

Departmental Recommendation: ENGL 101.

Lecture: 3 hours per week

Examination of the dynamics of the communication process; principles of effective communication; accurate expression of ideas; the place of self-disclosure, listening, and feedback in the communication process; non-verbal communication; assertive speech patterns; conflict resolution. Speech activities will emphasize the development of skill in these areas through dyadic, small group, and class discussions, lectures, activities, exercises, interviews, and analyses of relational communication. (Formerly Speech 111ABCD)

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.

SPECIAL STUDIES IN COMMUNICATION

246AB

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.

250ABC FACILITATING GROUP INTERACTION AND PERFORMANCE 4 UNITS

Associate Degree Applicable

Prerequisite: Completion of Speech 100.

Lecture: 3 hours per week

Laboratory: 3 hours per week

Individual projects for students with a special interest in the areas of public speaking and facilitating group communication skills. Projects will involve some of or all of the following activities: group facilitating, public speaking, conferencing and tutoring, assigned readings and research. Projects will be determined jointly by the student and the instructor prior to registration.

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 back ground 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. 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)

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.

130#4 JAZZ DANCE I

1-2 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

Lecture: .5-1 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. This course may be taken four times. (Formerly Thart 130ABCD) (See PE-I 130#4.)

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: 7.5 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.

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#4 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. This course may be taken four times. (Formerly Thart 150-151-152-153)

174#4 DANCE PRODUCTION WORKSHOP 2 UNITS

UC, CSU, Associate Degree Applicable

Prerequisite: None.

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. This course may be taken four times. (Formerly Thart 174ABCD)

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.

176#4 FUNDAMENTALS OF STAGECRAFT 1-4 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Laboratory: 2 hours per week per unit
Basic theories and practice of construction, painting, assembly, shifting and lighting of stage scenery and properties. This course may be taken four times. (Formerly Thart 176ABCD)

179#4 FUNDAMENTALS OF STAGECRAFT — ADVANCED PRACTICUM 2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: None.
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 dark-room procedures, finishing and presentation. This course may be taken four times. (Formerly Thart 179ABCD)

180#4 BALLET I 1-2 UNITS
UC, CSU, Associate Degree Applicable
Prerequisite: None.
Lecture: 1/2 -1 hour per week
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. This course may be taken four times. (Formerly Thart 180ABCD) (See PE-I 131#4.)

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
UC, 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.
Lecture: 1/2 -1 hour per week and
Laboratory: 1-2 hours per week
Continuation of Theatre Arts 130, with student choreography and performance added.

SPECIAL PROJECTS IN THEATRE ARTS 246#4 1 UNIT
UC, CSU, Associate Degree Applicable
Prerequisite: Completion of or concurrent enrollment in a theatre arts course.
Laboratory: 3 hours per week.
Laboratory projects for selected students in any area of theatre, with projects determined jointly by instructor and student. This course may be taken four times. (Formerly Thart 246ABCD)

WORK EXPERIENCE

099 GENERAL WORK EXPERIENCE 1-3 UNITS
Associate Degree Applicable
Prerequisite: None.
Laboratory: 5-15 hours per week
Supervised general work experience education to assist students in acquiring desirable work habits, career awareness, and job attitudes consonant 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 198 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
Biology
Business Administration
Business and Office Technology
Chemistry
Child Development
Computer and Information Sciences
Economics
Emergency Medical Services
English
Fire Technology
French
Geography
Geology
German
History
Liberal Studies
Marketing
Mathematics
Microbiology
Music
Philosophy
Physical Education
Physics
Political Science
Psychology
Radiologic Technology
Religious Studies
Respiratory Care
Sociology
Spanish
Speech
Theatre Arts

Crafton Hills College offers the first two years of course work towards the following areas of specialization:

Pre-Chiropractic
Pre-Dental Hygiene
Pre-Dentistry
Pre-Education
Pre-Engineering
Pre-Forestry
Pre-Legal
Pre-Medicine
Pre-Nursing
Pre-Occupational Therapy
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Veterinary Medicine

NOTES TO TRANSFER STUDENTS:

1. Consult with your counselor to decide on support courses for your chosen majors.
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 counselor to decide on support courses for your chosen majors.
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
Business Administration 230
Economics 200, 201
Mathematics 102, 108

Recommended Core Courses for Associate Degree Students:

Accounting 205, 210, 211, 220, 221, 225, 230
Business Administration 053, 100, 105, 210
Computer and Information Sciences 101
Economics 200, 201
Business and Office Technology 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, 124#4

ASTRONOMY

Recommended Core Courses:
Astronomy 150
Chemistry 150, 151
Mathematics 250, 251, 252, 254
Physics 200, 201

BIOLOGY

Recommended Core Courses:
Biology 130, 131
Chemistry 150, 151, 212, 213
Mathematics 103, 108, 151, 250, 251
Physics 200, 201

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, 230
Economics 200, 201
Mathematics 102, 108

BUSINESS AND OFFICE TECHNOLOGY

Recommended Core Courses:
Business and Office Technology 100, 101, 103 or 105, 110, 140, 141, 144, 146

CHEMISTRY

Recommended Core Courses:
Chemistry 150, 151, 212, 213
Mathematics 250, 251, 252, 254
Physics 200, 201

CHILD DEVELOPMENT

Recommended Core Courses:
Crafton Hills College expects to offer a Transfer and Associate Degree Program. See program director for specific information.

COMPUTER AND INFORMATION SCIENCES

Recommended Core Courses:
Computer and Information Science 101, 102, 103, 104, 105, 106, 110, 115, 200, 201, 230, 240, 250

ECONOMICS

Recommended Core Courses:
Economics 200, 201
Mathematics 108, 140
Philosophy 103

EMERGENCY MEDICAL SERVICES

Consult your counselor to develop an appropriate course of study.

ENGLISH

Recommended Core Courses:
English 101, 102, 152, 260, 261, 270, 271
Foreign Language*
**Varies from college to college; consult appropriate college catalog.*

FIRE TECHNOLOGY

Required Core Courses:
Fire Technology 100, 101, 102, 103, 116
Elective Courses (5.5 units of your choice):
Fire Technology 087, 104, 106, 118

FOREIGN LANGUAGE

Recommended Core Courses:
English 101, 102, 152
Foreign Language 101, 102, 103, 104
Second Foreign Language 101, 102

GEOGRAPHY

Recommended Core Courses:
Geography 102, 110, 111, 114
Geology 100
Oceanography 101
Mathematics 103

GEOLOGY

Recommended Core Courses:
Chemistry 150, 151
Geography 110, 111
Geology 100, 112, 250 or 251
Mathematics 250, 251
Physics 200, 201

HISTORY

Recommended Core Courses:

Geography 110

History 100, 101, 160 & 161 or 170 & 171

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, 230

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 250, 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 250

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#4 (may be waived in part or whole by examination), and a performance group.

PHILOSOPHY

Recommended Core Courses:

Interdisciplinary 101 or 102

Philosophy 101, 103, 105

Religious Studies 101, 110

PHYSICAL EDUCATION

Recommended Core Courses:

Anatomy / Physiology 150 and 151

Biology 100

EMS 910

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 250, 251, 252, 254

Physics 200, 201

POLITICAL SCIENCE

Recommended Core Courses:

Economics 200, 201

History 100, 101

Political Science 100, 101

PRE-CHIROPRACTIC

Recommended Core Courses:

Anatomy / Physiology 150, 151

Biology 130

Chemistry 150, 151, 212, 213

English 101

Mathematics 151

Physics 110, 111

Psychology 100

Speech 100

PRE-DENTAL HYGIENE

Recommended Core Courses:

Anatomy / Physiology 150, 151

Chemistry 101, 102

Microbiology 150

Psychology 100

Sociology 100

PRE-DENTISTRY

Recommended Core Courses:

Biology 130, 131
Chemistry 150, 151, 212, 213
Mathematics 250, 251
Physics 110, 111, or 200, 201

PRE-EDUCATION

This program is designed for those who are interested in teaching in the California public schools. The Teacher 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.

Additional Credential Requirements:

1. CLAD: Cross Cultural Language and Academic Development.
2. BCLAD: Bi-Lingual Cross Cultural Language and Academic Development.

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
Foreign Language 101, 102, 103
Health Education 102
Mathematics 102, 115
Music 100
Sociology 105, 141
One Life and one Physical Science with Laboratories

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 250, 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, 250
Physics 110, 111 or 200, 201

PRE-LEGAL

Law schools do not prescribe a definite Pre-Legal curriculum, nor do they require a specific major as a prerequisite to be 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, 102
History 100, 101, 160 & 161 or 170 & 171
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 250, 251
Physics 110, 111, or 201, 201

PRE-NURSING

Recommended Core Courses:

Anatomy/Physiology 150, 151
Chemistry 101, 102, 150
Math 090, 095
Microbiology 150

PRE-OCCUPATIONAL THERAPY

Recommended Core Courses:
 Anatomy / Physiology 150, 151
 Anthropology 102
 Chemistry 101
 Mathematics 108
 Physics 100

PRE-OPTOMETRY

Recommended Core Courses:
 Anatomy / Physiology 150, 151
 Biology 130, 131
 Chemistry 150, 151, 212, 213
 Mathematics 108, 250, 251
 Physics 110, 111

PRE-PHARMACY

Recommended Core Courses:
 Biology 130, 131
 Chemistry 150, 151, 212, 213
 Mathematics 250, 251
 Physics 110, 111

PRE-PHYSICAL THERAPY

Recommended Core Courses:
 Anatomy / Physiology 150, 151
 Chemistry 101, 102, 150, 151
 Microbiology 150
 Physics 100

PRE-VETERINARY MEDICINE

Recommended Core Courses:
 Biology 130, 131
 Chemistry 150, 151, 212, 213
 Mathematics 108, 250
 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, 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.)

Recommended Prerequisite Courses:
 Allied Health 090, 101
 Anatomy 101
 Chemistry 101
 Computer and Information Science 101
 Mathematics 090

RELIGIOUS STUDIES

Recommended Core Courses:
 Foreign Language*
 History 135, 160, 161
 Philosophy 101, 103
 Religious Studies 100, 101, 150A
**Varies from college to college; consult appropriate college catalog.*

RESPIRATORY CARE

Recommended Core Courses:
 Anatomy / Physiology 101 / 102 or 150 / 151
 Chemistry 101
 Allied Health 119A
 English 015 or 101
 Humanities - any two 3-unit courses
 Mathematics 090
 Microbiology 102 or 150
 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. Resp 050, Micro 102, and Anat 101 are minimal entrance requirements.
2. Students must complete the Respiratory Care Technician Certificate (see Section IV) 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.
4. A successful passing score on both the Registry Written and the Clinical Simulation Self-Assessment Examinations are required to receive a two-year Certificate of Completion from the Respiratory Care Program.

SOCIOLOGY

Recommended Core Courses:
 Anthropology 102
 Mathematics 108
 Psychology 100
 Sociology 100, 105, 141

SPEECH

Recommended Core Courses:
 English 260, 261, 270, 271
 Speech 100, 101, 111, 120, 121 140
 Theatre Arts 120

THEATRE ARTS

Recommended Core Courses:
 English 260, 275
 Speech 120
 Theatre Arts 100, 108, 120, 176#4, 220

SECTION IV

OCCUPATIONAL
CERTIFICATE PROGRAMS

Accounting

*Administration of Justice

Business Management

California Fire Officer Training

*Child Development

Clerical Assistant

Computer & Information Science

Emergency Medical Technician I

Emergency Medical Technician — Paramedic

Fire Academy

Fire Inspection Academy

Marketing Management

Microapplications Specialist

Mobile Intensive Care Nurse

Radiologic Technology

Respiratory Care Technician

Secretary

Word / Information Processor

**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, 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

The objectives of this certificate program are to prove entry-level, marketable employment skills, to equip the student with a basic understanding of the terminology and basic concepts / procedures used in the accounting field, and to acquaint the student with the various sub-functions within the overall career field of accounting. Completion of the certificate program will prepare the student for entry-level employment in a variety of related occupations including payroll clerk, accounts receivable or payable clerk, or beginning general bookkeeper clerk.

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 — Principles of Accounting — Principles of Accounting Computer Laboratory or Accounting 205 — Bookkeeping
2. Marketing 100 — Marketing Principles
3. Business Administration 100 — Introduction to Business
4. Economics 200 — Principles of Economics (Macro) or Economics 201 — Principles of Economics (Micro)
5. Business Administration 210 — Business Law
6. Business Administration 053 — Business Computation or Mathematics 108 — Introduction to Probability and Statistics
7. Business and Office Technology 100 — Beginning Typewriting
8. One Computer Language
9. Business Administration 230--Using Computers for Business

Plus the Following Specialty Courses**Units**

ACCT 210 Principles of Accounting	3
ACCT 211 Principles of Accounting Computer Laboratory	1
ACCT 220 Principles of Accounting	3
ACCT 221 Principles of Accounting Computer 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.

REQUIRED COURSES:	Units
ADJUS 101 Introduction to Administration of Justice	3
ADJUS 102 Principles and Procedures of the Justice System	3
ADJUS 103 Concepts of Criminal Law	3
ADJUS 104 Legal Aspects of Evidence	3
ADJUS 105 Community Relations	3
SPAN 015 Conversational Spanish	3
SPEECH 100 Elements of Public Speaking	3
or	
SPEECH 111 Interpersonal Communication	(3)
ENGL 101 Freshman Composition	4
SOC 100 Introduction to Sociology	3
SOC 141 Minority Relations	3
or	
HIST 137 History of American Minorities	(3)
Six units from the following list of RECOMMENDED COURSES	6
TOTAL	37

RECOMMENDED COURSES:	Units
Any Political Science Course	3
ADJUS 106 Principles of Investigation	3
ADJUS 107 Concepts of Enforcement Services	3
ADJUS 108 Juvenile Procedures	3
ADJUS 109 Police Records and Report Writing	3
B&OT 100 Beginning Typewriting	3
* OIS 100 Beginning Keyboarding	3
* PE 231 First Aid and Medical Self-Help	3
PHIL 105 Moral Values in Today's Society	3
(* SBVC Courses)	

BUSINESS MANAGEMENT CERTIFICATE

The objectives of this certificate program are to provide entry-level, marketable employment skills, to equip the student with a basic understanding of the terminology and basic concepts / procedures used in business, and to acquaint the student with the various sub-functions within the overall career field of business. Completion of the certificate program will prepare the student for entry-level employment in a variety of related occupations including supervision, small business ownership, and management trainee.

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 — Principles of Accounting — Principles of Accounting
Computer Laboratory or Accounting 205 — Bookkeeping
2. Marketing 100 — Marketing Principles
3. Business Administration 100 — Introduction to Business
4. Economics 200 — Principles of Economics (Macro) or
Economics 201 — Principles of Economics (Micro)
5. Business Administration 210 — Business Law
6. Business Administration 053 — Business Computation or
Mathematics 108 — Introduction to Probability and Statistics
7. Business and Office Technology 100 — Beginning Typewriting
8. One Computer Language
9. Business Administration 230--Using Computers for Business

Plus the Following Specialty Courses	Units
BUSAD 200 Business Management (Organizational Behavior)	3
BUSAD 105 Small Business Management	3
BUSAD 210 Business Law	3
BUSAD 230 Using Computers for Business	3
ACCT 220 Principles of Accounting	3
ACCT 221 Principles of Accounting Computer Lab	1
TOTAL	16

CALIFORNIA FIRE OFFICER TRAINING CERTIFICATE

The objective of this certificate is to provide students with a wide range of cognitive, affective, and psychomotor skills necessary to become an effective Fire Officer. Completion of this program may qualify the student to test for the position of First Line Fire Officer.

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 1A	2.5
FIRET 081 Fire Instructor 1B	2.5
FIRET 082 Fire Prevention 1A	2.5
FIRET 083 Fire Prevention 1B	2.5
FIRET 084 Fire Management 1	2.5
FIRET 085 Fire Command 1A	2.5
FIRET 086 Fire Command 1B	2.5
FIRET 087 Fire Investigation 1A	2.5
TOTAL	20

CLERICAL ASSISTANT CERTIFICATE

	Units
B&OT 100 Beginning Typewriting	3
B&OT 101 Intermediate Keyboarding/ Formatting	3
B&OT 102 Advanced Keyboarding/ Document Production	3
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	2
B&OT 105 Beginning Word Processing Applications: WordPerfect*	2
B&OT 110 Word/Information Processing Concepts	3
B&OT 140 General Office Procedures	6
B&OT 141 Records and Database Management*	2
B&OT 146 Human Relations in the Office Environment*	2
BUSAD 053 Business Computations	3
TOTAL	29

*8-week course

COMPUTER & INFORMATION SCIENCE CERTIFICATE

The objective of this certificate is to provide comprehensive training in computer programming and information systems. Completion of the certificate will prepare the student for entry-level positions in occupations dependent on computer technology and systems, especially in the areas of programming and information management.

Certificate requires completion of 21 units from the following course list:

	Units
BUSAD 100 Introduction to Business	3
C&IS 101 Introduction to Computers and Information Technology	3
C&IS 102 BASIC Language	3
C&IS 103 Programming in Visual Basic	3
C&IS 104 Fortran 77	3
C&IS 105 Database Concepts and Design	3
C&IS 109 Operating Systems and Environments	3
C&IS 110 PASCAL	3
C&IS 115 Programming in C	3
C&IS 200 Programming Business Applications: COBOL I	3
C&IS 201 Programming Business Applications: COBOL II	3
C&IS 230 Assembly Language	3

EMERGENCY MEDICAL TECHNICIAN-I CERTIFICATE

The objectives of this certificate are to train students with the necessary skills to perform basic life support and patient assessment and treatment skills in the prehospital setting and to provide students with part of the prerequisite knowledge and skills necessary to enter the paramedic program or the fire academy. Completion of the certificate program will prepare the student for entry-level employment as an emergency medical technician or an emergency department technician.

Required Course	Units
EMS 020 Emergency Medical Technician -I	6
TOTAL	6

EMERGENCY MEDICAL TECHNICIAN — PARAMEDIC

The objectives of this certificate are to train students with the necessary skills to perform advanced life support and patient assessment and treatment skills in the prehospital setting and to provide students knowledge and skills necessary to be licensed in the state of California. Completion of the certificate program will prepare the student for entry-level employment as an emergency medical technician-paramedic and other occupations requiring paramedic training as their base.

Prerequisites

Currently Certified EMT-I

Six months full-time documented EMT-I experience (paid or volunteer) or 1,000 part-time hours documented.

Required Courses	Units
EMS 050 Integrated Science and Basic Medical Language for Paramedics	3.00
EMS 151 Introduction to Emergency Medical Services — Paramedic	2.00
EMS 152 Cardiology for Paramedics	4.00
EMS 153 Pharmacology for Paramedics	3.00
EMS 154 EMS Theory	8.00
EMS 155 Skills Development for the Paramedic	3.00
EMS 156 Clinical Externship for the Paramedic	2.00
EMS 157 Field Externship for the Paramedic	7.50
TOTAL	33.5

FIRE ACADEMY CERTIFICATE

The objectives of this certificate are to develop all the skills required for Firefighter I certification and to develop teamwork attitudes and public service commitment. Completion of this certificate program may lead to entry-level employment as a firefighter in the public or private sectors.

Leads to entry-level employment as a fire fighter.

Prerequisites

EMS 020 Emergency Medical Technician-I
FIRET 100 Fire Protection Organization
FIRET 101 Fire Prevention Technology or Equivalent

Required Course	Units
FIRET 075 Fire Technology Basic Training Academy	10

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.

FIRE INSPECTION ACADEMY

The objectives of this certificate are to provide the student with an introduction to fire prevention practices, human relation skills, inspection skills, knowledge of applicable codes and regulations, and a working knowledge of public education. Completion of this certificate program may lead to employment as an entry-level fire inspector or fire safety specialist in the public or private sectors.

Recommended Courses:	Units
FIRET 100 Fire Protection Organization	3
FIRET 101 Fire Prevention Technology or equivalent	3

Required Courses:	Units
FIRET 078 Fire Inspection Academy	11

MARKETING MANAGEMENT CERTIFICATE

The objectives of this certificate program are to provide entry-level, marketable employment skills, to equip the student with a basic understanding of the terminology and basic concepts/procedures used in the marketing field, and to acquaint the student with the various sub-functions within the overall field of marketing. Completion of the certificate program will prepare the student for entry-level employment in a variety of related occupations including retail sales clerk, outside sales representative, advertising, merchandiser, distribution, or customer service representative.

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 — Principles of Accounting — Principles of Accounting Computer Laboratory or Accounting 205 — Bookkeeping
2. Marketing 100 — Marketing Principles
3. Business Administration 100 — Introduction to Business
4. Economics 200 — Principles of Economics (Macro) or Economics 201 — Principles of Economics (Micro)
5. Business Administration 210 — Business Law
6. Business Administration 053 — Business Computation or Mathematics 108 — Introduction to Probability and Statistics
7. Business and Office Technology 100 — Beginning Typewriting
8. One Computer Language
9. Business Administration 230— Using Computers for Business

Plus the Following Specialty Courses: Units

BUSAD 200 Business Management (Organizational Behavior)	3
MARKET 105 Salesmanship Principles	3
MARKET 110 Advertising	3
BUSAD 105 Small Business Management	3
BUSAD 230 Using Computers for Business	(3)
or	
Business Elective (Student's Choice)	(3)

TOTAL 15

MICROAPPLICATIONS SPECIALIST CERTIFICATE

	Units
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	2
B&OT 104 Advanced Word Processing Applications: Microsoft Word*	2
or	
B&OT 105 Beginning Word Processing Applications: WordPerfect*	2
B&OT 106 Advanced Word Processing Applications: WordPerfect*	2

AND THE FOLLOWING:

B&OT 107 Basics of PC / MS DOS (Disk Operating System)*	2
B&OT 109 Using Microsoft Windows *	2
B&OT 112 Fundamentals of Spreadsheet Applications*	2
B&OT 113 Fundamentals of Database Applications*	2
B&OT 114 Beginning Business Desktop Publishing*	2
B&OT 115 Advanced Business Desktop Publishing*	2
B&OT 116 Telecommunications for Business	3
BUSAD 230 Using Computers for Business	3

TOTAL 22

*8-week course

MOBILE INTENSIVE CARE NURSE CERTIFICATE

Prerequisites (or Corequisites as appropriate)

Registered Nurse

EMS 110 Advanced Cardiac Life Support — Provider

A current California R.N. license, one year experience as a registered nurse, 800 hours experience as a nurse in the Emergency Department, current ACLS certification, proof of a cardiac dysrhythmia course, current employment in a base station hospital in San Bernardino or Riverside county and the ability to complete a screening written examination with 80 percent accuracy.

Required Course Units

EMS 103 Mobile Intensive Care Nurse 2.25

RADIOLOGIC TECHNOLOGY CERTIFICATE

The objective of this certificate program is to prepare students as competent practitioners in the field of radiography. Completion of the certificate program will prepare the student for entry-level employment in the fields of diagnostic radiologic technology and fluoroscopy.

Units

B&OT 101 Intermediate Keyboarding/Formatting	3
B&OT 102 Advanced Keyboarding/Document Production	3
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	2
B&OT 104 Advanced Word Processing Applications: Microsoft Word*	2
B&OT 105 Beginning Word Processing Applications: WordPerfect*	2
B&OT 106 Advanced Word Processing Applications: WordPerfect*	2
B&OT 109 Using Microsoft Windows*	2
B&OT 110 Word/Information Processing Concepts	3
B&OT 116 Telecommunications for Business	3
B&OT 140 General Office Procedures	6
B&OT 141 Records and Database Management*	2
B&OT 144 Business English	3
B&OT 146 Human Relations in the Office Environment*	2

TOTAL 35

*8-week course

1st Semester Units

RADIOL 100 Introduction to Radiologic Technology	.75
RADIOL 101 Medical Ethics for the Radiographer	.50
RADIOL 102 Radiographic Medical Terminology	1.50
RADIOL 103 Radiographic Positioning I	1.50
RADIOL 104 Radiologic Physics I	1.50
RADIOL 105 Radiographic Anatomy/Physiology I	1.50
RADIOL 106 Radiographic Positioning Lab I	.50
RADIOL 115A Radiographic Clinic I	11.25

2nd Semester

RADIOL 107 Basic Radiologic Medical Techniques	1.25
RADIOL 108 Radiation Protection I	1.25
RADIOL 109 Radiologic Physics II	1.25
RADIOL 110 Radiographic Exposure I	1.25
RADIOL 111 Radiographic Film Critique I	1.25
RADIOL 112 Radiographic Positioning II	1.25
RADIOL 113 Radiographic Anatomy/Physiology II	1.25
RADIOL 114 Radiographic Positioning Lab II	.50
RADIOL 115B Radiographic Clinic II	10.50

3rd Semester

RADIOL 200	Radiation Protection II	1.50
RADIOL 201	Radiographic Exposure II	1.50
RADIOL 202	Radiographic Film Critique II	1.50
RADIOL 203	Radiographic Positioning III	1.50
RADIOL 204	Radiographic Anatomy / Physiology III	1.50
RADIOL 205	Radiographic Exposure Lab	.50
RADIOL 213A	Radiographic Clinic III	10.75

4th Semester

RADIOL 207	Radiographic Imaging	1.25
RADIOL 208	Registry Review Test in Radiology	2.75
RADIOL 209	Radiographic Film Critique III – Pathology	1.25
RADIOL 210	Radiographic Positioning IV	1.25
RADIOL 211	Radiographic Anatomy / Physiology IV	1.25
RADIOL 212	Special Procedures in Radiology	1.25
RADIOL 213B	Radiographic Clinic IV	11.00

TOTAL 77.50

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, all transcripts and site visit forms must be filed by March 1. Classes begin the first week of July each year. (Application packets available from October through January of each year.)

RESPIRATORY CARE TECHNICIAN CERTIFICATE

The objective of this certificate program is to prepare students as competent respiratory care practitioners at the technician level. Completion of the certificate program will prepare students for entry-level employment in hospital, skilled nursing facility or home care settings.

	Units
AH 119A Basic CPR	.75
*ANAT 101 General Anatomy and Physiology	4.00
ANAT 102 Anatomy and Physiology of the Cardiorespiratory System	4.00
*ENGL 015 Preparation for College Writing	4.00
*MATH 090 Elementary Algebra	4.00
*MICRO 102 Introductory Microbiology	4.00
RESP 050 Introduction to Respiratory Care	2.00
RESP 101 Fundamentals of Respiratory Care I	4.00
RESP 102 Fundamentals of Respiratory Care Skills I	11.00
RESP 103 Pulmonary Medical Terminology	3.00
RESP 104 Respiratory Care Clinical Application I	2.25
RESP 105 Fundamentals of Respiratory Care II	4.00
RESP 106 Fundamentals of Respiratory Care Skills II	6.00
RESP 108 Respiratory Care Clinical Application II	5.25
RESP 110 Clinical Medicine I	1.50
TOTAL	59.75

Notes:

1. Program begins fall semester only.
2. Anatomy and Physiology 101, Microbiology 102 and Respiratory 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 department certification.

4. A successful passing score on the Self-Assessment Entry-Level Examination is required to receive a one-year Certificate of Completion from the Respiratory Care Program.

**Students are encouraged to substitute equivalent advanced-level courses.*

SECRETARY CERTIFICATE

	Units
B&OT 101 Intermediate Keyboarding / Formatting	3
B&OT 102 Advanced Keyboarding / Document Production	3
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	2
B&OT 104 Advanced Word Processing Applications: Microsoft Word*	2
B&OT 105 Beginning Word Processing Applications: WordPerfect*	2
B&OT 106 Advanced Word Processing Applications: WordPerfect*	2
B&OT 110 Word / Information Processing Concepts	3
B&OT 140 General Office Procedures	6
B&OT 141 Records and Database Management*	2
B&OT 144 Business English	3
B&OT 146 Human Relations in the Office Environment*	2
BUSAD 053 Business Computations	3

TOTAL 33

**8-week course*

Recommended additional courses:

	Units
B&OT 107 Basics of PC / MS DOS (Disk Operating System)	2
B&OT 112 Fundamentals of Spreadsheet Applications	2
ACCT 205 Bookkeeping	3

WORD/INFORMATION PROCESSOR CERTIFICATE

	Units
B&OT 101 Intermediate Keyboarding / Formatting	3
B&OT 102 Advanced Keyboarding / Document Production	3
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	2
B&OT 104 Advanced Word Processing Applications: Microsoft Word*	2
B&OT 105 Beginning Word Processing Applications: WordPerfect*	2
B&OT 106 Advanced Word Processing Applications: WordPerfect*	2
B&OT 109 Using Microsoft Windows*	2
B&OT 110 Word / Information Processing Concepts	3
B&OT 116 Telecommunications for Business	3
B&OT 140 General Office Procedures	6
B&OT 141 Records and Database Management*	2
B&OT 144 Business English	3
B&OT 146 Human Relations in the Office Environment*	2

TOTAL 35

**8-week course*

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 — obtain 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 twenty two campuses in the system:

California Maritime Academy
 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, Monterey Bay
 California State University, San Marcos
 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 (60 recommended) 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 three years of mathematics 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

General Education courses provide a fundamental learning foundation for all instructional programs offered by the college. These courses are designed to stimulate the student's intellectual curiosity, to introduce the student to the major broad domains of higher education, to develop the student's communications and computational skills, and to enhance the student's awareness of societal concerns and of the responsibilities of citizenship. All programs leading to the Associate Degree include a general education component.

CALIFORNIA STATE UNIVERSITY (CSU)
GENERAL EDUCATION REQUIREMENTS

GENERAL PROVISIONS:

1. Students are required to complete 48 units of general education, 39 of which may be completed at Crafton Hills. Upon request to the Admissions & Records Office, CHC will certify completion of the following pattern to be applied toward the total general education requirement at any CSU.
2. This pattern of general education IS NOT applicable to any campus of the University of California (UC). Please refer to the specific UC catalog of your choice.
3. Completed courses MAY NOT be used in more than one area.



A. COMMUNICATION/CRITICAL THINKING

Nine (9) units required. Students MUST complete one course in the three areas listed:

English 101
English 102 or Philosophy 103
Speech 100

B. PHYSICAL AND LIFE SCIENCE/MATHEMATICS

Nine-twelve (9-12) units required, MUST include at least one course in biological science and one course in physical science and one of the courses MUST include a laboratory.

BIOLOGICAL SCIENCE

Anatomy / Physiology 101, 150, 151
Biology 100, 122, 123*, 130, 131
Microbiology 102, 150
Oceanography 101*

PHYSICAL SCIENCE

Astronomy 150 + 160
Chemistry 101, 102, 150, 151
Geography 110 + 111, 114* 126*
Geology 100, 101*, 112, 150*, 160, 250*, 252*
Oceanography 101*
Physics 100, 110, 111, 200, 201

MATHEMATICS

Mathematics 102, 103, 108, 115, 140, 141, 151, 250, 251, 252, 254

*Non-lab course

+May be taken with or without a lab

C. ARTS/LITERATURE/PHILOSOPHY/FOREIGN LANGUAGE

Nine-twelve (9-12) units required. Not more than six (6) units in any one discipline may be applied. Three (3) units in either Art, Music or Theatre Arts is required.

Anthropology 110
• Art 100, 102, 105
Foreign Language 101A, 101B, 101, 102A, 102B, 102, 103A, 103B, 103, 104A, 104B, 104, 242
History 160, 161, 170, 171
Interdisciplinary Studies 101, 102, 140
Literature / English 152, 155, 160, 170, 175, 232, 233, 250, 251, 260, 261, 270, 271, 275
• Music 100, 120, 134
Philosophy 101, 105
Religious Studies 100, 101, 110, 135, 150, 175, 176
Speech 120, 121
• Theatre Arts 100, 108, 109

• Designates classes in the arts

D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS

Nine-twelve (9-12) units required. Not more than six (6) units in any one discipline may be applied.

Note: Political Science 100 or 101 Plus either History 100 or 101 fulfills the U. S. History, Constitution and American Ideals requirements. (Title 5, CAC, SECTION 40404)

Anthropology 100, 102, 106, 107, 110
Economics 100, 200, 201
Geography 102, 120
History 100, 101, 107, 135, 139, 145, 153, 160, 161, 164, 165, 170, 171
Interdisciplinary Studies 108
Political Science 100, 101, 204
Psychology 100, 101, 102, 110, 112, 116, 133
Sociology 100, 105, 130, 141

**E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT
Three (3) units required.**

Health Education 102
Philosophy 105
Physical Education Activities (1 unit maximum)
Physical Education 262, 263
Psychology 103, 116, 118, 133
Speech 111, 140

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, continuing transfer students who follow and complete the IGETC 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 requirements 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.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM FOR TRANSFER TO CSU AND UC 1997-98

Completion of all of the requirements in the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements. All campuses will accept IGETC EXCEPT for UC, San Diego's Fifth and Revelle Colleges and UC, Berkeley's School of Business Administration; and Schools of Engineering.

The IGETC is not advisable for all transfer students. If you are pursuing a major that requires extensive lower-division preparation, you may be better served by taking courses which fulfill the CSU General Education-Breadth requirements or those of the UC campus or college to which you plan to transfer. Majors include, but are NOT LIMITED to: Engineering, Business, Pre-professional programs.

RESTRICTIONS: A student who has been registered at a UC campus is not eligible for IGETC. This restriction does not apply to students who have taken UC summer session or Extension classes only.

CERTIFICATION: Be sure to request certification when you request transcripts be sent to your choice of university or college. The course requirements for all areas MUST be completed before IGETC can be certified. All courses MUST be completed with grades of "C" or better.

AREA 1 - ENGLISH COMPOSITION

CSU - 3 courses required, one from each group below.

UC - 2 courses required, one from Group a and one from Group b

Group a:

English Composition, 1 course, 3 - 4 semester / 4 - 5 quarter units, English 101

Group b:

Critical Thinking - English Composition, 1 course, 3 semester / 4 - 5 quarter units each course, English 102

Group c:

Oral Communication (CSU only), 1 course, 3 semester / 4 - 5 quarter units, Speech 100

AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(1 course, 3 - 4 semester / 4 - 5 quarter units)

Math 108, 115, 140, **141, 151, **250, 251, 252, 254

**Indicates that transfer credit may be limited by UC or CSU or both. Please see the catalog or consult a counselor.

AREA 3 - ARTS AND HUMANITIES

(At least 3 courses with at least one from the Arts and one from the Humanities, 9 semester / 12 - 15 quarter units.)

ARTS: Art 100, 102, 105; Music 100, 120, 134; Theatre Arts 100, 108, 109

HUMANITIES:

Anthropology 110 (same as Religious Studies 110)
English 152, 155, 160, 170, 175, 250, 251, 260, 261, 270, 271, 275;
Foreign Language 242;
History 100, 101, 135, 145, 160, 161, 164, 165, 170, 171;
Interdisciplinary 101, 102, 140; Philosophy 101, 105;
Religious Studies 100, 101, 110 (same as Anthropology 110), 135, 175

AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES

(At least 3 courses from at least two disciplines, 9 semester / 12 - 15 quarter units)

Anthropology 100, 102, 106, 110 (same as Religious Studies 110)
Economics **100, 200, 201; Geography 102;
History 100, *101, *135, *145, *160, *161, 164, *165, 170, 171;
Political Science *100, *101;
Psychology 100, 101, 103, 110, 112, 116, 118, 133
Religious Studies 110 (Same as Anthropology 110)
Sociology 100, 105, 141

AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES

(2 courses required, one Physical Science course and one Biological Science course; at least one must include a laboratory, 7 - 9 semester / 9 - 12 quarter units.)

PHYSICAL: Astronomy 150, 160; Chemistry **101, 150, 151;
Geography 110, 111, 114, 114; Geology 100, 101, 112, 150, 160, 250;
Oceanography 101; Physics *100, **110, **111, **200, **201

BIOLOGICAL: Biology 100, 122, 123, 130, 131;
Microbiology **102, 150; Anatomy 150, 151

NOTE: Lab courses and Labs are underlined.

UC REQUIREMENT ONLY - Language Other Than English Proficiency equivalent to two years of high school or 1 year of college study in the same language.

The following courses at this institution fulfill the requirement:
French 102, German 102, Spanish 102

CSU REQUIREMENT ONLY - U.S. History, Constitution and American Ideals (not a part of IGETC; may be completed prior to transfer). **Six (6)** semester units, one course from Group 1 and one course from Group 2:

Group 1 - Political Science *100, *101
Group 2 - History *100, *101

* Course may be listed in more than one area, but shall not be certified in more than one area.

** Indicates that transfer credit may be limited by UC or CSU or both. Please see the catalog or consult a counselor.

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, obtain 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 Center. 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 general education pattern encountered at independent institutions.

THE UNIVERSITY OF REDLANDS BACHELOR OF ARTS DEGREE

- Writing Across the Curriculum
English 101: Freshman Composition
(In addition, all students are required to take an upper-level writing course in the junior or senior year.)
- Creative Process (At least three semester credits)
- Cross-Cultural Studies (at least three semester credits)
- Dominance and Difference (at least three semester credits)
- Foreign Language (fourth semester college level or higher)
- Human Behavior (at least three semester credits)
- Humanities / Philosophy (at least three semester credits)
- Humanities / History (at least three semester credits)
- Humanities / Literature (at least three semester credits)
- Mathematics and Science (three or four courses, one from each category, Natural Science / Mathematics / Computer Science at least three semester credits each. All students must complete Math 095 prior to admission to U of R.)
- State and Economy (at least three semester credits)

THE BACHELOR OF SCIENCE (B.S.) DEGREE

Candidates for the Bachelor of Science degree will be required to complete only up through a second semester of a college-level Foreign Language and only one course each from two of the three categories in the Humanities section.

If you are planning to transfer to the University of Redlands, make certain the courses you take at Crafton substantively match those offered at the U of R. An approved list of courses, applicable to general education, is available in the Counseling Center. 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.

ANDREWS, SANDRA (1985) Emergency Medical Services
Assistant Professor
A.S., Weber State College

ACQUISTAPACE, KRIS (1997) English
Instructor
B.A., Washington University, St. Louis, Missouri
M.E., University of Southern Mississippi

BAHNER, DANIEL (1991) English
Assistant Professor
B.A., Humboldt State University
M.A., California State University, Long Beach

BEITSCHER, JANE (1991) History
Assistant Professor
B.A., Pennsylvania State University
Ph.D., University of Wisconsin

BIFFLE, JAMES (1971) Philosophy / Religious Studies
Professor
B.A., University of California, Santa Cruz
M.A., California State University, San Francisco

BOATMAN, RON (1994) Geology / Geography
Instructor
B.S. University of Nevada, Reno

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

BRINK, T.L. (1989) Psychology
Associate Professor
B.A., Claremont Men's College
A.M., Ph.D., University of Chicago
M.B.A., Santa Clara University

BRYSON, KENNITH L. (1979) Respiratory Care
Associate Professor
B.V.E., California State College, San Bernardino
M.Ed., University of Redlands

BYRON, ELIZABETH J. (1979) Library
Professor
B.A., University of Redlands
M.S., California State University, Fullerton

CABANILLA, CLIFFORD D. (1966) Theatre Arts
Professor
B.S., M.A., Brigham Young University

COLVEY, KIRSTEN (1981) Handicapped Services
Associate Professor
B.A., University of California, Santa Cruz
M.S., Pepperdine University

CONTRERAS, ALEXANDER E. (1997) **Vice President, Student Services**
A.A., Southwestern College, Chula Vista
B.B.A., National University, San Diego
M.S.Ed., National University, San Diego

COTA, MARCO (1993) Counseling
Assistant Professor
A.A., College of the Desert
B.A., M.A., California State University, San Bernardino

CREAGH, CAROLYN (1990) Computer and Information Sciences
Assistant Professor
B.A., University of Redlands

DEMING, MERRILL (1978) Mathematics
Professor
B.A., The George Washington University
M.A., California State University, San Bernardino

DE SALLIERS, DEBORAH (1976) Health and Physical Education
Professor
B.S., Pepperdine University
M.S., University of California, Los Angeles
DrPH, Loma Linda University

FERRACONE, DONNA (1989) Emergency Medical Services
Assistant Professor
R.N., Queen of Angels Hospital, Los Angeles

FRANKLIN, BRADLEY H. (1979) Respiratory Care
Associate 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) College Nurse
Assistant Professor
B.S., Walla Walla College, Washington

GIBSON, KATHLEEN R. (1994) Mathematics
Instructor
B.A., University of Redlands
M.A., California State University, San Bernardino

GÓMEZ, LUIS (1976) **President**
B.A., M.A., California State University, San Bernardino
Ed.D., University of Southern California, Los Angeles

GONZÁLEZ, RAYMOND (1972) Foreign Languages
Professor
B.A., M.A., University of California, Riverside
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

HARRINGTON, JUDITH (1990) Counseling
Associate Professor
B.A., California State University, Fullerton
M.A., Loyola Marymount University

HARRISON, GLORIA (1968) **Vice President, Instruction and Associate Professor of Spanish Literature**
B.A., University of California, Riverside
M.A., University of California, Riverside

HENSLEY CORREA, HEATHER (1994) Speech
Instructor
B.A., Biola University
M.A., California State University, Long Beach

HOLBROOK, JAMES (1984) Emergency Medical Services
Professor
National Registry Emergency Medical Paramedic, Loma Linda University
B.V.E., California State University, San Bernardino
M.A., California State University, San Bernardino

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

JOB, SAMUEL (1984) Library
Associate Professor
 A.A., Merced College
 B.A., M.L.S., Brigham Young University

KIBBY, RONALD O. (1977) **Dean, Occupational Education**
 A.A., Stockton College
 A.B., University of Southern California
 M.A.T., University of Redlands
 Ed.D., Nova University

KOSMATKA, ARNOLD L. (1978) Respiratory Care
Professor
 A.A.S., Southern Oregon University
 B.A., University of Redlands
 M.A., University of Redlands
 Ed.D., Nova University

LEDoux, JANINE (1991) Health and Physical Education
Assistant Professor
 B.S., M.Ed., Bridgewater State College
 DrPH, Loma Linda University

LESIGHT, KENNETH (1979) Music
Professor
 B.S., The Pennsylvania State University
 M.A., Stephen F. Austin State University

LICERIO, MAMERTO D. (1979) Disabled Student Programs &
 Services
Professor
 B.A., San Francisco State University
 M.A., San Francisco State University

MANSOURIAN, FARHAD (1990) Economics
Assistant Professor
 B.S., University of California, Riverside
 M.A., University of California, Riverside

MATTHEWS, DAMARIS (1985) Learning Resource Center
Assistant Professor
 B.A., Oakwood College
 M.A., California State University, San Bernardino

McCUNE, RONALD M. (1977) ... Allied Health / Anatomy / Physiology
Assistant Professor
 B.A., Pepperdine University

MILLOY, WAYNE (1976) Mathematics
Professor
 B.S., M.A.T., University of Redlands
 Ed.D., Nova University

MOLINO, GLORIA S. (1990) Counseling
Associate Professor
 B.A., University of Redlands
 M.A., California State University, San Bernardino

MOORE, SANDRA B. (1990) Psychology
Associate Professor
 B.A., Northwestern University
 M.S., University of California, Santa Cruz
 Ph.D., University of California, Santa Cruz

MUNRO, GORDON D. (1966) Politics
Professor
 B.S., Antioch College
 M.A., California State University, Los Angeles
 Ph.D., Claremont Graduate School

NEAL, LETITIA D. (1988) Counseling
Associate Professor
 B.S., Bluefield State College
 M.S., Long Island University, New York

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
Professor
 A.A., San Bernardino Valley College
 B.A., M.A., University of California, Riverside

RABAGO, RALPH J. (1989) Health and Physical Education
Associate Professor
 B.A., University of Redlands
 M.S., University of Idaho

RIOS, AGUSTIN J. EOPS Coordinator
Assistant Professor
 B.A., University of California, Riverside

SEARLE, JEAN (1995) Child Development
Instructor
 CDA, Santa Monica College
 B.A., Pacific Oaks College
 M.S., Pacific Oaks College

SHIMELD, LISA A. (1989) Microbiology
Associate Professor
 B.A., California State University, San Bernardino
 M.S., California State University, San Bernardino

SHODAHL, SUSAN A. (1977) Dean, Continuing Education / Commu-
 nity Services
 B.A., University of San Francisco
 Ph.D., University of Nevada, Reno

SMITH, EDDIE (1991) Fire Technology
Assistant Professor
 A.S., Chaffey College
 B.A., California State University, San Bernardino

SNOWHITE, MARK S. (1967) English
Professor
 B.A., University of Maryland
 M.A., University of California, Riverside

TAYLOR, KATHARYN K. (1979) Respiratory Care
Assistant Professor
 B.S., California State Polytechnic University, Pomona

THOMERSON, C. BENSON (1969) English
Professor
 A.B., M.A., California State University, San Diego

THURMAN, LAURENS K. (1972) Physics / Astronomy
Professor
 B.A., M.A., University of California, Riverside

TUNG, LINDA P. (1972) Mathematics
Professor
 B.S, Chiao-tung University
 B.S., Hong Kong Baptist College
 M.S., California State University, Los Angeles
 Ph.D., University of California, Riverside

TURLEY, ROBERT (1976) Sociology
Professor
 B.A., M.A., Michigan State University

VAJNA, SUSAN (1986) Business and Office Technology
Assistant Professor
 A.A., San Bernardino Valley College
 B.A., California State University, San Bernardino

WIENCEK, JERRY (1992) Fire Technology
Assistant Professor
 A.S., Rancho Santiago College
 B.V.E., California State University, Long Beach

WINNINGHAM, LAURA (1983) Library
Associate Professor
B.A., B.S., California State Polytechnic University
M.A., University of Southern California
M.S., California State University, Fullerton

WIRZ, DONALD R. (1972) Chemistry
Professor
B.S., University of Redlands
M.S., Ph.D., Wayne State University

WRIGHT, WILLIAM R. (1977) Work Experience
Professor
B.V.E, M.A., California State University, Los Angeles

WURMBRAND, MARC (1972) Art
Professor
B.F.A., Cooper Union
M.F.A., Yale University

ADJUNCT FACULTY

*The dates in parentheses indicate the year of appointment to the
San Bernardino Community College District.*

AFZAL, Muhammad Mathematics
M.S., University of California, Los Angeles
M.S., Cranfield Institute of Technology, England

ALBRIGHT, Gavan M. (1996) Anatomy & Physiology
B.S., University of California, Riverside

ALLEN, Douglas H. (1983) Fire Technology
Community College Limited Service Credential—Valid for Life

ANDREWS, Marc D. (1989) Emergency Medical Services
A.S., Crafton Hills College

BACHMAN, Bruce (1989) Art
M.F.A., California State University, Fullerton

BEARDEN, Linda A. (1989) Physical Education
B.S., California State University, San Bernardino
M.S., Azusa Pacific University

BELDING, Don III (1983) Interdisciplinary Studies
M.A., California State University, Northridge

BENSON, Phyllis H (1978) Music
M.A., University of California, Riverside

BEST, Nancy Olson (1996) English
M.F.A., San Diego State University

BIDDIX, Walter "Jack" (1991) Fire Technology
B.S., Southern Illinois University, Carbondale

BOEBINGER, Kelly H. (1991) Chemistry
M.S., University of California, Riverside

BOUSLOUGH, Gail (1997) English
M.A., California Polytechnic University, Pomona

BROWN, Alan D. (1996) Sociology
M.A., University of New Orleans

BROWNFIELD, Sybil E. (1995) English
M.F.A., University of California, Irvine

BUNDY, Miriam J. (1990) Speech
M.A., California State University, Fullerton

CAGLAYAN, Saim M. (1990) Art
B.A., California State University, Long Beach

CAMPBELL, Robert G. (1988) Mathematics
M.A., University of Redlands

CASALE, William L. (1996) Anatomy
Ph.D., Michigan State University

CHAVANDO, Gustavo (1990) Spanish
M.A., University of California, Riverside

CHRISTENSEN, David (1978) Music
M.M., University of Redlands

CLARK, Ronald A. (1996) Physical Education
M.A., University of Redlands

COLEMAN, Myralynn (1994) Psychology
M.A., California State University, San Bernardino

COLVEY, Maryanne (1994) English
M.A., Claremont Graduate School

COOK, Linda M. (1996) Psychology
B.A., University of California, Riverside

COX, James R. (1981) Administration of Justice
A.A., San Bernardino Valley College

CRAW, Robert L. (1995) Mathematics
M.A., University Nebraska, Kearney

CRISE, Robert Dean Jr. (1989) Mathematics
M.A., California State University, Fullerton

CROW, Kathy (1994) Emergency Medical Services
A.S., Riverside Community College

DAVIS, Tracy L. (1994) History
M.A., University of California, Riverside

DOROTHY, Jennifer (1996) Psychology
M.S., Loma Linda University at Loma Linda

EDMAN, Susan A. (1990) Religion / History
M.A., University of Chicago

ELLIS, Carol (1994) English
Ph.D., University of Iowa

ERKEBAEV, Eskendr B. Mathematics
M.A., Moscow University, Russia

ESCALANTE, Sandi (1994) Business & Office Technology
M.A., California State University, San Bernardino

ESQUIVEL, Eric (1995) Fire Technology
A.A., San Bernardino Valley College

FORD, Pamela J. (1995) Anthropology
M.A., PhC., University of Washington, Seattle

FOUCH, Rhonda L. (1992) Physical Education
M.S., California Polytechnic University, Pomona

FRANKLIN, William J. (1995) Politics
Ph.D., Claremont Graduate School

GOLDER, Dave S. (1985) Fire Technology
B.V.E., California State University, San Bernardino

GRANDE, Charles W. (1969) History / Philosophy / Religion
M.A., Boston University
S.T.B., Boston University School of Theology

- GROCHOWSKI, Joseph G. (1985) Business & Office Technology
Program in Business Administration at La Salle Business
Institute, Chicago
- GUERRERO, Sherrie (1996) Speech
M.A., California State University, Fullerton
- GUY, Joy (1995) Coordinator, Radiologic Technology
M.H.A., Loma Linda University at Loma Linda
- HAKALA, Gary R. (1989) Mathematics
B.S., University of Wyoming
- HARDING, Mary (1982) Business & Office Technology
B.S., University of Redlands
- HARDY-DESMOND, Stacey D. (1996) Psychology
Ph.D., California School of Professional Psychology, San Diego
- HARGIS, Craig K. (1990) English
M.A., California State University, Los Angeles
- HARVEY, Lisa M. (1994) Anatomy & Physiology
Ph.D., Loma Linda University at Loma Linda
- HAYDEN, Patty (1991) Child Development
B.A., University of Redlands
- HAZARD, ROLAND F. (1979) Administration of Justice
B.V.E., California State University, San Diego
- HENDRIX, Thomas T. (1992) Fire Technology
State Chief Officer, Certified State Fire Marshal
- HOBSON, Richard H. (1995) Mathematics
Ph.D., Pennsylvania State University at University Park
- JOHNSTON, C. J. (1974) Mathematics
M.S., University of Arizona, Tucson
- JONES, M. JoAnn (1991) Child Development
M.Ed., Azusa Pacific University
- KEITH, Thomas Philosophy
M.A., Claremont Graduate School, Claremont
- KIBBY, Janice A. (1990) Child Development
B.A., University of Redlands
- LARDY, Leonard A. (1969) English
M.A., University of Montana at Missoula
- LARMON, Robert C. (1995) Politics
M.A., University of Southern California, Los Angeles
- LLOYD, Gordon T. (1977) Economics / Politics
Ph.D., Claremont Graduate School
- LOPEZ, Muriel (1995) Psychology
M.A., California State University, San Bernardino
- MACEY, Joan F. (1979) Business & Office Technology
B.S., Northern Illinois University at De Kalb
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