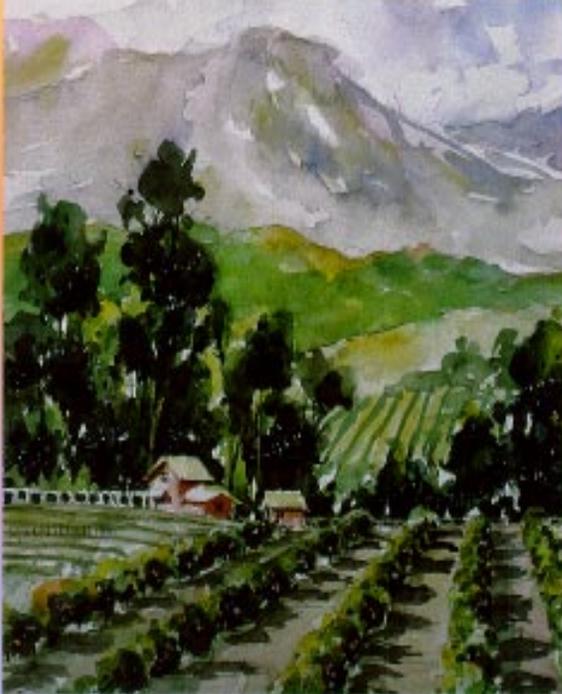


**CRAFTON  
HILLS  
COLLEGE**  
1998-99 CATALOG



<http://www.sibcol.ca.us/academic.htm>

# Crafton Hills College

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## 1998-99 Catalog

**CollegeSource**

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## **AMERICANS WITH DISABILITIES ACT OF 1990 STATEMENT OF POLICY**

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.

***Cover art is an original watercolor painting by Pasadena artist Joseph Stoddard done for the book "Letters from the Orange Empire" published by the Historical Society of Southern California.***

# CRAFTON HILLS COLLEGE

11711 Sand Canyon Road, Yucaipa, CA 92399 • (909) 794-2161  
<http://www.sbccd.cc.ca.us/chc/index.htm>

A Public Community College in California

## CATALOG 1998-1999

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.

The catalog is produced by the Office of Instruction in conjunction with  
Student Services and the Public Information Office

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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 embarking on a new journey, having just completed a quarter century of growth, progress, service, and quality education. That journey will take us into the new millennium.

As we begin this new journey, we hope you will join us because your opportunities to discover and to explore will be many since CHC now offers 38 majors, 14 pre-professional preparation programs, and 14 occupational certification plans. These programs are supported by 64 full-time and 110 adjunct faculty. In addition, services to students are provided within the areas of Admissions and Records, Career Center, Counseling, Disabled Student Program and Services (DSPS), Extended Opportunity Program and Services (EOPS), Financial Aid, Health Services, Transfer Center and Workforce Readiness Training. Opportunities for co-curricular activities will be available through Student Government, campus clubs, and organizations.

Over the last two and a half decades, the transfer program has prepared students well for the four-year colleges and universities. Yearly reports from the California State University and College System show our students who transfer to CSU 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 since 1972. Occupational education such as Radiologic Technology, Respiratory Therapy, Emergency Medical Services, and Computer and Information Science have become cutting edge programs in high technology. Fire Technology and the Paramedic program 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 few 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, a private firm; the original stage lighting in the Performing Arts Center was replaced with the latest system; a new Student Senate was constructed and furnished to accommodate our emerging leaders in student government; the installation of the CHC Carillon Bells occurred bringing back tradition and great joy to the campus; and a new Student Services Annex was approved with construction to begin this year.

CHC acknowledges 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 5,500 students each year who choose the College as the place to pursue their dreams.

We look forward with anticipation to the new millennium, continuing a tradition of growth, progress, service, and quality education within that vibrant, dynamic institution we know as Crafton Hills College!

Sincerely,

A handwritten signature in black ink, appearing to read "Luis S. Gómez". The signature is fluid and cursive, with a large, stylized initial "L".

Luis S. Gómez, Ed.D.  
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. 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 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 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 Workforce Development Program of fee-based classes that provides an opportunity for individuals to develop occupational skills in preparation for employment or to improve or upgrade job skills to enhance performance in current employment.
- 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

## 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 high school students who are capable of profiting from college courses. To be eligible, the student must have completed the tenth grade.

Students must present the following:

1. Crafton Hills College application.
2. A fully completed Special Attendance form, signed by the high school counselor and a parent or guardian.
3. Official high school transcripts with a grade point average of 3.0 or better.

### PRE-ENROLLMENT ASSESSMENT

As a result 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 Mathematics skills prior to enrollment with the following exceptions:

1. Completion of an Associate of Arts Degree or higher.
2. Completion of 30 or more semester units of college work.
3. Presenting of scores from the SAT, ACT, SCAT, CGP, ASSET, CPT, APS, MDTP.
4. Presentation of CHC Nelson Denny Test scores.
5. Completion of courses meeting English and Mathematics requirements.
6. Referral to DSP&S assessment.
7. Enrollment in one of the following courses: PE, Applied Arts, Applied Music up to a cumulative total of 12 units.

### 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 placement test at the Admissions and Records Office.
3. Submit official high school or college transcripts if you are a matriculated student.

### 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 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 money order.

#### **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 five semesters. You must take twelve or more units each semester.

## STUDENT SERVICES

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

#### 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 College.

#### 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.

#### 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.

#### STUDENT MATRICULATION

New, non-exempt students enrolling in California community colleges must participate in a matriculation procedure. Matriculation is a process which brings together a college and a student who enrolls for credit into an agreement for the purpose of realizing the student's educational objective. The agreement includes the provision of an admission process, college orientation, pre-enrollment assessment, advisement and counseling for course selection, a suitable program of studies, and follow-up on student progress. The student agrees to express at least a broad educational objective at entrance. He or she also agrees to declare a specific educational objective within a reasonable period of enrollment, attend class and complete coursework diligently, and maintain progress toward an educational goal.

The purpose of Matriculation is to ensure access to appropriate programs and courses offered by community colleges to all students who can benefit, and to facilitate successful completion of student educational objectives in accordance with applicable standards of educational quality as determined by the Board of Governors and local trustees.

**APPEALS:**

The college provides an appeals process for review of the following matriculation concerns:

1. Review of placement decisions.
2. Waiver & challenge of prerequisites.
3. Complaint of unlawful discrimination: If a student feels that assessment, orientation, counseling, prerequisites, or any other matriculation procedure is being applied in a discriminatory manner, he or she may appeal through the existing Petition for Special Privileges procedure.

**PETITION FOR SPECIAL PRIVILEGE PROCEDURE**

Students may obtain further information and/or forms regarding the appeals process from the Counseling Center, SSA 212 or the Student Services Office, SSA 306.

The completed petition must include:

1. The reason for the petition
2. A concise statement that may justify the granting of the petition
3. Any documentation that may support the granting of the petition

**ORIENTATION**

Psychology 955 is a required course for new students that provides for assessment of basic skills and interests in compliance with California's Matriculation Plan. The course includes:

1. Assessment of reading, writing and math skills (Placement Test).
2. Orientation to the services, policies, and philosophy of Crafton Hills College.
3. Explanation of the **function** and scope of a Community College.
4. Information **on** certificate programs, Associate Degree requirements and transfer requirements to four-year colleges and universities.
5. Career/Life planning, interest inventory test and occupational research.
6. Development of Student Educational Plan.

**CALWORKS/WORKFORCE READINESS TRAINING**

CalWORKs is a statewide employment initiative designed to assist students who are on public assistance. It is a mandatory program that provides EDUCATION, TRAINING, AND SUPPORTIVE SERVICES to eligible clients.

**FOCUS:**

- Assist current students to successfully complete an approved certificate/occupational program.
- Provide short-term educational training programs that are designed to assist students in obtaining employment.
- Provided employment experience
- Provide necessary childcare support

**CRITICAL SUPPORT SERVICES:**

- Assessment
- Counseling
- Child care
- Tutoring
- Job placement services

More information can be obtained in the CalWORKs/Workforce Readiness Training office, Lab/Admin. Building, Room 220 or by calling (909) 389-3208.

**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.

**DISTANCE EDUCATION**

The mission of the Distance Education Program of the San Bernardino Community College District is to expand access and provide greater flexibility to distant learners utilizing current and new technologies to deliver quality educational opportunities and to facilitate the attainment of students' personal and academic goals. Students enroll in Distance Education courses at normal registration times, by mail, or through telephone registration. For additional information, call the Distance Education office at (909) 888-6511, Extension 1131.

**TELECOURSES**

Telecourses air over KSKR-TV, channel 24 or 12, which is carried widely on area cable systems. Students who enroll in these courses attend on-campus orientation meetings, discussion sessions, and special lectures (there are generally 5 on-campus meetings). They also participate in on-campus examinations, but the majority of the course activity is engaged in 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 that complement the TV lectures.

**ON-LINE COMPUTER COURSES**

Computer courses are available on-line by accessing a dedicated telephone number using a computer's modem. Students do not need an Internet Service Provider such as AOL or EEE to participate. All that is needed is a modem connected to a telephone line. Certain courses also use a CD-ROM. Although Distance Education courses generally have 5 on-campus meetings, the computer-based courses may have fewer. These courses are the college's attempt to further explore computer technology as a teaching tool. Check the current class schedule or the Distance Education schedule for information on the computer courses being offered.

**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 be enrolled in 7 units, including Work Experience units. 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.

**EVENING COLLEGE**

The college offers a wide range of courses during the evening hours. These offerings make it possible for students 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.

**EXTENDED OPPORTUNITIES PROGRAMS AND SERVICES/ COOPERATIVE ASSISTANCE RESOURCES FOR EDUCATION (EOPS/CARE)**

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/CARE office or the current class schedule for the most recent income guidelines.

To apply for the program, just write the EOPS/CARE Office, Crafton Hills College, 11711 Sand Canyon Road, Yucaipa, California 92399, or telephone (909) 389-3239.

**WHAT IS THE EOPS/CARE SUMMER READINESS PROGRAM?**

The Summer Readiness Program is designed to assist first-time students (with no previous college experience) with acquiring specific skills important in making a successful transition into college. The program provides a great opportunity for students to experience and become acquainted with the necessary college survival skills and avoid the typical adjustment problems encountered upon entering college for the first time.

There is no cost to qualified eligible students who enroll in the program. All educational costs (books, supplies, etc.) are paid by EOPS/CARE. Students who successfully complete the five week program will be awarded an EOPS/CARE grant.

**FINANCIAL AID/LOANS, GRANTS, AND EMPLOYMENT**

If you need help with the costs of attending Crafton Hills College, the Financial Aid 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 Aid 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 Aid 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 Aid Office each semester, regardless of how successful you were in obtaining aid in the past.

### 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.

### 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.

### 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.

## STUDENT ACTIVITIES

### ASSOCIATED STUDENTS OF CRAFTON HILLS COLLEGE

The Associated Student of Crafton Hills College (ASCHC) 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 ASB cards.

The governing body of ASCHC is the Student Senate. The Senate supervises all student activities and budgets student funds. Officers are elected for one-year terms. Senate meeting times and agenda are posted in the Senate office.

In addition to supporting various student activities and events on campus, the Student Senate provides assistance and use of the Senate office to many student clubs and associations. The Student Senate sells Knott's Berry Farm tickets and Omnitrans Bus passes, as well as providing Fax service (contact the Senate office for rates and more details) from their office. The Student Senate office is located next to the Cafeteria, on the west end of the campus. Office hours are Monday, Wednesday and Thursday, 8:30 - 5:00 p.m. and Tuesday, 8:30 - 7:00 p.m. The telephone number is (909) 389-3410.

Some clubs which have been active on campus in the past are Alpha Gamma Sigma (AGS), Campus Crusade for Christ (CCC), Accounting and Business Association, Black Student Union

(BSU), Movimiento Estudiantil Chicano de Aztlan (MEChA), BETA II, International Club, Student California Teachers Association, and American Indian Association (AIA). Contact the Student Senate office for more information, including club meeting times.

## SUPPORT SERVICES

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

### LIBRARY

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

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

### LEARNING RESOURCES 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.

### 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.

## 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 SSA 306, for details.

## 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.

## WORKFORCE DEVELOPMENT PROGRAM

As an alternative to the college's regular occupational programs, the Workforce Development program provides a variety of fee-based classes aimed at helping people for employment. Courses are provided on a contract basis and are not academic equivalents to regular credit classes.

Workforce Development programs at Crafton Hills College provide an opportunity for individuals to develop occupational skills in preparation for employment or to improve or upgrade job skills to enhance performance in current employment. Specific class offerings are not included in the college catalog, but a list of offerings is available each semester under the Workforce Development section of the schedule of classes. Information on how to register and the fee for each class is also included.

The Dean of Occupational Education is responsible for the Workforce Development classes. Anyone wanting additional information about current offerings should telephone 389-3207.

## 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 SSA-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 American Council on Education. Inquire at the Counseling Center for full details.

### UNITS OF CREDIT

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

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

### UNIT LIMITATIONS

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

If you are a regular full-time student, you are restricted to a maximum of 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 Admissions and 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 who feel that their knowledge is equivalent to the course content of a currently approved course, and who can present evidence of extensive background and experience in the subject area, may apply for course credit by examination. To qualify, the student must have completed twelve(12) or more units at Crafton Hills College, or be a permanent employee of the San Bernardino Community College District, and have the approval of a full-time instructor. To apply, the student must submit a fully completed and signed application for Credit by Examination for each course requested to the CHC Office of Instruction. Applications may be obtained in the Admissions and Records Office (Room SSA-213).

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

Students will be charged a fee in accordance with SBCCD Board Policy 7180.

Upon approval of the application by the Vice President of Instruction and full payment of fees, requests for credit by examination will be forwarded to appropriate instructors to administer examinations and determine grades. Grades will be consistent with the Grading System established by the College and will be submitted to the Admissions and Records Office by the end of the semester in which the examination is completed.

The student's academic record shall clearly 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

Students must take all examinations given in the courses in which they are enrolled, and may not be excused from the required examinations of any course, including final examinations. Students who are absent during an examination forfeit the right to make up the examination unless they have prior permission from the instructor.

#### CLASS ATTENDANCE

It is the student's responsibility to attend classes regularly and on time. **Students who do not attend the first class session may be dropped from the class at the discretion of the instructor.** In the event of excessive absences, the instructor may drop a student from a course or may lower a student's grade. Students who are absent in excess of twenty percent of the total class hours or for two consecutive weeks shall be dropped from the class. The grade assigned will be in accordance with the policies guiding "Withdrawal from Classes" (see above). Such students may be reinstated only at the discretion of the instructor for extenuating circumstances.

#### OPEN ENTRY/OPEN EXIT COURSES

Students completing 0-74% of the work or time required in an open entry/open exit course will be given a grade of "W", which will be included in completion-ratio calculations. Students completing 75% or more of the work or time required will be assigned the grade earned, i.e., "A", "B", "C", "D", "F", "CR" or "NC".

#### 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 36 months 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 (e.g., the fall semester of 1996-97 followed by the fall semester 1997-98 shall be considered consecutive if the student was not enrolled in the spring semester of 1996-97.)

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 Privilege with the appropriate Student Services 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 D, F, NC was issued 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 C, B, A, CR was issued 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. No grade will be changed after 36 months.

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.

## STANDARDS OF STUDENT CONDUCT

### *In the Classroom*

Creating a proper teaching and learning environment is imperative for getting a good education. Everyone at Crafton Hills College is responsible for helping to create this environment, including students. Simple rules of courtesy apply.

1. **Respect for the Instructor.** This includes arriving on time, not leaving early, bringing appropriate materials, not speaking with other students while the instructor or another student is talking, not bringing food or drink into the classroom, not being loud, boisterous, or argumentative.
2. **Respect for Other Students.** This includes not interfering with the rights of others to listen and participate, not being disrespectful, not using inappropriate language or harassing others in any way
3. **Academic Honesty.** Lack of honesty in the classroom is considered a very serious offense. Any form of cheating on tests or assignments, turning in work which is not one's own (i.e., plagiarism), talking during tests, furnishing false information to college personnel, or knowingly misrepresenting oneself to the college is grounds for disciplinary action. The consequences of cheating are severe and may include receiving a grade of "F" for the class or possible expulsion from the college.
4. **Instructor's Rights.** An instructor has the right to remove a student from class at any time he or she considers a student's actions to be interfering with a proper collegiate environment. The instructor may also refer the incident to the Vice President of Student Services for disciplinary action as warranted.

5. **Student's Rights.** All students have a right to due process. If a classroom conflict occurs, the student must first discuss the problem with the instructor. If this does not resolve the problem, the student should follow the procedures detailed in SBCCD Board Policy 6090, Student Grievances.

### *OH the Campus*

Creating a proper campus environment is also very important for academic and individual success. The SBCCD Board of Trustees has established district-wide standards of student conduct which will be enforced at all times. These rules of conduct are particularly important in large common areas such as the cafeteria, bookstore, vending areas, campus quads, and other highly frequented areas.

## 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.

## LAWS TO HELP STUDENTS:

### TITLE IX

Congress passed Title IX of the Educational Amendment in 1972. Sex discrimination is prohibited in federally assisted, education programs. Title IX states:

No person in the United States shall, on the basis of sex, be excluded from participations in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving federal financial assistance.

### TITLE II

Title II of the Education Amendments of 1976 is Federal Legislation regarding Vocational Education. One of the purposes is to help all students receive the job training needed to become financially secure. Part of the law is: To develop and carry out programs of Vocational Education within each state so as to overcome sex discrimination and sex stereotyping in Vocational Education programs and thereby furnish equal educational opportunities in Vocational Education to persons of both sexes.

## GRADUATION REQUIREMENTS

## ASSOCIATE IN ARTS DEGREE:

Requirements for the Associate in Arts Degree:

1. Completion of a minimum of **60 units** acceptable college work with at least a "C" or better grade point average.

**NOTE:** Courses numbered 900-999 are designated as non-degree applicable; however, units earned in the courses **DO COUNT** as student workload units.

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 for their four-year program.
3. Completion of **twelve (12)** semester units in residence at Crafton Hills College.
4. Demonstrated reading capability at the 12th grade level, or higher on the Nelson-Denny test, completion of a reading course numbered 079, 090, 975, 976 or 977 with a grade of "C" or better, or a score of 85 or better on the reading portion of the placement test (Accuplacer).
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. (Revised 7/88).
6. Writing competency as demonstrated by a grade of "C" or better in ENGL 015, 101 or 144.
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.
  - c. A maximum of 6 units of Reading and Study Skills courses may be applied.
  - a. A maximum of 16 units of Occupational Work Experience or 6 units of General Work Experience may be applied for elective credit.
8. Completion of **twenty-six (26)** units of general education must be distributed as indicated: three-four units in category A, two units in category B, and three to six units in categories C, D, E, and F. No single course may be used to meet more than one general education requirement.
  - a. **English** (3-4 units minimum) to be selected from ENGL 015, 101, 144
  - b. **Physical Education/Nutrition/Health Education** (2 units)  
HEALTH 102  
Physical Education activity courses  
PE 262 or 263

c. **Natural Sciences (3-6 units)**

ANAT/PHYSIO 101, 150, 151  
Astronomy  
Biology  
Chemistry  
GEOG 110/111, 114, 126  
Geology  
Microbiology  
Oceanography  
Physics

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

i. ANTHRO 110  
ART 100, 102, 105  
ENGL 055, 150AB, 152, 155, 160, 170, 175, 250, 251,  
260, 261, 270, 271, 275  
Foreign Languages  
HIST 160, 161, 164, 165, 170, 171  
INTDIS 101, 102, 108, 140  
MUSIC 100, 103, 120, 134  
Philosophy  
Religious Studies  
SPEECH 120, 121  
THART 100, 108, 109

## 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

f. **Communication & Analytical Thinking (3-6 units)**

BUSAD 053  
Computer and Information Science (except 100, 101, 105, 106)  
ENGL 015, 101, 102, 144  
Mathematics (except 942, 952)  
PHIL 103  
SPEECH 100, 101, 111, 140, 142

## 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 Natural Science\* or an occupational curriculum.

\* A minimum of one life science with lab and one physical science with lab is required for a major in Natural Science.

## 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 re-admission 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.

## 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 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.

## PREREQUISITE/COREQUISITE CHALLENGE PROCESS

Any prerequisite or corequisite may be challenged by a student on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Challenges shall be resolved in a timely manner and, if the challenge is upheld, the student shall be permitted to enroll in the course program in question. Grounds for challenge are:

1. The prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites;
2. The prerequisite or corequisite is in violation of Title 5 of the Education Code;
3. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner;
4. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite;
5. The student will be subject to undue delay in attaining the goal of his or her Student Educational Plan because the prerequisite or corequisite course has not been made reasonably available;
6. The student seeks to enroll and has not been allowed to enroll due to a limitation on enrollment established for a course that involves intercollegiate competition or public performance, or one or more of the courses for which enrollment has been limited to a cohort of students. The student shall be allowed to enroll in such a course if otherwise he or she would be delayed by a semester or more in attaining the degree or certificate specified in his or her Student Educational Plan; and
7. The student seeks to enroll in a course which has a prerequisite established to protect the health and safety, and the student demonstrates that he or she does not pose a threat to himself or herself or others.

## 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 applicable to the Associate degree; May also apply to Baccalaureate degree.

900-999 Courses not applicable to the Associate degree.

### COURSE TRANSFERABILITY

Many courses numbered 100 through 299 are acceptable for transfer to the California State University and the University of California. Courses that are transferable to these universities will have CSU and/or UC printed directly beneath the title of the course. If CSU or UC is followed by an asterisk(\*), there may be a limitation on the credit allowed. Please check with a counselor for specific details. Courses that apply to the Associate degree are indicated under the course title.

### 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

**Every course at Crafton Hills College falls into one of the following Departments and Disciplines:**

## DEPARTMENTS

### ALLIED HEALTH SCIENCES

Allied Health ..... AH  
 Radiology Technology ..... RADIOL  
 Respiratory Care..... RESP

### BIOLOGICAL SCIENCES

Anatomy ..... ANAT  
 Biology ..... BIOL  
 Microbiology ..... MICRO  
 Physiology..... PHYSIO

### BUSINESS

Accounting ..... ACCT  
 Business Administration ..... BUSAD  
 Business and Office Technology ..... B&OT  
 Marketing ..... MARKET  
 Real Estate ..... REALST  
 Supervision ..... SUP

### COMMUNICATIONS

English ..... ENGL  
 French ..... FRENCH  
 German ..... GERMAN  
 Reading and Study Skills ..... READ  
 Speech ..... SPEECH  
 Spanish ..... SPAN

### EMERGENCY MEDICAL SERVICES

Emergency Medical Services ..... EMS

### FINE ARTS

Art ..... ART  
 Music ..... MUSIC  
 Theatre Arts..... THART

### FIRE TECHNOLOGY

Fire Technology ..... FIRET

### PHYSICAL EDUCATION

Health Education ..... HEALTH  
 Individual and Group Activities ..... PE-I  
 Personal Activities ..... PE  
 Team ..... PE-T

### PHYSICAL SCIENCE/MATHEMATICS

Astronomy ..... ASTRON  
 Chemistry ..... CHEM  
 Computer and Information Sciences..... C&IS  
 Geography..... GEOG  
 Geology..... GEOL  
 Mathematics ..... MATH  
 Oceanography ..... OCEAN  
 Physics ..... PHYSIC

### SOCIAL SCIENCES

Administration of Justice ..... ADJUS  
 Anthropology ..... ANTHRO  
 Child Development..... CD  
 Economics ..... ECON  
 History ..... HIST  
 Human Services ..... HUMSV  
 Interdisciplinary Studies ..... INTDIS  
 Philosophy ..... PHIL  
 Political Science ..... POLIT  
 Psychology ..... PSYCH  
 Religious Studies..... RELIG  
 Sociology ..... SOC

# ACCOUNTING (ACCT)

## 102 FINANCE ACCOUNTING AND ANALYSIS 3 UNITS

*CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 48 hours per semester*

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

*CSU\*, Associate Degree Applicable*

*Prerequisite: None.*

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

*Laboratory: Minimum 80-320 hours per semester*

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: Minimum 48 hours per semester*

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 ACCT 210.)

## 210 PRINCIPLES OF ACCOUNTING 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Corequisite: ACCT 211*

*Lecture: Minimum 48 hours per semester*

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 user's perspective and on developing team learning and decision-making skills. (CAN BUS 2.)

## 211 PRINCIPLES OF ACCOUNTING COMPUTER LABORATORY 1 UNIT

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Corequisite: ACCT 210.*

*Laboratory: Minimum 48 hours per semester*

Laboratory accompaniment to ACCT 210.

## 220 PRINCIPLES OF ACCOUNTING 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: ACCT 210,211.*

*Corequisite: ACCT 221.*

*Lecture: Minimum 48 hours per semester*

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. (CAN BUS 1.)

## 221 PRINCIPLES OF ACCOUNTING COMPUTER LABORATORY 1 UNIT

*UC, CSU, Associate Degree Applicable*

*Prerequisite: ACCT 210, 211.*

*Corequisite: ACCT 220.*

*Laboratory: Minimum 48 hours per semester*

Laboratory accompaniment to ACCT 220.

## 225 INTERMEDIATE ACCOUNTING 3 UNITS

*CSU, Associate Degree Applicable*

*Prerequisite: ACCT 210, 220.*

*Lecture: Minimum 48 hours per semester*

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 user's perspective and on developing team learning and decision-making skills.

## 226 COST ACCOUNTING 4 UNITS

*CSU, Associate Degree Applicable*

*Prerequisite: ACCT 220,221.*

*Lecture: Minimum 64 hours per semester*

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 user's 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: ACCT 205 and/or ACCT 210.*

*Lecture: Minimum 48 hours per semester*

*Laboratory: Minimum 48 hours per semester*

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 (ADJUS)

## 101 INTRODUCTION TO ADMINISTRATION OF JUSTICE 3 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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

*CSU\*, Associate Degree Applicable*

**Prerequisite:** None.

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

**Laboratory: Minimum 80-320 hours per semester**

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

# ALLIED HEALTH (AH)

## 090 SURVEY OF RADIOLOGIC TECHNOLOGY 1.5 UNITS

*Associate Degree Applicable*

**Prerequisite:** None.

**Lecture: Minimum 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: Minimum 48 hours per semester**

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.

119ABCD SELECTED TOPICS IN ALLIED HEALTH SCIENCES  
.5-3 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: Minimum 8-48 hours per semester and/or**Laboratory: Minimum 24-144 hours per semester*

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

## 198 ALLIED HEALTH WORK EXPERIENCE 1-4 UNITS

*CSU\*, Associate Degree Applicable**Prerequisite: None.**Corequisite: Concurrent enrollment in at least 7 units, including this course.**Laboratory: Minimum 80-320 hours per semester*

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: Minimum 48 hours per semester*

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

ANATOMY / PHYSIOLOGY  
(ANAT/PHYSIO)101 ESSENTIALS OF HUMAN ANATOMY AND  
PHYSIOLOGY 4 UNITS*CSU, Associate Degree Applicable**Prerequisite: None.**Lecture: Minimum 48 hours per semester and**Laboratory: Minimum 48 hours per semester*

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: ANAT 101.**Lecture: Minimum 48-64 hours per semester**Laboratory: Minimum up to 48 hours per semester*

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: Minimum 48 hours per semester and**Laboratory: Minimum 48 hours per semester*

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: Minimum 48 hours per semester**Laboratory: Minimum 48 hours per semester*

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: Minimum 16-64 hours per semester and/or**Laboratory: Minimum 16-64 hours per semester*

Study of topics of current interest in Anatomy and Physiology,

247 SPECIAL PROBLEMS IN ANATOMY AND PHYSIOLOGY  
2 UNITS*CSU, Associate Degree Applicable**Prerequisite: ANAT 101 or ANAT 150.**Laboratory: Minimum 96 hours per semester*

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 (ANTHRO)

### 100 INTRODUCTION TO ARCHEOLOGY 3 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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. This course is also offered as HIST 107.

### 110 PRIMITIVE RELIGIONS 3 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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. This course is also offered as RELIG 110.

### 246ABCD SPECIAL PROBLEMS IN ANTHROPOLOGY 1 UNIT

*CSU, Associate Degree Applicable*

**Prerequisite:** Completion of or concurrent enrollment in another Anthropology class.

**Laboratory:** Minimum 48 hours per semester

Practical archeology for selected students, including archeological digging and museum work as these activities are available.

## ART (ART)

### 100-102 ART HISTORY 3 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None. Courses need not be taken in sequence.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 16-32 hours per semester and

**Laboratory:** Minimum 32-64 hours per semester

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:** Minimum 32 hours per semester and

**Laboratory:** Minimum 64 hours per semester

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:** Minimum 16-32 hours per semester and

**Laboratory:** Minimum 32-64 hours per semester

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: Minimum 32 hours per semester  
 Laboratory: Minimum 64 hours per semester  
 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: Minimum 32 hours per semester and  
 Laboratory: Minimum 64 hours per semester  
 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: Minimum 32 hours per semester and  
 Laboratory: Minimum 64 hours per semester  
 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  
 24BABCD 3 UNITS  
 249ABCD 4 UNITS

UC, CSU, Associate Degree Applicable  
 Prerequisite: Completion of or concurrent enrollment in an art course.

Laboratory: Minimum 48 hours per semester.  
 Independent study for selected students in any area of art, with projects determined jointly by student and instructor.

275#4 CONTEMPORARY SCULPTURE 3 UNITS  
 TECHNIQUES  
 UC, CSU, Associate Degree Applicable  
 Prerequisite: ART 175#4.

Lecture: Minimum 32 hours per semester and  
 Laboratory: Minimum 64 hours per semester  
 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 (ASTRON)

050-051 ASTROPHOTOGRAPHY 1 UNIT  
 052-053

Associate Degree Applicable  
 Prerequisite: None. Courses must be taken in sequence.  
 Laboratory: Minimum 48 hours per semester  
 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: Minimum 16 hours per semester  
 Laboratory: Minimum 48 hours 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: Minimum 48 hours per semester  
 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: ASTRON 150.

Laboratory: Minimum 48 hours per semester  
 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: Minimum 16-48 hours per semester  
 Laboratory: Minimum 48-144 per semester  
 Current information on selected topics in astronomy.

246AB SPECIAL PROBLEMS IN ASTRONOMY 1 UNIT  
 247AB 2 UNITS

UC, CSU, Associate Degree Applicable  
 Prerequisite: ASTRON 160.  
 Laboratory: Minimum 48-96 hours per semester  
 Laboratory projects designed for students with a special interest in astronomy

# BIOLOGY (BIOL)

## 100 GENERAL BIOLOGY 4 UNITS

**UC, CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester and**

**Laboratory: Minimum 48 hours per semester**

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: Minimum 48 hours per semester and**

**Laboratory: Minimum 48 hours per semester**

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

## 123 ECOLOGY AND ENVIRONMENT 3 UNITS

**UC, CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**

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 2 UNITS

**129**  
**CSU, Associate Degree Applicable**

**Prerequisite: None. Courses need not be taken in sequence.**

**Lecture: Minimum 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: Minimum 48 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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: Minimum 48 hours per semester and**

**Laboratory: Minimum 48 hours per semester**

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

## 150-151 INTRODUCTION TO FIELD BIOLOGY 1.5-3 UNITS

**152**  
**CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 4-16 hours per semester**

**Laboratory: Minimum 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: Minimum 16 hours per semester and**

**Laboratory: Minimum 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 equivalent.**

**Courses must be taken in sequence.**

**Laboratory: Minimum 48 hours per semester**

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: BIOL ZOO.**

**Laboratory: Minimum 48-144 hours per semester**

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

# BUSINESS ADMINISTRATION

## (BUSAD)

### 053 BUSINESS COMPUTATIONS 3 UNITS

**Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

Study of oral and written communication skills essential to the business industrial setting. This course is also offered as B&OT 145.

### 198 BUSINESS ADMINISTRATION WORK EXPERIENCE 1-4 UNITS

**CSU\*, Associate Degree Applicable**

**Prerequisite: None.**

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

**Laboratory: Minimum 80-320 hours per semester**

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 (ORGANIZATIONAL BEHAVIOR) 3 UNITS

**CSU, Associate Degree Applicable**

**Prerequisite: BUSAD 100 or equivalent.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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.

\*Maximum UC credit for BUSAD 210 and 211, one course.

### 230 USING COMPUTERS FOR BUSINESS 3 UNITS

**CSU, Associate Degree Applicable**

**Prerequisite: ACCT 205 or BUSAD 100 or equivalent.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 16 hours per semester**

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 (B&OT)

**009ABCD OFFICE SKILLS LAB** 1-3 UNITS  
*Associate Degree Applicable*  
**Prerequisite:** None. Courses must be taken in sequence.  
**Laboratory:** Minimum 48-144 hours per semester  
 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:** Minimum 8-48 hours per semester  
 Study of topics selected to acquaint the office worker with the latest techniques, skills and procedures in the rapidly changing business world.

**100AB BEGINNING TYPEWRITING** 1-3 UNITS  
*Associate Degree Applicable*  
**Prerequisite:** None  
**Lecture:** Minimum 16-32 hours per semester and/or  
**Laboratory:** Minimum 32-48 hours per semester  
 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.

**101AB INTERMEDIATE KEYBOARDING/FORMATING** 1-3 UNITS  
*Associate Degree Applicable*  
**Prerequisite:** B&OT 100AB or ability to type at least 30 net words a minute.  
**Lecture:** Minimum 16-32 hours per semester and/or  
**Laboratory:** Minimum 32-48 hours per semester  
 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 101AB or ability to type at least 40 net words a minute.  
**Lecture:** Minimum 16-32 hours per semester and/or  
**Laboratory:** Minimum 32-48 hours per semester  
 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 100AB or 119 or equivalent.  
**Lecture:** Minimum 64 hours per semester (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:** Minimum 64 hours per semester (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:** Minimum 64 hours per semester (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:** Minimum 64 hours per semester (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: Minimum 64 hours per semester**

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. This course is also offered as C&IS 107.

108 ADVANCED PC/MS DOS  
(DISK OPERATING SYSTEM) 2 UNITS

**Associate Degree Applicable**

**Prerequisite: B&OT 107.**

**Lecture: Minimum 64 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 16-32 hours per semester**

**Laboratory: Minimum 16-48 hours per semester**

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:** Minimum 40-80 hours per semester**Laboratory:** Minimum 16-48 hours per semester

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:** Minimum 40 hours per semester**Laboratory:** Minimum 24 hours per semester

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:** Minimum 64 hours per semester

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

**CSU, Associate Degree Applicable****Prerequisite:** None.**Lecture:** Minimum 48 hours per semester

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. This course is also offered as ENGL 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:** Minimum 48 hours per semester

Study of oral and written communication skills essential to the business/industrial setting. This course is also offered as BUSAD 145.

## 146 HUMAN RELATIONS IN THE OFFICE ENVIRONMENT 1-3 UNITS

**Associate Degree Applicable****Prerequisite:** None.**Lecture:** Minimum 16-48 hours per semester

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:** Minimum 16-96 hours per semester**Laboratory:** Minimum 16 hours per semester

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:** Minimum 16-96 hours per semester**Laboratory:** Minimum 16 hours per semester

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

**CSU\*, Associate Degree Applicable****Prerequisite:** None.**Corequisite:** Concurrent enrollment in at least 7 units, including this course.**Laboratory:** Minimum 80-320 hours per semester

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

## CHEMISTRY (CHEM)

101 INTRODUCTORY CHEMISTRY 4 UNITS

**UC\*, CSU, Associate Degree Applicable**

**Prerequisite: One year of high school algebra or MATH 090.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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: CHEM 101 or 150.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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 CHEM 101.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 96 hours per semester**

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: CHEM 150 with a grade of "C" or better.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 96 hours per semester**

Continuation of CHEM 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: CHEM 150-151 with a grade of "C" or better.**

**Courses must be taken in sequence.**

**Lecture: Minimum 48 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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: CHEM 150.**

**Laboratory: Minimum 48 hours per semester 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

## (CD)

100 INTRODUCTION TO CHILD DEVELOPMENT 3 UNITS

**Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**

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

**UC, CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 24 hours per semester**

**Laboratory: Minimum 120 hours per semester**

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: Minimum 24 hours per semester**

**Laboratory: Minimum 120 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 24 hours per semester**

**Laboratory: Minimum 24 hours per semester**

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.) This course is also offered as EMS 116.

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: Minimum 32 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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: Minimum 32 hours per semester**

**Laboratory: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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.**

**Departmental Recommendation: CD 105.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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:** Minimum 48 hours per semester

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  
*CSU\*, Associate Degree Applicable*

**Prerequisite:** None.

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

**Laboratory:** Minimum 80-320 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 32 hours per semester

**Laboratory:** Minimum 48 hours per semester

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 (C&IS)

100 COMPUTER LITERACY 1.5-3 UNITS  
*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 24-48 hours per semester

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

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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 AND PROBLEM SOLVING I 3 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** C&IS 101.

**Lecture:** Minimum 48 hours per semester

Instruction in programming concepts and problem solving techniques applied to programming problem statements. Students assignments will be to create programming problem documentation to include Visual Table of Contents, Input-Processing-Output Report, Logical Flowcharts, and Format Sheets applied to a problem statement and used to write, run, and debug both numeric and non-numeric programs in the interactive computer system. Concepts will include: structured programming with lower level modules, string and numeric variables, input and output statements, loops, conditional transfer statements, switches, screen processing, and arrays.

103 PROGRAMMING IN VISUAL BASIC 3 UNITS  
*UC, CSU, Associate Degree Applicable*

**Prerequisite:** C&IS 112.

**Lecture:** Minimum 48 hours per semester

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: Minimum 48 hours per semester**  
 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  
**CSU, Associate Degree Applicable**  
**Prerequisite: C&IS 101.**  
**Lecture: Minimum 48 hours per semester**  
 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 developed projects.
- 106 MICROCOMPUTERS 3 UNITS  
**CSU, Associate Degree Applicable**  
**Prerequisite: C&IS 102.**  
**Lecture: Minimum 48 hours per semester**  
 Study of the organization and programming of small computers, design conventions, microprocessor organization and hardware programs, control units (CPU), interrupt and input/output.
- 109 OPERATING SYTEMS AND ENVIRONMENTS 3 UNITS  
**Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 Examination of programming concepts, data expressions, and assignments; decisions, syntax and implementation; program design; and program standards.
- 112 BASIC LANGUAGE AND PROBLEM SOLVING II 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: C&IS 102.**  
**Lecture: Minimum 48 hours per semester**  
 Instruction in advanced programming concepts and problem solving techniques applied to complex programming problem statements. Skills acquired in C&IS 102 will be used. The following additional concepts will be presented. File creation and processing program with add, change, and delete capability, 2 and 3 dimensional arrays, multiple reports, and page numbering. Students assignments will be to create program documentation to include Visual Table of Contents, Input-Processing-Output Report, Logical Flowcharts, and Format Sheets applied to problem statement and used to write, run, and debug both numeric and non-numeric problems in various programs. The course will also include: structured programming with lower level modules, string and numeric variables, input and output statements, loops, conditional transfer statements, and switches.
- 115 PROGRAMMING IN C 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: C&IS 112.**  
**Lecture: Minimum 48 hours per semester**  
 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 102 or equivalent.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 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: Minimum 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: Minimum 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

**CSU\*, Associate Degree Applicable**

**Prerequisite: None.**

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

**Laboratory: Minimum 80-320 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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 (ECON)

100 INTRODUCTION TO ECONOMICS 3 UNITS

**UC\*, CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**  
 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: ECON 200 or 201.**  
**Laboratory: Minimum 48-96 hours per semester**  
 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 (EMS)

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: Minimum 68 hours per semester**  
**Laboratory: Minimum 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: Minimum 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: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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 paramedicme.

090ABCD SELECTED TOPICS IN EMERGENCY MEDICAL SERVICES .25-4 UNITS

**Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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.

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: Minimum 24 hours per semester**  
**Laboratory: Minimum 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: Minimum 24 hours per semester**  
**Laboratory: Minimum 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:** Minimum 12 hours per semester

**Laboratory:** Minimum 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:** Minimum 14 hours per semester

**Laboratory:** Minimum 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.

116 PEDIATRIC CPR, FIRST AID AND SAFETY FOR  
CHILDREN GROUP 3 UNITS

**Associate Degree Applicable**

**Prerequisite:** None.

**Lecture:** Minimum 24 hours per semester

**Laboratory:** Minimum 24 hours per semester

Certification in pediatric CPR, pediatric first aid, prevention of the spread of infectious disease, immunizations, child safety, and injury prevention. Meets community and state licensing recommendations for child care workers. This course is also offered as CD 116.

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:** Minimum 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:** Minimum 60 hours per semester

**Laboratory:** Minimum 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:** Minimum 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:** Minimum 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:** Minimum 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

**CSU\*, Associate Degree Applicable**

**Prerequisite: None**

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

**Laboratory: Minimum 80-320 hours per semester**

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: Minimum 1-64 hours per semester and/or**

**Laboratory: Minimum 2-96 hours per semester and/or**

**Clinic/Field: 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: Minimum 1-64 hours per semester and/or**

**Laboratory: Minimum 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: Minimum 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: Minimum 4 hours per semester**

**Laboratory: Minimum 4 hours per semester**

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

911ABCD BASIC CARDIAC LIFE SUPPORT - PROVIDER (RECERTIFICATION) 1.25 UNIT

**Not Applicable to the Associate Degree**

**Prerequisite: EMS 910.**

**Lecture: Minimum 1 hour per semester**

**Laboratory: Minimum 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: Minimum 3-9 hours per semester**

**Laboratory: Minimum 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: Minimum 3 hours per semester**

**Laboratory: Minimum 3 hours per semester**

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

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

**Not Applicable to the Associate Degree**

**Prerequisite: EMS 020 or EMS 022.**

**Lecture: Minimum 12 hours per semester**

**Laboratory: Minimum 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: Minimum 3 hours per semester**

**Laboratory: Minimum 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.**

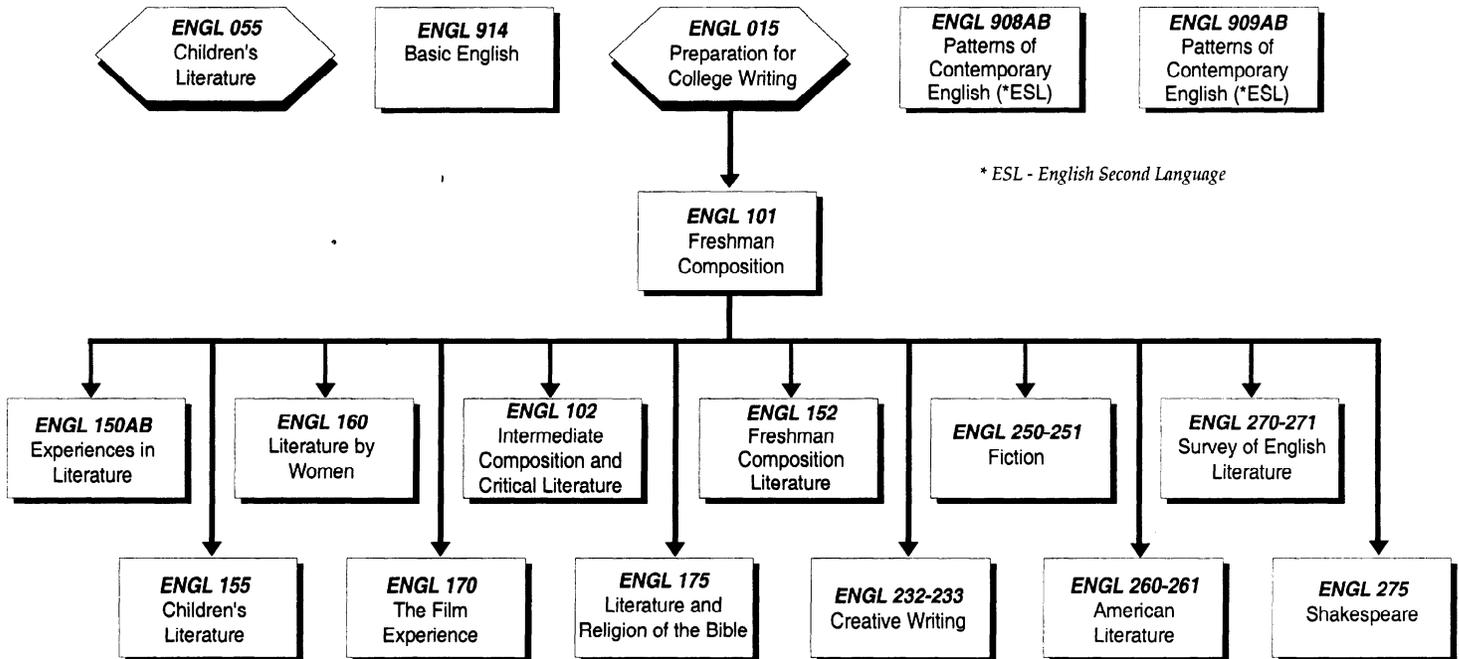
**Lecture: Minimum 3 hours per semester**

**Laboratory: Minimum 3 hours per semester**

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

## CRAFTON HILLS COLLEGE - SEQUENCE OF CLASSES FOR ENGLISH

Students may follow this sequence of courses to develop proficiency in English or may be eligible to begin this sequence at any level depending on their previous background, ability (i.e. multiple measures) and the results on the CPTs assessment test.  
(See a counselor for details)



## ENGLISH (ENGL)

015 PREPARATION FOR COLLEGE WRITING 4 UNITS

**Associate Degree Applicable****Prerequisite: None.****Lecture: Minimum 64 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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 ENGL 155.)

101 FRESHMAN COMPOSITION 4 UNITS

**UC, CSU, Associate Degree Applicable****Prerequisite: ENGL 015 with a grade of C or better or a passing score on an accepted placement test.****Lecture: Minimum 64 hours per semester**

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. (CAN ENGL 2.)

102 INTERMEDIATE COMPOSITION AND CRITICAL THINKING 4 UNITS

**UC, CSU, Associate Degree Applicable****Prerequisite: ENGL 101.****Lecture: Minimum 64 hours per semester**

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

127#4 LITERARY MAGAZINE PRODUCTION:  
THE SAND CANYON REVIEW 3 UNITS**CSU, Associate Degree Applicable****Prerequisite: ENGL 101.****Laboratory: Minimum 96 hours per semester**

Production of the college literary magazine, including the study of the principles of short fiction, poetry, and drama, as well as the process of publishing, including selecting material, planning and executing format, defining and maintaining theme, developing design and layout, editing and desktop publishing.

- 144 BUSINESS ENGLISH 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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. This course is also offered as B&OT 144.
- 150AB EXPERIENCES IN LITERATURE 3 UNITS  
**UC\*, CSU, Associate Degree Applicable**  
**Prerequisite: Eligibility for ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 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**  
**Prerequisite: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 Study of fiction, poetry and drama, with emphasis on the fundamental principles of literary criticism and interpretation including student writing based on critical reading. (CAN ENGL 4.)
- 155 CHILDREN'S LITERATURE 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 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 ENGL 055. (See ENGL 055.)
- 160 LITERATURE BY WOMEN 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 Overview of contemporary literature by and about women.
- 170 THE FILM EXPERIENCE 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 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. This course is also offered as RELIG 175.
- 232-233 CREATIVE WRITING 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: Eligibility for ENGL 101. Courses need not be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101. Courses need not be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101. Courses need not be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101. Courses need not be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: ENGL 908B with a grade of "C" or better.****Courses must be taken in sequence.****Lecture: Minimum 48 hours per semester**

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, ENGL 908/909.****Lecture: Minimum 48 hours per semester**

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: Minimum 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

## (FIRET)

## 050-061ABCD SELECTED TOPICS IN FIRE TECHNOLOGY .25-4 UNITS

**Associate Degree Applicable****Prerequisite: None.****Lecture: Minimum 1-64 hours per semester and/or****Laboratory: Minimum 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: Minimum 60 hours per semester****Laboratory: Minimum 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: Minimum 100 hours per semester****Laboratory: Minimum 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. The Basic Fire Academy is approved by the California State Fire Marshal's Office as an accredited Regional Training Center.

## 078 FIRE INSPECTION ACADEMY 11 UNITS

**Associate Degree Applicable****Prerequisite: None. FIRET 100 and FIRET 101 recommended.****Lecture: Minimum 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: Minimum 32 hours per semester****Laboratory: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 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.

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

*Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 Fundamentals of building construction and design; fire protection features and special considerations.

**118 WILDLAND FIRE CONTROL** 3 UNITS  
*Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture: Minimum 48 hours per semester**  
 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: Minimum 16 hours per semester**  
**Laboratory: Minimum 48 hours per semester**  
 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: Minimum 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: Minimum 40 hours per semester**  
 Introduction to wildland fire suppression; overview of commonly used concepts and practices of fire fighting.
- 174 WILDIAND FIRE PREVENTION 2.5 UNITS  
**Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 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: Minimum 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: Minimum 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: Minimum 36 hours per semester**  
**Laboratory: Minimum 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: Minimum 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: Minimum 40 hours per semester**  
 Study of how building construction influences fire behavior.
- 183 AIRCRAFT ACCIDENTS 2.5 UNITS  
**Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 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  
**CSU\*, Associate Degree Applicable**  
**Prerequisite: None.**  
**Corequisite: Concurrent enrollment in at least 7 units, including this course.**  
**Laboratory: Minimum 80-320 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 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: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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: Minimum 1-64 hours per semester and/or**  
**Laboratory: Minimum 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:** *Minimum 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:** *Minimum 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:** *Minimum 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:** *Minimum 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 200 recommended.*  
**Lecture:** *Minimum 48 hours per semester*  
 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  
*Not applicable to Associate Degree.*  
**Prerequisite:** *None*

**Corequisite:** *FIRET 901 recommended.*  
**Lecture:** *Minimum 16 hours per semester*  
**Laboratory:** *Minimum 32 hours per semester*  
 Preparation of pre-entry level fire technology students to successfully pass a job related physical agility examination. Instruction through assessment and physical development.

## FRENCH (FRENCH)

015AB-016AB CONVERSATIONAL FRENCH 3 UNITS  
*Associate Degree Applicable*

**Prerequisite:** *None. Courses must be taken in sequence.*  
**Lecture:** *Minimum 48 hours per semester*  
 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:** *Minimum 40 hours per semester*  
**Laboratory:** *Minimum 8 hours per semester*  
 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:** *Minimum 40 hours per semester*  
**Laboratory:** *Minimum 8 hours per semester*  
 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:** *Minimum 80 hours per semester*  
**Laboratory:** *Minimum 16 hours per semester*  
 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:** *Minimum 40 hours per semester*  
**Laboratory:** *Minimum 8 hours per semester*  
 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:** *Minimum 40 hours per semester*  
**Laboratory:** *Minimum 8 hours per semester*  
 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:** *Minimum 80 hours per semester*  
**Laboratory:** *Minimum 16 hours per semester*  
 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:** Minimum 64 hours per semester  
**Laboratory:** Minimum 16 hours per semester  
 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:** Minimum 64 hours per semester  
**Laboratory:** Minimum 16 hours per semester  
 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:** Minimum 1-48 hours per semester  
**Laboratory:** Minimum 32 hours per semester 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:** Minimum 48 hours per semester  
 Study of the culture and civilization of France. (Class is conducted in English.)

## GEOGRAPHY (GEOG)

102 INTRODUCTION TO CULTURAL GEOGRAPHY 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester  
 Laboratory to accompany GEOG 110.

114 WEATHER AND CLIMATE 3-4 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester and field trips  
**Laboratory:** Minimum up to 48 hours per semester  
 Study of the earth's atmospheric phenomena, emphasizing the causes and regional distribution of weather and climate. (4 unit course includes a lab.)

119ABCD SELECTED STUDIES IN GEOGRAPHY .25-1 UNIT  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture:** Minimum 4-16 hours per semester and/or  
**Laboratory:** Minimum 12-48 hours per semester  
 Short courses in regional, physical, and cultural geography offered on an occasional basis.

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

**Lecture:** Minimum 48 hours per semester  
 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:** Minimum 48 hours per semester and field trips  
 Historical study of each general region in California (sea-shore, mountain, valley, desert) in terms of five ingredients: land, vegetative cover, fauna, water, and air.

## GEOLOGY (GEOL)

100 PHYSICAL GEOLOGY 4 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester  
**Laboratory:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester  
 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:** Minimum 48 hours per semester  
**Laboratory:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester  
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:** Minimum 8 hours per semester  
**Laboratory:** Minimum 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:** BIOL 209.  
**Lecture:** Minimum 16 hours per semester  
**Laboratory:** Minimum 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:** Minimum 48 hours per semester  
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:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester 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:** Minimum 48 hours per semester  
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:** Minimum 16 hours per semester  
**Laboratory:** Minimum 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. (\*Maximum UC credit, one course).

270ABC GEOLOGY OF THE EASTERN SIERRA NEVADA 1 UNIT  
*CSU, Associate Degree Applicable*  
**Prerequisite:** Any course in Geology.  
**Lecture:** Minimum 8 hours per semester  
**Laboratory:** Minimum 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 (GERM)

101A COLLEGE GERMAN I (PART 1) 2.5 UNITS

*UC\*, CSU\*, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 40 hours per semester*

*Laboratory: Minimum 8 hours per semester*

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: Minimum 40 hours per semester*

*Laboratory: Minimum 8 hours per semester*

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

101 COLLEGE GERMAN I 5 UNITS

*UC\*, CSU\*, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 8 hours per semester*

*Laboratory: Minimum 16 hours per semester*

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: Minimum 80 hours per semester*

*Laboratory: Minimum 16 hours per semester*

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: Minimum 64 hours per semester*

*Laboratory: Minimum 16 hours per semester*

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: Minimum 64 hours per semester*

*Laboratory: Minimum 16 hours per semester*

Continuation of GERMAN 103.

166 SELECTED STUDIES IN GERMAN I-3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: GERMAN 102 or two years of high school German, or equivalent proficiency.*

*Lecture: Minimum 16-48 hours per semester*

*Laboratory: Minimum 32 hours per semester 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 (HEALTH)

102 BIOLOGIC PRINCIPLES OF HEALTH 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 48 hours per semester*

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

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 48 hours per semester*

This course reviews the literature on the basic nutrients; protein, fat, carbohydrates, vitamins, minerals, and water. Students will have the opportunity to develop the skills necessary to analyze, evaluate and prescribe a dietary intake for "healthy" individuals. The class includes an in-depth analysis of emotional stress as a lifestyle factor in disease. This course is also offered as PE 263.

# HISTORY (HIST)

100-101 HISTORY OF THE UNITED STATES 3 UNITS

UC, CSU, Associate Degree Applicable

**Prerequisite:** None. Courses need not be taken in sequence.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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. This course is also offered as ANTHRO 107.

135 RELIGION IN AMERICA 3 UNITS

UC, CSU, Associate Degree Applicable

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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. This course is also listed as RELIG 135.

139 AFRICAN-AMERICAN HISTORY II 3 UNITS

UC, CSU, Associate Degree Applicable

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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

# HUMAN SERVICES (HMV)

175 INTRODUCTION TO EATING DISORDERS 3 UNITS  
*CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 48 hours per semester*

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: Minimum 48 hours per semester*

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 STUDENTS (INTDIS)

080 GROUP LEADERSHIP SKILLS 3 UNITS

*Associate Degree Applicable*

*Prerequisite: None.*

*Departmental Recommendation: Active participation in the Associated Student Senate, student clubs and organizations, college sponsored activities or in a community based organization.*

*Lecture: Minimum 16 hours per semester*

*Laboratory: Minimum 96 hours per semester*

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

*Associate Degree Applicable*

*Prerequisite: None.*

*Departmental Recommendation: Active participation in the Associated Student Senate, student clubs and organizations, college sponsored activities or in a community based organization.*

*Lecture: Minimum 16 hours per semester*

*Laboratory: Minimum 96 hours per semester*

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: Minimum 48 hours per semester*

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: Minimum 16 hours per semester*

*Laboratory: Minimum 48 hours per semester*

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: Minimum 48 hours per semester*

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.

122ABCD SELECTED STUDIES IN SIGN LANGUAGE  
1-2 UNITS

*CSU, Associate Degree Applicable*

**Prerequisite:** INTDIS 106.

**Lecture:** Minimum 8-16 hours per semester

**Laboratory:** Minimum 24-48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 16 hours per semester 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:** Minimum 8-32 hours per semester and/or

**Laboratory:** Minimum 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 (MARKET)

100 MARKETING PRINCIPLES 3 UNITS

*CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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

*CSU\*, Associate Degree Applicable*

**Prerequisite:** None.

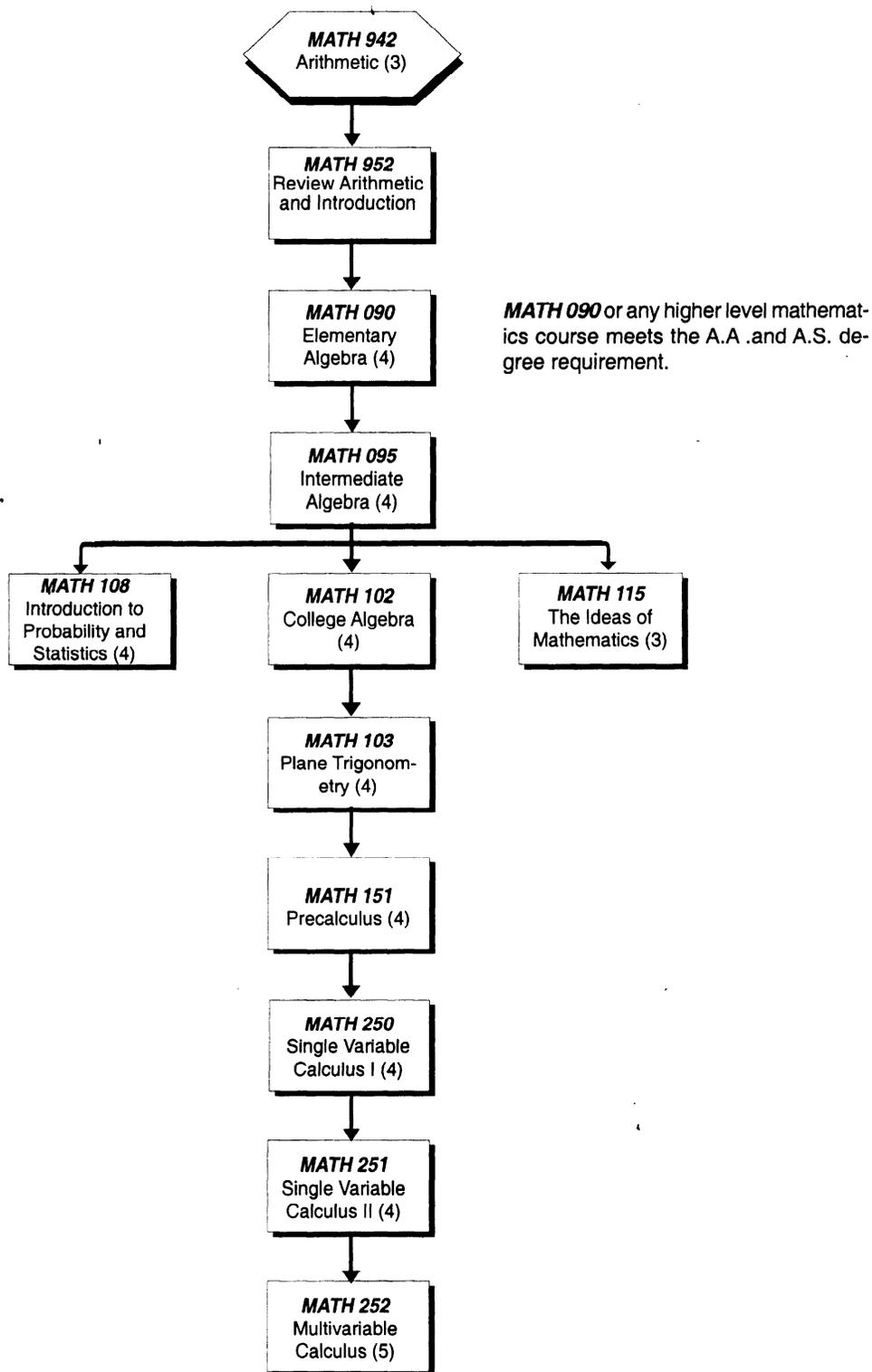
**Corequisite:** Concurrent enrollment in at least 7 units, including this course.

**Laboratory:** Minimum 80-320 hours per semester

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

## CRAFTON HILLS COLLEGE - SEQUENCE OF CLASSES FOR MATHEMATICS

Students may follow this sequence of courses to develop proficiency in Mathematics  
 or  
 may be eligible to begin this sequence at any level depending on their previous background, ability (i.e. multiple measures) and the results on the CPTs assessment test.  
 (See a counselor for details)



# MATHEMATICS (MATH)

## 090 ELEMENTARY ALGEBRA 4 UNITS

**Associate Degree Applicable**

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

**Lecture: Minimum 64 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 64 hours per semester**

This course provides additional rigor above the level taught in Elementary Algebra in factoring, fractions, and equations. Students also study inequalities with absolute value, rational exponents, radicals, quadratic and exponential functions, linear and nonlinear systems of equations and functions and their inverses. Building linear equations from geometric characteristics is also taught.

## 102 COLLEGE ALGEBRA 4 UNITS

**CSU, Associate Degree Applicable**

**Prerequisite: MATH 095 or equivalent.**

**Lecture: Minimum 64 hours per semester**

This course will include logarithms, sequences, series, the Binomial Theorem, graphing conic sections, inverse functions, operations with radicals with different indices, systems of quadratic equations, and solving systems of three or more linear equations in three or more variables by matrices, and determinants. There will also be an introduction to graphing rational function, and the theory of equations.

## 103 PLANE TRIGONOMETRY 4 UNITS

**CSU, Associate Degree Applicable**

**Prerequisite: MATH 102 or equivalent.**

**Lecture: Minimum 64 hours per semester**

This course includes the definitions of the circular functions, their inverses, and 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: Minimum 64 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: Minimum 64 hours per semester**

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: Minimum 64 hours per semester**

Differential and integral calculus with emphasis on applications in business, social sciences, and life sciences. Not open to students with credits in MATH 250,251.

## 151 PRECALCULUS 4 UNITS

*UC, CSU, Associate Degree Applicable***Prerequisite:** MATH 103 or equivalent.**Lecture:** Minimum 64 hours per semester

This course includes the 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 and continuity

## 250 SINGLE VARIABLE CALCULUS I 4 UNITS

*UC, CSU, Associate Degree Applicable***Prerequisite:** MATH 151 or equivalent.**Lecture:** Minimum 64 hours per semester

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:** Minimum 64 hours per semester

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***Prerequisite:** MATH 251 or equivalent.**Lecture:** Minimum 80 hours per semester

Study of vectors and solid analytic geometry, functions of several variables, partial derivatives, multiple integrals, and line and surface integrals. (CAN MATH 22.)

## 254 INTRODUCTION TO ORDINARY DIFFERENTIAL EQUATIONS 4 UNITS

*UC, CSU, Associate Degree Applicable***Prerequisite:** MATH 251 or equivalent.**Lecture:** Minimum 64 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 64 hours per semester

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

## MICROBIOLOGY (MICRO)

## 102 INTRODUCTORY MICROBIOLOGY 4 UNITS

*UC\*, CSU, Associate Degree Applicable***Prerequisite:** None.**Lecture:** Minimum 48 hours per semester**Laboratory:** Minimum 48 hours per semester

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:** CHEM 101.**Lecture:** Minimum 48 hours per semester**Laboratory:** Minimum 96 hours per semester

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.

\* **MICRO 102 and 150 combined:** Maximum UC credit 5 units

## 151 ADVANCED MEDICAL MICROBIOLOGY 3 UNITS

*Associate Degree Applicable***Prerequisite:** MICRO 250.**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester  
 Independent projects for selected students with a special interest in microbiology involving library research and/or laboratory projects.

112AB JAZZ THEORY AND MUSICIANSHIP 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** Ability to read music.  
**Lecture:** Minimum 48 hours per semester  
 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:** Minimum 48 hours per semester  
 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.

## MUSIC (MUSIC)

100 FUNDAMENTAL SKILLS IN MUSIC 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture:** Minimum 48 hours per semester  
 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.

130#2 ELEMENTARY VOICE 2 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** Ability to match pitches.  
**Lecture:** Minimum 16 hours per semester  
**Laboratory:** Minimum 32 hours per semester  
 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.)

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:** Minimum 48 hours per semester  
**Laboratory:** Minimum 16 hours per semester  
 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.

132#4 GUITAR 2 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** Student must have his/her own guitar.  
**Lecture:** Minimum 16 hours per semester  
**Laboratory:** Minimum 32 hours per semester  
 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.)

103 INTRODUCTION TO & APPRECIATION OF AMERICAN POPULAR MUSIC 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture:** Minimum 48 hours per semester  
 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

134 AMERICAN JAZZ MUSIC - PAST AND PRESENT 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture:** Minimum 48 hours per semester  
 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.

105#2 MUSICIANSHIP 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture:** Minimum 48 hours per semester  
**Laboratory:** Minimum 16 hours per semester  
 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.)

135#4 PIANO 2 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Departmental Recommendation:** MUSIC 100.  
**Lecture:** Minimum 16 hours per semester  
**Laboratory:** Minimum 48 hours per semester  
 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:** Minimum 16 hours per semester  
**Laboratory:** Minimum 32 hours per semester  
 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:** Minimum 16 hours per semester  
**Laboratory:** Minimum 32 hours per semester  
 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:** Minimum 16 hours per semester  
 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:** Minimum 48 hours per semester  
 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:** Minimum 8-16 hours per semester  
**Laboratory:** Minimum 40-80 hours per semester  
 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:** Minimum 32-64 hours per semester  
 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:** Minimum 32 hours per semester  
 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:** Minimum 48 hours per semester 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:** Minimum 32 hours per semester  
 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:** Minimum 32 hours per semester  
 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:** Minimum 32 hours per semester  
 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:** Minimum 64 hours per semester  
 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:** Minimum 64 hours per semester  
 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: Minimum 32 hours per semester**  
 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: Minimum 64 hours per semester**  
 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 (OCEAN)

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

**Lecture: Minimum 48 hours per semester**  
 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: Minimum 16 hours per semester and**  
**Laboratory: Minimum 48 hours per semester**  
 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 (PHIL)

101 INTRODUCTION TO PHILOSOPHY 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: None.**

**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester 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 (PE-I)

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: Minimum 48 hours per semester**

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

076 PHYSICAL TRAINING FOR FIREFIGHTERS 1 UNIT

**Associate Degree Applicable**

**Prerequisite: Admission to the Fire Academy.**

**Laboratory: Minimum 48 hours per semester**

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: Minimum 32 hours per semester**

**Laboratory: Minimum 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: Minimum 24-48 hours per semester**

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: Minimum 24-48 hours per semester**

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: Minimum 24-48 hours per semester**

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: Minimum 24-48 hours per semester**

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

130#4 JAZZ DANCE 1-2 UNITS

**UC\*, CSU\*, Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 24-48 hours per semester**

**Laboratory: Minimum 16-32 hours per semester**

This course may be taken four times. This course is also offered as THART 130#4. (Formerly PE-I 130ABCD.)

131#4 BALLET .5-1 UNIT

**UC\*, CSU, Associate Degree Applicable**

**Prerequisite: None.**

**Laboratory: Minimum 24-48 hours per semester**

This course may be taken four times. This course is also offered as THART 180#4. (Formerly PE-I 131ABCD.)

148#4 TENNIS .5-1 UNIT

**UC\*, CSU\*, Associate Degree Applicable**

**Prerequisite: None.**

**Laboratory: Minimum 24-48 hours per semester**

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

## SPECIAL ACTIVITIES (PE)

246ABCD SPECIAL ACTIVITIES IN PHYSICAL EDUCATION  
1 UNIT

**UC\*, CSU\*, Associate Degree Applicable**

**Prerequisite: None.**

**Laboratory: Minimum 48 hours per semester**

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 (PE-T)

130#4 TEAM SPORTS (CO-ED) .5-1 UNIT  
*UC\*, CSU\*, Associate Degree Applicable*  
*Prerequisite: None.*  
*Laboratory: Minimum 24-48 hours per semester*  
(Specific sport announced in class schedule.) This course may be taken four times. (Formerly PE-T 130ABCD.)

## PERSONAL ACTIVITIES

### (PE)

262 BODY CONDITIONING AND NUTRITION 1-3 UNITS  
*UC\*, CSU\*, Associate Degree Applicable*  
*Prerequisite: None.*  
*Lecture: Minimum 16 hours per semester and/or*  
*Laboratory: Minimum 32-96 hours per semester*  
Conditioning for strength, flexibility, and endurance, as well as lectures on nutrition. Co-ed class.

263 NUTRITION AND HEALTH 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
*Prerequisite: None.*  
*Lecture: Minimum 48 hours per semester*  
This course reviews the literature on the basic nutrients; protein, fat, carbohydrates, vitamins, minerals, and water. Students will have the opportunity to develop the skills necessary to analyze, evaluate and prescribe a dietary intake for "healthy" individuals. The class includes an in-depth analysis of emotional stress as a lifestyle factor in disease. This course is also offered as HEALTH 263.

264 HEALTH TESTING LAB 2-3 UNITS  
*CSU, Associate Degree Applicable*  
*Prerequisite: None.*  
*Lecture: Minimum 32 hours per semester and*  
*Laboratory: Minimum 16-64 hours per semester*  
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 (PHYSIC)

100 INTRODUCTION TO PHYSICS 4 UNITS  
*UC\*, CSU, Associate Degree Applicable*  
*Prerequisite: None.*  
*Lecture: Minimum 48 hours per semester*  
*Laboratory: Minimum 48 hours per semester*  
Introduction to the ideas, concepts, and theories of physics; a nonmathematical course. No UC credit granted if taken after PHYSIC 110, 111, 200 or 201.

106 THE MECHANICAL UNIVERSE, AN INTRODUCTION TO PHYSICS 3 UNITS  
*UC\*, CSU, Associate Degree Applicable*  
*Prerequisite: Elementary Algebra.*  
*Lecture: Minimum 48 hours per semester*  
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: PHYSIC 106.*  
*Laboratory: Minimum 48 hours per semester*  
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: Minimum 48 hours per semester*  
*Laboratory: Minimum 16 hours per semester*  
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 PHYSIC 100 or PHYSIC 108AB and intermediate algebra and trigonometry. Courses must be taken in sequence.*  
*Lecture: Minimum 48 hours per semester*  
*Laboratory: Minimum 48 hours per semester*  
Introduction to mechanics, heat waves, optics, electricity, and atomic and nuclear physics.  
\* PHYSIC 110 + 111 and 200 + 201: Maximum UC credit one series.

200-201 PHYSICS 5 UNITS  
*UC\*, CSU, Associate Degree Applicable*  
**Prerequisite:** High school Physics or PHYSIC 100. Courses must be taken in sequence.

**Prerequisite or Corequisite:** For 200, MATH 250; for 201, MATH 251.

**Lecture:** Minimum 64 hours per semester

**Laboratory:** Minimum 48 hours per semester

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.

\* PHYSIC 110 + 111 and 200 + 201: Maximum UC credit one series.

246AB SPECIAL PROBLEMS IN PHYSICS 1 UNIT  
 247AB 2 UNITS

*UC, CSU, Associate Degree Applicable*

**Prerequisite:** One semester of college physics.

**Laboratory:** Minimum 48-96 hours per semester

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

## PHYSIOLOGY (PHYSIO)

161 HUMAN PHYSIOLOGY 4 UNITS  
*UC\*, CSU, Associate Degree Applicable*

**Prerequisite:** Human Anatomy & CHEM 101.

**Lecture:** Minimum 48 hours per semester and

**Laboratory:** Minimum 48 hours per semester

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

## POLITICAL SCIENCE

### (POLIT)

100 AMERICAN POLITICS 3 UNITS  
*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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. (CAN GOVT 2.)

101ABCD CONTEMPORARY POLITICAL ISSUES 3 UNITS  
*UC, CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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 (PSYCH)

052 PRACTICAL PSYCHOLOGY 3 UNITS  
*Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 16-48 hours per semester

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:** Minimum 8 hours per semester

**Laboratory:** Minimum 8 hours per semester

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: Minimum 16-48 hours per semester**

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 PSYCH 2)**

**Prerequisite: None.**

**Departmental Recommendations: ENGL 101, MATH 952,**

**Reading: passing Nelson-Denny or comparable test at or above the 12th grade.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100 or equivalent.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Departmental Recommendation: ENGL 101.**

**Lecture: Minimum 48 hours per semester**

Survey of the psychological development of individuals from infancy through adolescence, emphasizing influential psychological theories, contemporary research methods and trends, and applications of theory and research to everyday life.

116 PSYCHOLOGY OF SEX ROLES 3 UNITS

**UC, CSU, Associate Degree Applicable**

**Prerequisite: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: PSYCH 100.**

**Lecture: Minimum 48 hours per semester**

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: Minimum 48 hours per semester 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: Minimum 16 hours per semester (S-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.

103 RADIOGRAPHIC POSITIONING I 1.5 UNITS

*Associate Degree Applicable*

*Prerequisite: Must be pre-selected into the X-Ray*

*Technology program.*

*Corequisites: RADIOL 100, 101, 102, 104, 105, 106, 115A.*

*Lecture: Minimum 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: RADIOL 100, 101, 102, 103, 105, 106, 115A.*

*Lecture: Minimum 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: RADIOL 100, 101, 102, 103, 104, 106, 115A.*

*Lecture: Minimum 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: RADIOL 100, 101, 102, 103, 104, 105, 115A.*

*Laboratory: Minimum 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: RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.*

*Corequisites: RADIOL 108, 109, 110, 111, 112, 113, 114, 115B.*

*Lecture: Minimum 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: RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.*

*Corequisites: RADIOL 107, 109, 110, 111, 112, 113, 114, 115B.*

*Lecture: Minimum 22 hours per semester*

Study of the basic principles and application of radiation protection, physics, and radiation monitoring devices.

# RADIOLOGIC TECHNOLOGY

## (RADIOL)

100 INTRODUCTION TO RADIOLOGIC TECHNOLOGY .75 UNITS

*Associate Degree Applicable*

*Prerequisite: Must be pre-selected into the X-Ray*

*Technology program.*

*Corequisites: RADIOL 101, 102, 103, 104, 105, 106, 115A.*

*Lecture: Minimum 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: RADIOL 100, 102, 103, 104, 105, 106, 115A.*

*Lecture: Minimum 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: RADIOL 100, 101, 103, 104, 105, 106, 115A.*

*Lecture: Minimum 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.

- 109 RADIOLOGIC PHYSICS II 1.25 UNITS  
**Associate Degree Applicable**  
**Prerequisites:** RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.  
**Corequisites:** RADIOL 107, 108, 110, 111, 112, 113, 114, 115B.  
**Lecture: Minimum 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:** RADIOL 100, 101, 102, 103, 104, 105, 106, 125A.  
**Corequisites:** RADIOL 107, 108, 109, 111, 112, 113, 114, 115A.  
**Lecture: Minimum 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:** RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.  
**Corequisites:** RADIOL 107, 108, 109, 110, 112, 113, 114, 115B.  
**Lecture: Minimum 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:** RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.  
**Corequisites:** RADIOL 107, 108, 109, 110, 111, 113, 114, 115B.  
**Lecture: Minimum 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:** RADIOL 100, 101, 102, 103, 104, 105, 106, 125A.  
**Corequisites:** RADIOL 107, 108, 109, 110, 112, 114, 115B.  
**Lecture: Minimum 22 hours per semester**  
 Study of human anatomy and physiology pertinent to radiology.
- 114 RADIOGRAPHIC POSITIONING LAB II .25 UNIT  
**Associate Degree Applicable**  
**Prerequisites:** RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.  
**Corequisites:** RADIOL 107, 108, 109, 110, 111, 112, 113, 115B.  
**Laboratory: Minimum 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:** RADIOL 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:** RADIOL 100, 101, 102, 103, 104, 105, 106, 115A.  
**Corequisites:** RADIOL 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.  
**Corequisites:** RADIOL 201, 202, 203, 204, 205, 213A.  
**Lecture: Minimum 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.  
**Corequisites:** RADIOL 200, 202, 203, 204, 205, 213A.  
**Lecture: Minimum 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.  
**Corequisites:** RADIOL 200, 201, 203, 204, 205, 213A.  
**Lecture: Minimum 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.  
**Corequisites:** RADIOL 200, 201, 202, 204, 205, 213A.  
**Lecture: Minimum 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.  
**Corequisites:** RADIOL 200, 201, 202, 203, 205, 213A.  
**Lecture: Minimum 24 hours per semester**  
 Study of human anatomy and physiology pertinent to radiology

**205 RADIOGRAPHIC EXPOSURE LAB .5 UNIT**  
**Associate Degree Applicable****Prerequisites:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.**Corequisites:** RADIOL 200, 201, 202, 203, 204, 213A.**Laboratory: Minimum 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:** RADIOL 200, 201, 202, 203, 204, 205, 213A.**Corequisites:** RADIOL 208, 209, 210, 211, 212, 213B.**Lecture: Minimum 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:** RADIOL 200, 201, 202, 203, 204, 205, 213A.**Corequisites:** RADIOL 207, 209, 210, 211, 212, 213B.**Lecture: Minimum 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:** RADIOL 200, 201, 202, 203, 204, 205, 213A.**Corequisites:** RADIOL 207, 208, 210, 211, 212, 213B.**Lecture: Minimum 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: Minimum 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:** RADIOL 200, 201, 202, 203, 204, 205, 213A.**Corequisites:** RADIOL 207, 208, 209, 210, 212, 213B.**Lecture: Minimum 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:** RADIOL 200, 201, 202, 203, 204, 205, 213A.**Corequisites:** RADIOL 207, 208, 209, 210, 211, 213B.**Lecture: Minimum 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:** RADIOL 107, 108, 109, 110, 111, 112, 113, 114, 115B.**Corequisites:** RADIOL 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:** RADIOL 200, 201, 202, 203, 204, 205, 213B.**Corequisites:** RADIOL 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 (READ)

**079ABCD DEVELOPMENTAL READING 3 UNITS**  
**Associate Degree Applicable****Prerequisite: None. Courses must be taken in sequence.****Lecture: Minimum 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: Minimum 48 hours per semester or****Laboratory: Minimum 48-144 hours per semester**

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: Minimum 48 hours per semester or*  
*Laboratory: Minimum 48-144 hours per semester*  
 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: Minimum 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: Minimum 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: Minimum 48 hours (Summer Session only: 3 Units)*

*Laboratory: Minimum 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: Minimum 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: Minimum 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: Minimum 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: Minimum 96 hours per semester*

(See description under 975ABCD.)

977 DEVELOPMENTAL READING 3 UNITS

*Not Applicable to the Associate Degree*

*Prerequisite: None.*

*Laboratory: Minimum 144 hours per semester*

(See description under 975ABCD.)

## REAL ESTATE (REALST)

085-092ABCD SELECTED TOPICS IN REAL ESTATE  
 1/8-4 UNITS

*Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 2-64 hours per semester*

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: Minimum 48 hours per semester*

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: REALST 100 or Real Estate License.*

*Lecture: Minimum 48 hours per semester*

Day-to-day operations in real estate, overview of brokerage procedures and the various roles of the employee. Mandatory prerequisite to Real Estate Broker's examination.

205 REAL ESTATE APPRAISAL: RESIDENTIAL 3 UNITS

*CSU, Associate Degree Applicable*

*Prerequisite: REALST 100 or Real Estate License.*

*Lecture: Minimum 48 hours per semester*

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: REALST 100 or Real Estate License.*

*Lecture: Minimum 48 hours per semester*

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: REALST 100 or Real Estate License.**  
**Lecture: Minimum 48 hours per semester**  
 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: REALST 100 and 200; Real Estate License.**  
**Lecture: Minimum 48 hours per semester**  
 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: REALST 100.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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.

## RELIGIOUS STUDIES

### (RELIG)

- 100 INTRODUCTION TO RELIGIOUS STUDIES 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester**  
 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. This course is also offered as ANTHRO 110.

- 135 RELIGION IN AMERICA 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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. This course is also offered as HIST 135.

- 150 INTRODUCTION TO MYTHOLOGY 3 UNITS  
**CSU, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 48 hours per semester**  
 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: ENGL 101.**  
**Lecture: Minimum 48 hours per semester**  
 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. This course is also offered as ENGL 175.

- 176 JESUS AND HIS INTERPRETERS 3 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: A course in Religious Studies or Philosophy.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 48 hours per semester per unit**  
 Independent projects for students with a special interest in religious studies, involving assigned readings, research, and conferences.

# RESPIRATORY CARE

## (RESP)

### 050 INTRODUCTION TO RESPIRATORY CARE 2 UNITS

**Associate Degree Applicable**

**Prerequisite: None.**

**Lecture: Minimum 32 hours per semester**

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 14 UNITS

**Associate Degree Applicable**

**Prerequisites: RESP 050, ANAT 101, MICRO 102.**

**Corequisites: RESP 102, 103, 104.**

**Lecture: Minimum 64 hours per semester**

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: Minimum 132 hours per semester and**

**Laboratory: Minimum 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: Minimum 48 hours per semester**

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: Minimum 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: Minimum 64 hours per semester.**

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 102, 103, 104, with a grade of "C" or better.**

**Corequisites: RESP 105, 108, 110.**

**Lecture: Minimum 64 hours per semester**

**Laboratory: Minimum 64 hours per semester**

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

**Associate Degree Applicable**

**Prerequisites: Completion of RESP 101, 102, 103, 104, with a grade of "C" or better.**

**Corequisites: RESP 105, 106, 110.**

**Lecture: Minimum 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: Minimum 24 hours per semester**

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:** Minimum 64 hours per semester

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:** Minimum 32 hours per semester

**Laboratory:** Minimum 96 hours per semester

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:** Minimum 80 hours per semester

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, 203, 104, 105, 106, 108, 110 with a grade of "C" or better.

**Corequisites:** RESP 201, 202, 203, 205.

**Lecture:** Minimum 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:** Minimum 48 hours per semester

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, 120, 201-205 with a grade of "C" or better.

**Corequisites:** RESP 207, 208, 211, 212.

**Lecture:** Minimum 64 hours per semester

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, 210, 201-205 with a grade of "C" or better.

**Corequisites:** RESP 206, 208, 211, 212.

**Lecture:** Minimum 80 hours per semester

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:** Minimum 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:** Minimum 24 hours per semester

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:** Minimum 48 hours per semester

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 Resp 101, 102, 103, 104, 105, 106, 108, 110, 201-205 with a grade of "C" or better.

**Corequisites:** RESP 206, 207, 208, 211, 212.

**Lecture:** Minimum 32 hours per semester

**Laboratory:** Minimum 96 hours per semester

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:** Minimum 12 hours per semester

**Laboratory:** Minimum 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:** Minimum 16-48 hours per semester

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:** Minimum 16-48 hours per semester

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:** Minimum 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.

927#4 ADVANCED PRACTITIONER EXAMINATIONS:  
REVIEW AND SEMINAR 3 UNITS

*Not Applicable to the Associate Degree*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

Preparation for the National Board for Respiratory Care, Inc. Advanced Level Written Registry and Clinical Simulation Examination; discussion of examination structure, content, examination site requirements, and review of sample test questions, self-evaluation practice examinations are featured.

## SOCIOLOGY (SOC)

100 INTRODUCTION TO SOCIOLOGY 3 UNITS

*UC, CSU, Associate Degree Applicable (CAN SOC 2)*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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 (SPAN)

- 015-016 CONVERSATIONAL SPANISH 3 UNITS  
**Associate Degree Applicable**  
**Prerequisite: None. Courses must be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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: Minimum 40 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 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: SPAN 101A.**  
**Lecture: Minimum 40 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 101A.  
 (SPAN 101 AB is equivalent to SPAN 101.)
- 101 COLLEGE SPANISH I 5 UNITS  
**UC\*, CSU\*, Associate Degree Applicable**  
**Prerequisite: None.**  
**Lecture: Minimum 80 hours per semester**  
**Laboratory: Minimum 16 hours per semester**  
 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: SPAN 101B, or SPAN 101, or one year of high school Spanish.**  
**Lecture: Minimum 40 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 101.
- 102B COLLEGE SPANISH II (PART 2) 2.5 UNITS  
**UC\*, CSU\*, Associate Degree Applicable**  
**Prerequisite: SPAN 102A**  
**Lecture: Minimum 40 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 102A. (SPAN 102AB is equivalent to SPAN 102.)
- 102 COLLEGE SPANISH II 5 UNITS  
**UC\*, CSU\*, Associate Degree Applicable**  
**Prerequisite: SPAN 101 or SPAN 101A and 101B, or one year of high school Spanish.**  
**Lecture: Minimum 80 hours per semester**  
**Laboratory: Minimum 16 hours per semester**  
 Continuation of SPAN 101.
- 103A COLLEGE SPANISH III (PART 1) 2 UNITS  
**UC\*, CSU\*, Associate Degree Applicable**  
**Prerequisite: SPAN 102, or SPAN 102A and 102B, or two years of high school Spanish.**  
**Lecture: Minimum 32 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 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: SPAN 103A.**  
**Lecture: Minimum 32 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 103A. (SPAN 103AB is equivalent to SPAN 103.)
- 103 COLLEGE SPANISH III 4 UNITS  
**UC\*, CSU\*, Associate Degree Applicable**  
**Prerequisite: SPAN 102, or SPAN 102A and 102B, or two years of high school Spanish.**  
**Lecture: Minimum 64 hours per semester**  
**Laboratory: Minimum 16 hours per semester**  
 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: SPAN 103, or SPAN 103B, or three years of high school Spanish.**  
**Lecture: Minimum 32 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 103.
- 104B COLLEGE SPANISH IV (PART II) 2 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: SPAN 104A.**  
**Lecture: Minimum 32 hours per semester**  
**Laboratory: Minimum 8 hours per semester**  
 Continuation of SPAN 104A. (SPAN 104AB is equivalent to SPAN 104.)
- 104 COLLEGE SPANISH IV 4 UNITS  
**UC, CSU, Associate Degree Applicable**  
**Prerequisite: SPAN 103 or three years of high school Spanish.**  
**Lecture: Minimum 64 hours per semester**  
**Laboratory: Minimum 16 hours per semester**  
 Continuation of SPAN 103.
- 130AB SPANISH FOR PUBLIC EMPLOYEES 3 UNITS  
**CSU, Associate Degree Applicable**  
**Prerequisite: None. Courses must be taken in sequence.**  
**Lecture: Minimum 48 hours per semester**  
 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:** SPAN 102, or SPAN 102A and 102B, or two years of high school Spanish, or equivalent proficiency.  
**Lecture:** Minimum 16-48 hours per semester  
**Laboratory:** Minimum 32 hours per semester 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:** SPAN 104 or equivalent  
**Lecture:** Minimum 32 hours per semester

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:** SPAN 104 or equivalent.  
**Lecture:** Minimum 32 hours per semester

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:** Minimum 48 hours per semester  
 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 (SPEECH)

100 ELEMENTS OF PUBLIC SPEAKING 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.  
**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester  
 Practice in various forms of public speaking, with emphasis on audience analysis, and study-analysis of selected famous speeches.

111 INTERPERSONAL COMMUNICATION 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** None.

**Departmental Recommendation:** ENGL 101.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

Analysis of literature for oral interpretative reading, with practice on the presentation of materials to an audience. Drill on minor voice problems as necessary

12 1 ORAL INTERPRETATION II 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** SPEECH 120.

**Lecture:** Minimum 48 hours per semester

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

*CSU, Associate Degree Applicable*

**Prerequisite:** None.

**Lecture:** Minimum 48 hours per semester

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:** Minimum 48 hours per semester

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  
 24BABC 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite or Corequisite: Any speech course.*

*Laboratory: Minimum 48 hours per semester 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

*UC, CSU, Associate Degree Applicable*

*Prerequisite: Completion of SPEECH ZOO.*

*Lecture: Minimum 48 hours per semester*

*Laboratory: Minimum 48 hours per semester*

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(THART)

100 INTRODUCTION TO THEATRE 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None.*

*Lecture: Minimum 48 hours per semester*

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: Minimum 48 hours per semester*

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: Minimum 80 hours per semester*

*Laboratory: Minimum 32 hours per semester (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

*UC, CSU, Associate Degree Applicable*

*Prerequisite: THART 116. Courses must be taken in sequence.*

*Lecture: Minimum 48 hours per semester*

*Laboratory: Minimum 96 hours per semester (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: Minimum 48 hours per semester*

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: Minimum 8-16 hours per semester*

*Laboratory: Minimum 16-32 hours per semester*

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. This course is also offered as PE-I 130#4. (Formerly THART 130ABCD.)

140-141-142-143 THEATRE WORKSHOP 3 UNITS

*UC, CSU, Associate Degree Applicable*

*Prerequisite: None. Courses need not be taken in sequence.*

*Lecture: Minimum 48 hours per semester*

*Laboratory: Minimum 120 hours per semester (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: Minimum 48 hours per semester*

*Laboratory: Minimum 96 hours per semester (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: Minimum 48 hours per semester*

*Laboratory: Minimum 96 hours per semester (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:** Minimum 64-128 hours per semester (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:** Minimum 16 hours per semester  
**Laboratory:** Minimum 32 hours per semester  
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:** Minimum 48 hours per semester  
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:** Minimum 32 hours per semester 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:** Minimum 64 hours per semester  
Continuation of THART 176, designed to extend the student's vocational opportunities in the theatrical profession. Emphasizes special projects in the theatre (lighting, special effects, special bn designs), black and white photography which uses the actual theatre production as a subject exclusively. Includes camera familiarization and shooting techniques, negative and print darkroom procedures, finishing and presentation. This course may be taken four times. (Formerly THART 179ABCD.)

180#4 BALLET 1-2 UNITS  
*UC\*, CSU\*, Associate Degree Applicable*  
**Prerequisite:** None.

**Lecture:** Minimum 8-26 hours per semester  
**Laboratory:** Minimum 16-32 hours per semester  
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. This course is also offered as PE-I 131#4. (Formerly THART 180ABCD.)

220-221 ADVANCED ACTING 3 UNITS  
*UC, CSU, Associate Degree Applicable*  
**Prerequisite:** THART 120. Courses must be taken in sequence.

**Lecture:** Minimum 48 hours per semester  
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:** Minimum 48 hours per semester  
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#4 or PE-I 130#4. Courses must be taken in sequence.

**Lecture:** Minimum 8-16 hours per semester and  
**Laboratory:** Minimum 16-32 hours per semester  
Continuation of THART 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:** Minimum 48 hours per semester.  
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:** Minimum 80-240 hours per semester

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. (Listed as 198 in each appropriate discipline.)

## 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.

#### M A J O R S

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  
Fires 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-Law  
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 major.
2. Consult the catalog of the college or university to which you intend to transfer to determine whether or not you need to make adjustments in specific course patterns.
3. Pay careful attention to the specific requirements of the different types of four-year institutions, as outlined in Section V of this catalog, to make sure you understand the general education requirements of the institution you want to attend.

#### NOTES TO ASSOCIATE DEGREE STUDENTS:

1. Consult with your counselor to decide on support courses for your chosen major.
2. Consult the graduation requirements outlined in Section I of this catalog; they must be completed for you to graduate from Crafton Hills College.

#### ACCOUNTING

Recommended Core Courses for Transfer Students:

- ACCT 210/211, 220/221
- ECON 200, 201
- BUSAD 210
- MATH 102, 108
- BUSAD 230

Recommended Core Courses for Associate Degree Students:

- ACCT 205, 210/211, 220/221, 225, 230
- BUSAD 053, 100, 105, 210
- C&IS 101
- ECON 200, 201
- B&OT 100

### ADMINISTRATION OF JUSTICE

- Recommended Core Courses:
- ADJUS 101, 102, 103, 104, 105

### ANATOMY/PHYSIOLOGY

- Recommended Core Courses:
- AH 101
  - ANAT/PHYSIO 150, 151
  - CHEM 101
  - MICRO 150

### ANTHROPOLOGY

- Recommended Core Courses:
- ANTHRO 100, 102, 106
  - GEOG 110
  - SOC 100

### ART

- Recommended Core Courses:
- ART 100, 102, 120A, 120B, 124#4

### ASTRONOMY

- Recommended Core Courses:
- ASTRON 150
  - CHEM 150, 151
  - MATH 250, 251, 252, 254
  - PHYSIC 200, 201

### BIOLOGY

- Recommended Core Courses:
- BIOL 130, 131
  - CHEM 150, 151, 212, 213
  - MATH 103, 108, 151, 250, 251
  - PHYSIC 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:
- ACCT 210/211, 220/221
  - BUSAD 210, 230
  - ECON 200, 201
  - MATH 102, 108

### BUSINESS AND OFFICE TECHNOLOGY

- Recommended Core Courses:
- B&OT 100, 101, 103 or 105, 110, 140, 141, 144, 146

### CHEMISTRY

- Recommended Core Courses:
- CHEM 150, 151, 212, 213
  - MATH 250, 251, 252, 254
  - PHYSIC 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:
- C&IS 101, 102, 103, 104, 105, 106, 110, 115, 200, 201, 230, 240, 250

### ECONOMICS

- Recommended Core Courses:
- ECON 200, 201
  - MATH 108, 140
  - PHIL 103

### EMERGENCY MEDICAL SERVICES

Consult your counselor to develop an appropriate course of study.

### ENGLISH

- Recommended Core Courses:
- ENGL 101, 102, 260, 261, 270, 271
  - FOREIGN LANGUAGE\*
- \*Varies from college to college; consult appropriate college catalog.*

### FIRE TECHNOLOGY

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

### FOREIGN LANGUAGE

- Recommended Core Courses:
- ENGL 101, 102, 152
  - FOREIGN LANGUAGE 101, 102, 103, 104
  - SECOND FOREIGN LANGUAGE 101, 102

### GEOGRAPHY

- Recommended Core Courses:
- GEOG 102, 110, 111, 114
  - GEOL 100
  - OCEAN 101
  - MATH 103

### GEOLOGY

- Recommended Core Courses:
- CHEM 150, 151
  - GEOG 110, 111
  - GEOL 100, 112, 250 or 251
  - MATH 250, 251
  - PHYSIC 200, 201

### HISTORY

- Recommended Core Courses:
- GEOG 110
  - HIST 100, 101, 160 & 161 or 170 & 171
  - POLIT 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)

See a counselor for specific details regarding transfer to a four year college.

**MARKETING****Recommended Core Courses for Transfer Students:**

- ACCT 210/211, 220/221
- ECON 200, 201
- BUSAD 210, 230
- MATH 102, 108

**Recommended Core Courses for Associate Degree Students:**

- ACCT 205, 210/211, 220/221
- MARKET 100, 105, 110
- BUSAD 053, 100, 210
- SPEECH 100, 101
- C&IS 101

**MATHEMATICS****Recommended Core Courses:**

- C&IS 102, 104
- FOREIGN LANGUAGE\*
- MATH 250, 251, 252, 254
- PHYSIC 200, 201

\*Varies from college to college; consult appropriate college catalog.

**MICROBIOLOGY****Recommended Core Courses:**

- BIOL 130, 131
- MICRO 150
- CHEM 150, 151, 212, 213
- PHYSIC 110, 111
- MATH 250

**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:**

- INTDIS 101 OR 102
- PHIL 101, 103, 105
- RELIG 101, 110

**PHYSICAL EDUCATION****Recommended Core Courses:**

- ANAT/PHYSIO 150 AND 151
- BIOL 100
- EMS 910
- HEALTH 102
- PE 263
- PSYCH 100
- SOC 100

Minimum of one activities course per semester.

**PHYSICS****Recommended Core Courses:**

- CHEM 150, 151
- MATH 250, 251, 252, 254
- PHYSIC 200, 201

**POLITICAL SCIENCE****Recommended Core Courses:**

- ECON 200,201
- HIST 100,101
- POLIT 100

**PRE-CHIROPRACTIC****Recommended Core Courses:**

- ANAT/PHYSIO 150, 151
- BIOL 130
- CHEM 150, 151, 212, 213
- ENGL 101
- MATH151
- PHYSIC 110, 111
- PSYCH 100
- SPEECH 100

**PRE-DENTAL HYGIENE****Recommended Core Courses:**

- ANAT/PHYSIO 150, 151
- CHEM 101, 102
- MICRO 150
- PSYCH 100
- SOC 100

**PRE-DENTISTRY****Recommended Core Courses:**

- BIOL 130, 131
- CHEM 150, 151, 212, 213
- MATH 250,251
- PHYSIC 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
- ENGL 260, 261
- FOREIGN LANGUAGE 101, 102, 103
- HEALTH 102
- MATH 102, 115
- MUSIC 100
- SOC 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:

- ANTHRO 102
- ECON 201
- HEALTH 102
- PSYCH 112
- SOC 100, 105

**PRE-ENGINEERING**

Recommended Core Courses:

- CHEM 150, 151
- C&IS 102, 104
- ECON 201
- MATH 250, 251, 252, 254
- PHYSIC 200, 201

**PRE-FORESTRY**

Recommended Core Courses:

- BIOL 130, 131
- CHEM 150, 151
- C&IS 102
- ECON 200, 201
- GEOL 100
- MATH 108, 250
- PHYSIC 110, 111 OR 200, 201

**PRE-LAW**

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:

- ECON 200, 201
- ENGL 101, 102
- HIST 100, 101, 160 & 161 OR 170 & 171
- PHIL 103
- POLIT 100
- PSYCH 100
- SOC 100
- SPEECH 100, 101

**PRE-MEDICINE**

Recommended Core Courses:

- BIOL 130, 131
- CHEM 150, 151, 212, 213
- MATH 250, 251
- PHYSIC 110, 111, or 201, 201

• **PRE-NURSING**

Recommended Core Courses:

- ANAT/PHYSIO 150, 151
- CHEM 101, 102, 150
- MATH 090, 095
- MICRO 150

• **PRE-OCCUPATIONAL THERAPY**

Recommended Core Courses:

- ANAT/PHYSIO 150,151
- ANTHRO 102
- CHEM 101
- MATH 108
- PHYSIC 100

**PRE-OPTOMETRY**

Recommended Core Courses:

- ANAT/PHYSIO 150, 151
- BIOL 130, 131
- CHEM 150, 151, 212, 213
- MATH 108, 250, 251
- PHYSIC 110, 111

**PRE-PHARMACY**

Recommended Core Courses:

- BIOL 130, 131
- CHEM 150, 151, 212, 213
- MATH 250, 251
- PHYSIC 110, 111

**PRE-PHYSICAL THERAPY**

Recommended Core Courses:

- ANAT/PHYSIO 150, 151
- CHEM 101, 102, 150, 151
- MICRO 150
- PHYSIC 100

**PRE-VETERINARY MEDICINE**

Recommended Core Courses:

- BIOL 130, 131
- CHEM 150, 151, 212, 213
- MATH 108, 250
- PHYSIC 110, 111

**PSYCHOLOGY**

Recommended Core Courses:

- MATH 108
- PSYCH 100, 101, 103, 112
- SOC 100

**RADIOLOGIC TECHNOLOGY**

Required Core Courses:

- RADIOL 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:

- AH 090,101
- ANAT 101
- CHEM 101
- C&IS 101
- MATH 090

**RELIGIOUS STUDIES**

Recommended Core Courses:

- FOREIGN LANGUAGE\*
- HIST 135, 160, 161
- PHIL 101, 103
- RELIG 100, 101, 150

\*Varies from college to college; consult appropriate college catalog.

**RESPIRATORY CARE**

Recommended Core Courses:

- ANAT/PHYSIO 101/102 OR 150/151
- CHEM 101
- AH 119A
- ENGL 015 OR 101
- HUMANITIES - any two 3-unit courses
- MATH 090
- MICRO 102 OR 150
- RESP 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:

- ANTHRO 102
- MATH 108
- PSYCH 100
- SOC 100, 105, 141

**SPEECH**

Recommended Core Courses:

- ENGL 260, 261, 270, 271
- SPEECH 100, 101, 111, 120, 121, 140
- THART 120

**THEATRE ARTS**

Recommended Core Courses:

- ENGL 260, 275
- SPEECH 120
- THART 100, 108, 120, 176#4, 220

## SECTION IV

### OCCUPATIONAL CERTIFICATE PROGRAMS

Certificates are closely tied to the work 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 a counselor 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.

#### APPLICATION FOR AND COMPLETION OF OCCUPATIONAL CERTIFICATES

For admission and completion of occupational programs please follow the guidelines provided below.

#### ACCOUNTING

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** of the five core courses listed in the Occupational Certificate Programs. In addition to these five core courses the student must complete the required Specialty Courses. Contact the Office of Admissions and Records for application materials.

#### 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**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** of 37 units of instruction in this catalog. The certificate is issued only through San Bernardino Valley College. Therefore, application for this certificate must be made at the Office of Admissions and Records at San Bernardino Valley College.

**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
Six units from the following: list of RECOMMENDED COURSES	6
<b>TOTAL</b>	<b>37</b>

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
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**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** of a minimum of five core courses plus completion of the six specialty courses. Contact the Office of Admissions and Records for application materials.

**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	1
<b>TOTAL</b>	<b>16</b>

**CALIFORNIA FIRE OFFICER TRAINING**

**Admission:** Open to all students.

**Completion** of all eight specialty courses may qualify the student to test for the position of First Line Fire Officer. Certificate is available by applying at the Fire Technology Office and filed with the Office of Admissions and Records.

**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
<b>TOTAL</b>	<b>20</b>

**CHILD CARE PROVIDER**

**Admission:** Open to all students.

**Completion** of the following five courses qualify the student for the Child Care certificate. Contact the Office of Admissions and Records for application materials.

**CHILD CARE PROVIDER CERTIFICATE**

	UNITS
CD 105 Child Growth and Development	3
CD 126 Child, Family and Community	3
CD128 Creative Experiences for Young Children	3
CD 106 Beginning Internship in Early Childhood Education	4
CD Electives (one of the following)	<u>3</u>
CD 115 Health, Welfare and Nutrition	(3)
CD 137 Play and Play Materials	(3)
CD229 Science for the Young Child	(3)
*CD 230 Language, Literature and Literacy for Young children	(3)
<b>TOTAL</b>	<b>16</b>

**CLERICAL ASSISTANT**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** of 29 units of instruction required. There are ten courses that the student must complete before applying at the Office of Admissions and Records for the certificate.

**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: Microsoft Word	2
B&OT 109 Using Microsoft Windows	2
B&OT 140 General Office Procedures	3
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
<b>TOTAL</b>	<b>26</b>

**COMPUTER AND INFORMATION SCIENCES**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** requires 24 units of instruction to be completed with a grade of C or better. Contact the Office of Admissions and Records for application materials.

**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 24 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 112 Basic Language and Problem Solving II	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
<b>TOTAL</b>	<b>39</b>

## EMERGENCY MEDICAL TECHNICIAN - I

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion** of EMS 020 is all that is required to apply for the certificate.

## 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
<b>TOTAL</b>	<b>6</b>

## EMERGENCY MEDICAL TECHNICIAN - PARAMEDIC

**Admission:** There are three steps to the entrance process (application, testing and selection).

To be granted a testing position you must correctly complete the application form and submit all required documentation in the sequence specified by the department. All documentation must be submitted by a date determined and posted by the department.

The two major components of admission include written and oral components. Written tests in Math and English will be given and when the student successfully completes this step the student must complete a EMT-I field judgment orla examination.

### Entrance requirements to be completed are:

1. a valid EMT-I certificate
2. written documentation of completion of six months of full-time or 1,000 hours of part-time EMT-I experience prior to testing.
3. a completion of a transferable Anatomy and Physiology course or equivalent.
4. a copy of a high school diploma or GED.
5. a TB test within the last year or chest x-ray within the last two years.
6. immunization against Hepatitis B.
7. a copy of a rubella titar showing immunity or a copy of proof of re-immunization.

The department will not accept FAX or electronic submission of any application forms.

### Program testing requirements are:

- (a) a reading level of grade 12 or better.
- (b) a math proficiency of grade 10 or better.
- (c) a written EMT-I competency examination with a score of 80% or higher.
- (d) field judgment competency with 80% or higher.
- (e) Anatomy and Physiology of 80% or higher.

**Completion** requires 33.5 units of instruction to be completed with a grade of C or better. Contact the Office of Admissions and Records for application materials.

## 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
EMS 151 Introduction to Emergency Medical Services - Paramedic	2
EMS 152 Cardiology for Paramedics	4
EMS 153 Pharmacology for Paramedics	3
EMS154 EMS Theory	8
EMS155 Skills Development for the Paramedic	3
EMS 156 Clinical Externship for the Paramedic	2
EMS 157 Field Externship for the Paramedic	7.5
<b>TOTAL</b>	<b>33.5</b>

## FIRE ACADEMY

**Admission:** Open to all students who have completed the prerequisite courses. The three courses that must be completed before admission to the Fire Technology Basic Training Academy are:

EMS 020  
FIRET 100 and  
FIRET 101

**Completion** requires finishing the 12.5 unit academy with a grade of C or better. Contact the Office of Admissions and Records for application materials.

**FIRE ACADEMY CERTIFICATE**

The objectives of this certificate are to develop all the skills required for Firefighter I certification and to develop team-work 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. The Basic Fire Academy is approved by the California State Fire Marshal's Office as an accredited Regional Training Center. 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**

**Admission:** It is recommended that all students complete either FIRET 100 or FIRET 101 with a grade of C or better.

**Completion:** Achieving a C or better in Fire Inspection Academy (FIRET 078) will allow the student to apply for a certificate. Contact the Office of Admissions and Records for application materials.

**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

**HOME DAY CARE PROVIDER**

**Admission:** Open to all students.

**Completion** requires the completion of 11 units of credits. The following courses are required to qualify for the Home Day Care Provider certificate:

- CD 105 Child Growth and Development
- CD 128 Creative Experiences for Children
- CD 175 Home Day Care Practices, Programs and Business Principles
- CD 116 Pediatric CPR, First Aid and Safety for Children

Contact the Office of Admissions and Records for application materials.

**MARKETING MANAGEMENT**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion:** Certificate requirements include a minimum of five core courses and all five specialty courses for a total of 15 units. Contact the Office of Admissions and Records for application materials.

**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

<b>Plus the Following Specialty Courses:</b>	<b>UNITS</b>
BUSAD 200 Business Management (Organizational Behavior)	3
MARKET 105 Salesmanship Principles	3
MARKET 110 Advertising	3
BUSAD 10.5 Small Business Management	3
BUSAD 230 Using Computers for Business	(3)
or	
Business Elective (Student's Choice)	(3)
<b>TOTAL</b>	<b>15</b>

**MICROAPPLICATIONS SPECIALIST**

**Admission:** Open to all students. Registration is limited to class size restrictions.

**Completion:** Certificate requirements include a minimum of two core courses (choose Word or WordPerfect) and all eight specialty courses for a total of 22 units. Contact the Office of Admissions and Records for application materials.

**MICROAPPLICATIONS SPECIALIST CERTIFICATE**

	<b>UNITS</b>
B&OT 090 Selected Topics: Creating Web Pages	2
B&OT 119 Microcomputer Keyboarding	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 Desktop Publishing	2
B&OT 115 Advanced Desktop Publishing: Presentation Graphics	2
B&OT 116 Telecommunications for Business	3
BusAd 230 Using Computers for Business	3
<b>TOTAL</b>	<b>20</b>

**MOBILE INTENSIVE CARE NURSE**

**Admission:** Open to students who possess a current California Registered Nurse License who have complete the following:

- (a) EMS 110 (Advanced Cardiac Life Support (ACLS) --Provider), or have a current ACLS card.
- (b) have 800 hours experience as a nurse in the Emergency Department.
- (c) proof of a cardiac dysrhythmia course.
- (d) current employment in a base station hospital in San Bernardino or Riverside County, and
- (e) the ability to complete a screening written examination with 80 percent accuracy.

**Completion:** Finishing EMS 103 with a grade of C or higher allows the student to apply for the certificate. Contact the Office of Admissions and Records for application materials.

**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.

<b>Required Course</b>	<b>UNITS</b>
EMS 103 Mobile Intensive Care Nurse	2.25

**OFFICE ASSISTANT**

**Admission:** Open to all students.

**Completion** of the following courses qualify the student for the Office Assistant certificate. Contact the Office of Admissions and Records for application materials.

<b>OFFICE ASSISTANT CERTIFICATE</b>	<b>UNITS</b>
B&OT 100 Beginning Typewriting Keyboarding	3
B&OT 103 ABCD Beginning Word Processing Application: Microsoft Word	2
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
<b>TOTAL</b>	<b>15</b>

**RADIOLOGIC TECHNOLOGY**

**Admission:** Open to all students who have completed the prerequisite courses.

Contact the Radiology Program Director for information on application materials and interview process. The six courses that must be completed before admission to the Radiology Program are:

- AH 101 Medical Terminology
- A&P 101 Essentials of Human Anatomy and Physiology
- CHEM 101 Introductory Chemistry
- C&IS 100 Computer Literacy
- MATH 090 Elementary Algebra
- AH 090 Survey of Radiologic Technology

**NOTE:** Applications are sent out October 1st and the application deadline is March 1st of every year.

**Completion** of the required Radiology courses with a grade of C or higher qualifies the student to apply for the Radiology Technician Certificate. Contact the Office of Admissions and Records for application materials.

**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.

	<b>UNITS</b>
B&OT 101 Intermediate Keyboarding/Formatting	<b>3</b>
B&OT 102 Advanced Keyboarding/Document Production	<b>3</b>
B&OT 103 Beginning Word Processing Applications: Microsoft Word*	<b>2</b>
B&OT 104 Advanced Word Processing Applications: Microsoft Word*	<b>2</b>
B&OT 105 Beginning Word Processing Applications: WordPerfect*	<b>2</b>
B&OT 106 Advanced Word Processing Applications: WordPerfect*	<b>2</b>
B&OT 109 Using Microsoft Windows*	<b>2</b>
B&OT 110 Word/Information Processing Concepts	<b>3</b>
B&OT 116 Telecommunications for Business	<b>3</b>
B&OT 140 General Office Procedures	<b>6</b>
B&OT 141 Records and Database Management*	<b>2</b>
B&OT 144 Business English	<b>3</b>
B&OT 146 Human Relations in the Office Environment*	<b>2</b>
<b>TOTAL</b>	<b>35</b>

\*8-week course

**UNITS**

**1st Semester**

RADIOL 100 Introduction to Radiologic Technology	.75
RADIOL 101 Medical Ethics for the Radiographer	.5
RADIOL 102 Radiographic Medical Terminology	1.5
RADIOL 103 Radiographic Positioning I	1.5
RADIOL 104 Radiologic Physics I	1.5
RADIOL 105 Radiographic Anatomy/Physiology I	1.5
RADIOL 106 Radiographic Positioning Lab I	5
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/THERAPIST

**Admission:** Open to all students who have completed the prerequisite courses.

Contact the Respiratory Care Program Director for information on application materials and registration pass. The four courses that must be completed before admission to the Respiratory Care Program are:

RESP 050	Introduction to Respiratory Care
A&P 101	Essentials of Human Anatomy and Physiology
MICRO 102	Introductory Microbiology
AH 119A	Basic CPR

**Completion** of the first year courses (all listed as 100 series courses) with a C or higher will qualify the student for the Respiratory Care Technician Certificate.

## RESPIRATORY THERAPIST

**Admission:** Open to all students who have completed the prerequisites for the Technician Program and who have completed all of the RESP 100 series courses with a C or higher, OR students who possess a valid California Respiratory Care Practitioner License and present proof of 24 months of paid experience will be considered for the Respiratory Therapist advanced standing program. You may choose either a one-year or two-year track.

Contact the Respiratory Care Program Director for information on application materials and registration pass.

**Completion** of all Respiratory Care courses with a C or higher and completion of the Associate of Science Degree will qualify the student for the Respiratory Therapist Certificate.

## 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
ANAT 102 Anatomy and Physiology of the Cardiorespiratory System	4
*ENGL 015 Preparation for College Writing	4
*MATH 090 Elementary Algebra	4
*MICRO 102 Introductory Microbiology	4
RESP 050 Introduction to Respiratory Care	2
RESP 101 Fundamentals of Respiratory Care I	4
RESP 102 Fundamentals of Respiratory Care Skills I	11
RESP 103 Pulmonary Medical Terminology	3
RESP 104 Respiratory Care Clinical Application I	2.25
RESP 105 Fundamentals of Respiratory Care II	4
RFSP 106 Fundamentals of Respiratory Care Skills II	6
RESP 108 Respiratory Care Clinical Application II	5.25
RESP 110 Clinical Medicine	15
<b>TOTAL</b>	<b>59.75</b>

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**

**Admission:** Open to all students.

**Completion** of all twelve specialty courses totaling 33 units of credit. Contact the Office of Admissions and Records for application materials.

**SECRETARY CERTIFICATE**

	<b>UNITS</b>
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: Microsoft Word	2
B&OT 104 Advanced Word Processing: Microsoft Word	2
B&OT 109 Using Microsoft Windows	2
B&OT 112 Fundamentals of Spreadsheets	2
B&OT 140 General Office Procedures	3
B&OT 141 Records and Database Management	2
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
<b>TOTAL</b>	<b>32</b>

**WORD/INFORMATION PROCESSOR**

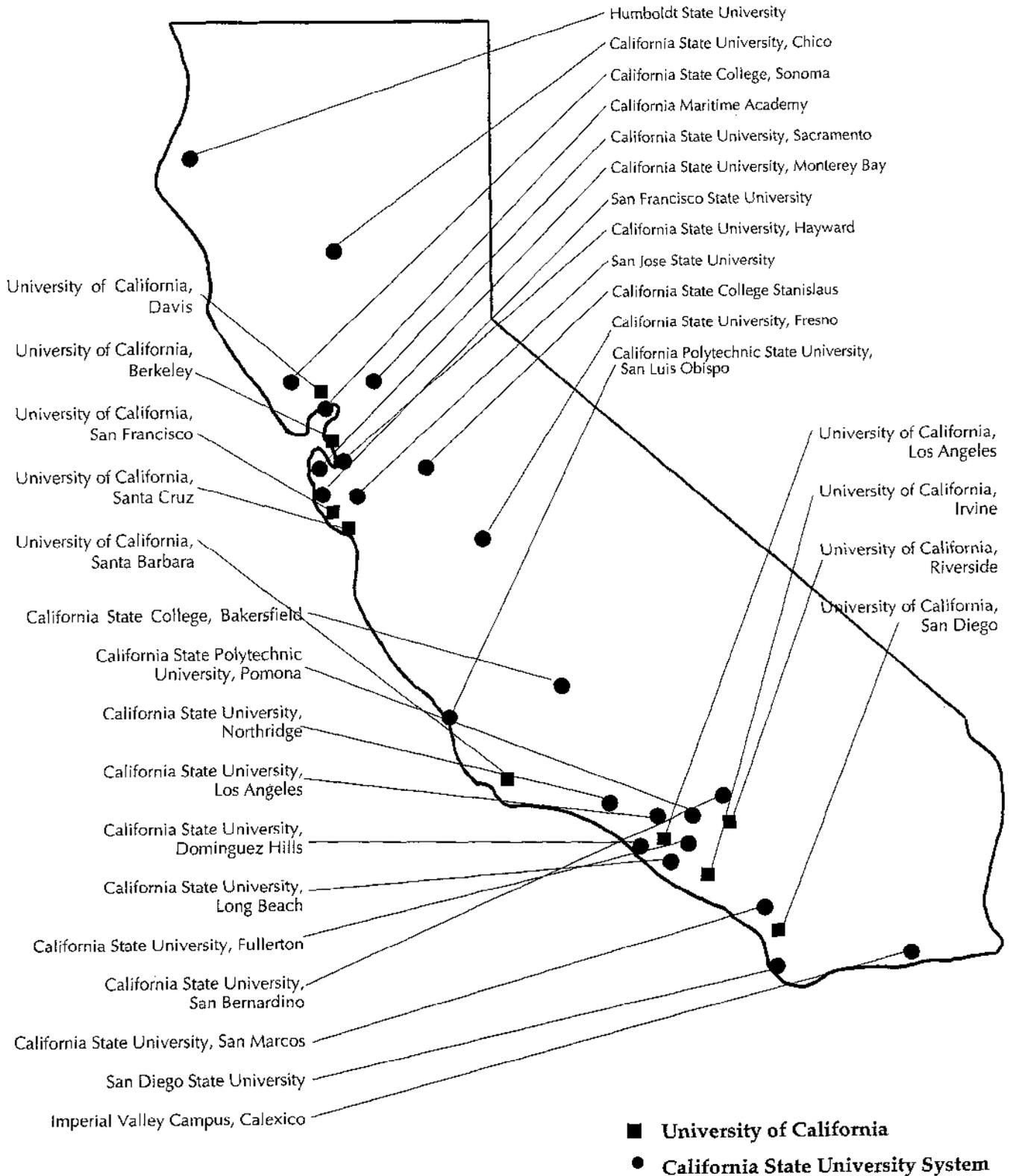
**Admission:** Open to all students.

**Completion** of all thirteen specialty courses totaling 35 units of credit.

Contact the Office of Admissions and Records for application materials.

**WORD/INFORMATION PROCESSOR CERTIFICATE**

	<b>UNITS</b>
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: Microsoft Word	2
B&OT 104 Advanced Word Processing: Microsoft Word	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 144 Business English	3
B&OT 146 Human Relations in the Office Environment	2
<b>TOTAL</b>	<b>24</b>



## 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 (1929) • S • (707) 648-4222  
200 Maritime Academy Dr., Vallejo 94590

California State University Bakersfield • Q • (805) 664-2011  
9001 Stockdale Highway, Bakersfield 93311

California Polytechnic State University, San Luis Obispo  
• Q • (805) 756-1111 • San Luis Obispo 93407

California State Polytechnic University, Pomona • Q •  
(909) 869-7659 • 3801 W. Temple Ave., Pomona 91768

California State University, Chico • S • (530) 898-6116  
1st & Normal Street, Chico 95929

California State University, Dominguez Hills • S •  
(310) 243-3300 • 1000 E. Victoria Street, Carson 90747

California State University, Fresno • S • (209) 278-4240  
5241 N. Maple Avenue, Fresno 93740

California State University, Fullerton • S • (714) 278-2011  
P.O. Box 34080, Fullerton 92634

California State University, Hayward • Q • (510) 885-3000  
Hayward 94542

California State University, Long Beach • S • (310) 985-4111  
1250 Bellflower Blvd., Long Beach 90804

California State University, Los Angeles • Q • (213) 343-3901  
5 15 1 State University Drive, Los Angeles 90032

California State University, Monterey Bay • S • (408) 582-3330  
100 Campus Center Drive, Seaside 93955

California State University, San Marcos • S • (760) 750-4000  
Admissions & Records Office, San Marcos 92096

California State University, Northridge • S • (818) 677-1200  
18111 Nordhoff Street, Northridge 91330

California State University, Sacramento • S • (916) 278-3901  
6000 J Street, Sacramento 95819

California State University, San Bernardino • Q •  
(909) 880-5200-5500 University Parkway,  
San Bernardino 92407

California State University, Stanislaus • Q • (209) 667-3122  
801 W. Monte Vista Ave., Turlock 95380

Humboldt State University • S • (707) 826-4402  
Admissions & Records Office, 1 Harpst St., Arcata 95521

San Diego State University • S • (619) 594-5200  
5500 Campanile Drive, San Diego 92182

San Francisco State University • S • (415) 338-1111  
1600 Holloway Avenue, San Francisco 94132

San Jose State University • S • (408) 924-1000  
One Washington Square, San Jose 95 192

Sonoma State University • S • (707) 664-2880  
1801 E. Cotati Ave., Rohnert Park 94928

**S = Semester System**

**Q = Quarter System**

## **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. In addition to other academic requirements, four years of college preparatory high school English and three years of mathematics are required.

To be included in the fifty-six transferable units is a minimum of thirty semester units of the CSU General Education requirements, including English (Category A) and mathematical concepts (Category B) with at least a "C" in each course.

## **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.

## CRAFTON HILLS COLLEGE

### CALIFORNIA STATE UNIVERSITY (CSU) GENERAL EDUCATION REQUIREMENTS 1998-99

**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, and/or the Intersegmental General Education Transfer Curriculum (IGETC) for transfer to CSU and UC.
3. Completed courses **MAY NOT** be used in more than one area.

**A. COMMUNICATION/CRITICAL THINKING**

9 units required. Students **MUST** complete one course in the three areas listed.

- English 101
- English 102 or Philosophy 103
- Speech 100

COMMENTS: \_\_\_\_\_ 

Total	Met	Need

**B. PHYSICAL AND LIFE SCIENCE/MATHEMATICS**

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.

<b>Biological Science</b>	<b>Physical Science</b>	<b>Mathematics</b>
Anatomy/Physiology 101, 150, 151	Astronomy 150 + 160	Mathematics 102, 103, 108, 115, 140, 141, 151, 250, 251, 252, 254
Biology 100, 122 123* 130, 131	Chemistry 101, 102, 150, 151	
Microbiology 102, 150	Geography 110 + 111, 114*, 126*	
Oceanography 101*	Geology 100, 101*, 112, 150*, 160, 250*, 252*	
	Oceanography 101*	
	Physics 100, 110, 111, 200, 201	

\* Non-lab course  
+ May be taken with or without a lab

COMMENTS: \_\_\_\_\_ 

Total	Met	Need

**C. ARTS/LITERATURE/PHILOSOPHY/FOREIGN LANGUAGE**

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

COMMENTS: \_\_\_\_\_ 

Total	Met	Need

**D. SOCIAL, POLITICAL AND ECONOMIC INSTITUTIONS**

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 & American Ideals requirements. (Title V, 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

COMMENTS: \_\_\_\_\_ 

Total	Met	Need

**E. LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT**

- 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

COMMENTS: \_\_\_\_\_ 

Total	Met	Need

## 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.

UC, Davis, CA 95616 • (916) 752-1011

UC, Berkeley • (510) 642-6000  
1101 Sproul Hall, Berkeley CA 94720

UC, San Francisco • (415) 476-9000  
San Francisco, CA 94143

UC, Santa Cruz, Santa Cruz, CA 95064 • (408) 459-0111

UC, Santa Barbara, Santa Barbara, CA 93106 • (805) 893-8000

UC, Los Angeles • (310) 825-4321  
405 Hilgard Avenue, Los Angeles, CA 90095

UC, Irvine, Irvine, CA 92717 • (949) 824-5011

UC, Riverside, Riverside, CA 92521 • (909) 787-1012

UC, San Diego, La Jolla, CA 92093 • (619) 534-2230

### MINIMUM ADMISSION REQUIREMENTS FOR TRANSFER APPLICANTS

A transfer applicant, according to the University is a student who has graduated from high school and enrolled in a regular session at another college or university. A student who meets this definition cannot disregard his or her college record and apply as a freshman.

#### NEW TRANSFER REQUIREMENTS FOR FALL 1998

New minimum admission requirements for transfer students go into effect beginning with students who transfer to the University in fall 1998.

#### CALIFORNIA RESIDENTS\*

To qualify for admission to the University as a transfer student, a student must meet one of the three sets of requirements described below. The pathway the student follows depends upon whether she was eligible for admission to the University when she graduated from high school.

If the student is a California resident', he or she must have at least a C (2.0) average in all transferable college coursework. The Subject, Scholarship, and Examination Requirements referred to below can be explained by a counselor.

### REQUIREMENTS FOR STUDENTS TRANSFERRING TO UC IN FALL 1998 AND LATER

1. Students who were eligible for admission to the University when they graduated from high school - meaning they satisfied the Subject, Scholarship, and Examination Requirements - are eligible to transfer if they have a C (2.0) average in transferable coursework.
2. Students who met the Scholarship Requirement but not the Subject Requirement must take transferable college courses in the missing subjects earning a C or better in each required course, and have an overall C average in all transferable coursework to be eligible to transfer. Students who met the Scholarship Requirement but not the Examination Requirement must complete a minimum of 12 semester (18 quarter) units of transferable work and earn an overall C (2.0) average in all transferable college coursework completed.
3. Students who were not eligible for admission to the University when they graduated from high school because they did not meet the Scholarship Requirement must:
  - a. Complete 90 quarter units or 60 semester units of transferable college credit with a grade point average of at least 2.4, and;
  - b. Complete the following course pattern, earning a grade of "C" or better in each course:
    - two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and
    - one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning; and
    - four transferable college courses (3 semester or 45 quarter units each) chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, the physical and biological sciences.

(Students who satisfy the Intersegmental General Education Transfer Curriculum prior to transferring to UC will satisfy Option 3b above of the new transfer admission requirements.

#### NONRESIDENTS

The minimum admission requirements for nonresident transfer applicants are the same as those for residents, except that nonresidents must have a grade point average of 2.8 or higher in all transferable college coursework.

\* Residency Status: The requirements for bonafide California residents also apply to dependents of University of California graduates and employees. The manner in which legal residence is defined for tuition purposes is different. For questions about your residency status, contact the Admissions or Registrar's Office at the appropriate campus.

**CRAFTON HILLS COLLEGE**

**Intersegmental General Education Transfer Curriculum for Transfer to CSU and UC 1998-99**

Student's Name \_\_\_\_\_  
 (print) Last First Middle SSN (or Student I.D. #) Major

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 Eleanor Roosevelt and Revelle Colleges, 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 "C" or better.

**INSTRUCTION TO COUNSELORS:** Circle courses and check appropriate column at right. Requirements satisfied by exam should be noted.

	OTHER COLLEGES	COMPLETED	IN PROGRESS	REMAINING
<p><b>AREA 1 - ENGLISH COMPOSITION</b></p> <p>CSU - 3 courses required, one from each group below.                      UC - 2 courses required, one from group a and one from group b</p>				
<p>Group a:</p> <p>English Composition, 1 course, 3 - 4 semester/ 4 - 5 quarter units.                      English 101</p>				
<p>Group b:</p> <p>Critical Thinking - English Composition, 1 course, 3 semester/                      4 - 5 quarter units each course,                      English 102</p>				
<p>Group c:</p> <p>Oral Communication (CSU only), 1 course, 3 semester/                      4 - 5 quarter units, Speech 100</p>				
<p><b>AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING</b>                      (1 course, 3 - 4 semester/ 4 - 5 quarter units)                      Math 108, 140, **141, 151, **250, 251, 252, 254                      NOTE: **Indicates that transfer credit may be limited by UC or CSU or both.                      Please see the catalog or consult a counselor.</p>				
<p><b>AREA 3 - ARTS AND HUMANITIES</b>                      (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</p>				
<p><b>HUMANITIES:</b> 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</p>				

	OTHER COLLEGES	COMPLETED	IN PROGRESS	REMAINING
<p><b>AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES</b>                      (At least 3 courses from a 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, 120;                      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</p>				
<p><b>AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES</b>                      (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.)</p> <p>PHYSICAL: Astronomy 150, 160; Chemistry <u>**101, 102, 150, 151, 212, 213</u>;                      Geography 110, 111, 114, 114, 126; Geology 100, 101, 112, 150, 160, 250;                      Oceanography 101; Physics *100, **110, **111, **200, **201</p> <p>BIOLOGICAL: Biology <u>100, 122, 123, 130, 131</u>; Microbiology <u>**102, 150</u>;                      Anatomy <u>150, 151</u></p> <p>NOTE: Lab courses and Labs are underlined.</p>				
<p><b>UC REQUIREMENT ONLY - Language Other Than English</b>                      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</p>				
<p><b>CSU REQUIREMENT ONLY - U.S. History, Constitution and American Ideals</b>                      (Not a part of IGETC; may be completed prior to transfer)                      (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</p>				

\* 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 plan to attend. Catalogs are usually sent upon request.

Consult with a counselor regarding transfer requirements to the University of Redlands and Loma Linda University

## FACULTY AND ADMINISTRATORS

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

**ACQUISTAPACE, Kris** (1997) ..... English  
**Instructor**

B.A., Washington University, St. Louis, Missouri  
M.E., University of Southern Mississippi

**ANDREWS, Sandra** (1985) Emergency Medical Services  
**Assistant Professor**

A.S., Weber State College

**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  
**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, Kenneth L.** (1979) ..... Respiratory Care  
**Professor**

A.A., Loma Linda University  
B.V.E., California State College, San Bernardino  
M.A., 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

**CISMOWSKI, Robert D.** (1998) ..... Mathematics  
**Associate Professor**

M.S., California Polytechnic University, Pomona  
M.S., University of Alaska

**CLARK, Kristy** (1998). Computer & Information Sciences  
**Instructor**

B.B.A., Boise State University  
M.C.S.M., Creighton University

**COLVEY, Kirsten** (1981) ..... Handicapped Services  
**Professor**

B.A., University of California, Santa Cruz  
M.S., Pepperdine University

**CONTRERAS, Alexander E.** (1997) ..... Student Services  
**Vice President**

A.A., Southwestern College, Chula Vista  
B.B.A., 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

**CROW, Kathy** (1998) ..... Emergency Medical Services  
A.S., Riverside Community College

- 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  
B.A., California State University, San Bernardino
- FRANKLIN, Bradley H.** (1979) . . . . . Respiratory Care  
**Associate Professor**  
B.S., University of Missouri  
M.A., University of Redlands
- 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  
**Associate Professor**  
B.S., Walla Walla College, Washington  
M.A., University of Redlands
- GIBSON, Kathleen R.** (1994) . . . . . Mathematics  
**Assistant Professor**  
A.S., Crafton Hills College  
B.A., University of Redlands  
M.A., California State University, San Bernardino
- GIST, John** (1998) . . . . . Counseling  
**Counselor**  
B.A., M.A., California State University, San Bernardino
- GOMEZ, Luis** (1976) . . . . . President  
B.A., M.A., California State University, San Bernardino  
Ed.D., University of Southern California, Los Angeles
- GONZALEZ, Raymond** (1972) . . . . . Foreign Languages  
**Professor**  
B.A., M.A., University of California, Riverside
- GRIFFITH, Barton L.** (1976) . . . . . Marketing &  
Business Administration  
**Professor**  
B.S., University of Denver  
M.A., Northern Colorado State University
- HARRINGTON, Judith** (1990) . . . . . Counseling  
**Associate Professor**  
B.A., California State University, Fullerton  
M.A., Loyola Marymount University
- HARRISON, Gloria M.** (1968) . . . . . Instruction  
**Vice President**  
A.A., San Bernardino Valley College  
B.A., M.A., University of California, Riverside
- HENSLEY CORREA, Heather** (1994) . . . . . Speech  
**Assistant Professor**  
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., 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  
**Associate 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
- JONES, Patricia** (1998) . . . . . Counseling  
**Counselor**  
B.A., M.A., California State University, San Bernardino
- KIBBY, Ronald O.** (1977) . . . . . Instruction  
**Dean, Occupational Education**  
A.A., Stockton College  
A.B., University of Southern California  
M.A.T., University of Redlands  
Ed.D., Nova University
- KOEPER, John** (1998) . . . . . Counseling  
**Instructor**  
A.S., Chaffey College  
B.A., National University
- KOSMATKA, Arnold L.** (1978) . . . . . Respiratory Care  
**Professor**  
A.A.S., Southern Oregon University  
B.A., M.A., University of Redlands  
Ed.D., Nova University
- LEDOLX, 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., M.A., San Francisco State University
- MANSOURIAN, Farhad** (1990) . . . . . Economics  
**Assistant Professor**  
B.S., M.A., University of California, Riverside

- MATTHEWS, Damaris** (1985) Learning Resource Center  
**Associate Professor**  
B.A., Oakwood College  
M.A., California State University, San Bernardino
- 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., 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) ..... Administrative Services  
**Vice President**  
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/CARE Coordinator  
**Associate Professor**  
B.A., University of California, Riverside
- SEARLE, Jean** (1995) ..... Child Development  
**Instructor**  
CDA, Santa Monica College  
B.A., M.S., Pacific Oaks College
- SHIMELD, Lisa A.** (1989) ..... Microbiology  
**Associate Professor**  
B.A., M.S., California State University, San Bernardino
- SHODAHL, Susan A.** (1977) Instruction **Dean,**  
**Instructional Services and Special Programs**  
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
- SNOWWHITE, Mark S.** (1967) ..... English  
**Professor**  
B.A., University of Maryland  
M.A., University of California, Riverside
- TAYLOR, Katharyn K.** (1979) ..... Respiratory Care  
**Associate 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  
MS., 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  
**Associate Professor**  
A.A., San Bernardino Valley College  
B.A., California State University, San Bernardino
- WHITE, Frances** (1998) ..... Counseling  
**Counselor**  
A.A., San Bernardino Valley College  
B.A., M.A., California State University, San Bernardino
- 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
- YAMAMOTO, June** (1988) . . . . **Interim Dean, Workforce**  
**Readiness Training**  
A.A., Grange Coast College  
B.A., California State University, Long Beach  
M.A., California State University, San Bernardino

## ADJUNCT FACULTY

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

**ABEL-COOPER, Tabitha (1997)** ..... Respiratory Care  
M.A., Loma Linda University, Loma Linda

**ALI, Shafin (1998)** ..... Economics  
M.A., Claremont Graduate School

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

**ANDERSON, Angela (1997)** ..... English  
M.A., California State University, San Bernardino

**ANDERSON, Marlene (1997)** ..... Respiratory Care  
M.A., Loma Linda University, Loma Linda

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

**ANTONIO, Janys (1997)** ..... Physical Education  
M.A., University of California, Irvine

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

**BATES, Debra (1997)** ..... Child Development  
B.A., University of Redlands, Redlands

**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

**BELLAS, Monica (1998)** ..... Anthropology  
Ph.D., University of California, Riverside

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

**BIDDIX, Walter "Jack" (1991)** ..... Fire Technology  
A.S., Riverside Community College  
B.S., Southern Illinois University, Carbondale  
M.S., California State University, Fullerton

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

**BOTTRUFF, Stephen (1997)** ..... Speech  
Ed.D., La Sierra University

**BOURDAGES, DeAnna (1997)** ..... English  
M.A., California State University, San Bernardino

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

**BOWLING, Danny (1997)** ..... Fire Technology  
A.A., Chaffey College, Alta Loma

**BOYNS, David (1997)** ..... Sociology  
M.A., University of California, Riverside

**BURNS, Carole (1997)** ..... Microbiology  
A.A., Crafton Hills College

**CAGLAYAN, Saim (1997)** ..... Art  
B.A., California State University, Long Beach

**CAIMANO, Gary (1998)** ..... English  
M.A., Middlebury College

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

**CAMPBELL, Robin (1997)** ..... Psychology  
M.A., California State University, San Bernardino

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

**CASS, Kelsy (1997)** ..... History  
M.A., Brigham Young University, Provo, Utah

**CERECERES, Virginia (1997)** ..... Spanish  
M.A., University of Southern California

**CHAND, Pansy (1997)** ..... Child Development  
M.A., Penn State University, Pennsylvania

**CHANG, James (1997)** ..... Physics  
Ph.D., University of California, Riverside

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

**CHLEBNICK, John (1997)** ..... Accounting  
B.S., Wayne State University

**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

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

**COOKE, Mitchel (1998)** ..... Spanish  
M.A., University of California, Riverside

**CORTNER, Kimberly (1997)** ..... English  
M.A., Loma Linda University, Loma Linda

- COX, James R.** (1981) . . . . . Administration of Justice  
A.A., San Bernardino Valley College
- CRANDELL, Judith** (1997) . Computer & Information Sciences  
B.A., University of Houston, Texas
- CRAW, Robert L.** (1995) . . . . . Mathematics  
M.A., University Nebraska, Kearney
- CRISE, Robert Dean Jr.** (1989) . . . . . Mathematics  
M.A., California State University, Fullerton
- CRUMRINE, Sandy** (1997) . . . . . Physical Education  
M.A., Azusa Pacific University
- DAVIS, Tracy L.** (1994) . . . . . History  
M.A., University of California, Riverside
- DE LA OSSA, Ralph** (1997) . . . . . Fire Technology  
AS., Crafton Hills College  
B.S., California State University, Long Beach
- DERKSEN, Jared** (1997) . . . . . Mathematics  
M.A., California State University, San Bernardino
- DILLARD, Kristin** (1997) . . . . . Mathematics  
B.A., California State University, San Bernardino
- DRAKE, Penny** (1998) . . . . . Speech  
M.A., California State University, San Bernardino
- ESCALANTE, Sandi** (1994) . . Business & Office Technology  
M.A., California State University, San Bernardino
- ESQUIVEL, Eric** (1995) . . . . . Fire Technology  
A.A., San Bernardino Valley College
- FEJERAN, Timothy** (1997) . . . . . Fire Technology  
A.A., Crafton Hills College
- FOERSTER, Richard** (1997) . . . Computer & Info. Sciences  
B.A., California State University, Fullerton
- FRANKLIN, William J.** (1995) . . . . . Politics  
Ph.D., Claremont Graduate School
- FRANKO, Karla** (1997) . . . . . Religion  
M.A., Azusa Pacific University, Azusa
- GALARZA, Daniel** (1998) . . . . . Spanish  
M.A., University of California, Riverside
- GONZALES, Brent** (1997) . . . . . Physical Education  
B.A., California State University, San Bernardino
- GRANDE, Charles W.** (1969) History/Philosophy/Religion  
M.A., Boston University  
S.T.B., Boston University School of Theology
- GRENFELL, Christopher** (1997) . . . . . Physical Education  
Ph.D., California State University, San Bernardino
- GROCHOWSKI, Joseph G.** (1985) . . . . . Business & Office  
Technology  
Program in Business Administration at La Salle  
Business Institute, Chicago
- GUNDERSON, Howard** (1997) . . . . Anatomy/Physiology  
Ph.D., University of California, Riverside
- 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
- HARDY-DESMOND, Stacey D.** (1996) . . . . . Psychology  
Ph.D., California School of Professional Psychology,  
San Diego
- HARNESS, William** (1997) . . . . . Anatomy  
D.D.S., University of Missouri
- HASHEM, Mazen** (1997) . . . . . Sociology  
M.A., DePaul University, Chicago, Illinois
- HAWKINS, Judith** . . . . . English  
M.A., California State University, San Bernardino
- 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
- HEUMANN, Michael** (1997) . . . . . English  
M.A., University of California, Riverside
- HILLOCK, Romeo** (1997) . . . . . Chemistry  
Ph.D., University of Alabama, Birmingham
- HOBSON, Richard H.** (1995) . . . . . Mathematics  
Ph.D., Pennsylvania State University at University Park
- HODGES, Peter** . . . . . Philosophy  
M.A., National University, San Diego
- HOPKINS, Lisa** (1997) . . . . . Speech  
B.A., California State University, Fullerton
- HOPPER, James** (1997) . . . . . Chemistry  
M.A., University of California, Riverside
- HOVICK, Christopher** (1997) . . . . . Mathematics  
M.A., California State University, Hayward
- HUFF, James** . . . . . Child Development/  
Emergency Medical Services  
Ph.D., Clayton School of Natural Healing & the  
American Holistic
- JACOBS, Jane** (1997) . . . . . Physical Education  
M.A., University of Illinois, Chicago

- JOHNSON, David** ..... Mathematics  
M.S., Air Force Institute of Technology
- JOHNSTON, C. J.** (1974) ..... Mathematics  
MS., University of Arizona, Tucson
- JONASSON, Mark** (1997) ..... Anatomy/Physiology  
Ph.D., Loma Linda University
- JONES, M. JoAnn** (1991) ..... Child Development  
M.Ed., Azusa Pacific University
- JONES, Robert** (1997) ..... English  
M.A., University of California, Riverside
- KADOW, Eugene** (1997) ..... Economics  
M.A., Fresno State, Fresno
- KEITH, Thomas** ..... Philosophy  
M.A., Claremont Graduate School, Claremont
- KIBBY, Janice A.** (1990) ..... Child Development  
B.A., University of Redlands
- LARMON, Robert C.** (1995) ..... Politics  
M.A., University of Southern California, Los Angeles
- LLOYD, Gordon T.** (1977) ..... Economics/Politics  
Ph.D., Claremont Graduate School
- LOCKARD, Kandy** (1997) ..... English  
B.A., Seattle Pacific University, Seattle, Washington
- LOWE, Lynn** (1998) ..... Reading  
M.A., Pacific Oaks
- LOYD, Rene** (1997) ..... Mathematics  
M.A., University of California, Riverside
- LYNCH, Brock** (1997) ..... Mathematics  
M.A., University of California, Riverside
- MACEY, Joan F.** (1979) ..... Business & Office Technology  
B.S., Northern Illinois University at De Kalb
- MADSON, Gordon E.** (1988) ..... English  
M.A., University of California, Los Angeles
- MARTIN, Debra** (1997) ..... Health  
M.A., Azusa Pacific University, Azusa
- MATELJAN, Theresa** (1998) ..... English  
M.S., Ed. University of Souther California
- MATHEWS, Jane L.** (1997) ..... Psychology  
M.A., California State University, San Bernardino
- MCALLISTER, Caroline** (1997) ..... Child Development  
M.A., University of Redlands
- McDONOUGH, Judith** ..... Health/PE  
PH., Loma Linda University, La Verne
- MCGEE, Richard** (1997) ..... Sociology  
M.A., Mississippi St. University
- MCKENZIE, Nellie** (1997) ..... Anatomy/Physiology  
M.A., California State University, San Bernardino
- McKINNEY, William R.** (1981) ..... Psychology  
M. Div., Vanderbilt University, Nashville
- MCKOWN, Derek** (1997) ..... English  
M.A., Syracuse University, Syracuse, New York
- MCMURRAN, Shawnee** (1997) ..... Mathematics  
Ph.D., University of California, Riverside
- METZINGER, Nancy** (1991) ..... Business & Office  
Technology  
MS., Governors State University, Park Forest
- MINOR, Christopher** (1997) ..... Mathematics  
M.A., University of California, Riverside
- MOBLEY, Ernest W.** (1978) ..... Physical Education  
M.A., California State University Long Beach
- MORGAN, Edwin M.** (1997) ..... Mathematics  
M.S., University of Oregon, Eugene
- MORRIS, Donna J.** (1995) ..... Mathematics  
M.A., Fresno Pacific College, Fresno
- MOWER, Frances E.** (1989) ..... Child Development  
M.A., Pacific Oaks College, Pasadena
- MUNRO, Theresa** (1997) ..... History  
M.A., University of California, Riverside
- NIELSEN, William C.** (1980) ..... Physics  
MS., Air Force Institute of Technology
- NOBLE, Alan P.** (1988) ..... Chemistry  
M.S., University of Redlands
- O'TOOLE, Robert L.** (1990) ..... Accounting  
B.S., Arizona State University
- OVERSTREET-MURPHY, Penni Kaye** (1994) ..... Fire  
Technology  
M.A., California State University, San Bernardino
- OYLER, Michele** ..... French  
M.A., California State University, Fullerton
- PEQUENO, Catherine L.** (1995) Computer & Information  
Sciences  
B.S., California State University, San Bernardino
- PIERCE, Leah C.** (1990) ..... Mathematics  
B.A., California State University, San Bernardino
- POFFEK, Christine M.** (1984) ..... Physical Education  
California State University, Fullerton

- PLAXTON, Charity** ..... Psychology  
M.A., Loma Linda University
- POWELL, Wallace W.** (1977) ..... Physical Education  
M.A., Northern Arizona University
- REYES, Henry L.** (1997) ..... Administration of Justice  
B.A., California State University, San Bernardino
- ROBERSON, Darren** (1997) ..... Fire Technology  
B.A., Humboldt State University, Arcata
- ROBINSON, James L.** (1997) ..... Politics  
Ph.D., University of California, Los Angeles
- ROMANO, Nicholas** (1997) ..... C&IS  
A.S., Crafton Hills College
- SADLER, Roger M.** (1995) ..... Biology  
M.S., Loma Linda University at Loma Linda
- SANCHEZ, Wallace A.** (1997) ..... Physical Education  
M.A., California State University, San Bernardino
- SCHUERMAN, Patricia G.** (1989) .... Business & Office  
Technology  
M.A., University of Redlands
- SCHWENNESEN, Carol** ..... Art  
M.F.A., Claremont Graduate School
- SENTMAN, H. T.** (1994) ..... C&IS  
M.A., Webster University at St. Louis
- SHELBY, Patricia** ..... Sociology  
M.A., California State University, Fullerton
- SHOOK, William** . . Business Administration/Marketing  
M.A., California State University San Bernardino
- SKOUSEN, James** (1997) ..... Theatre Arts  
M.A., California State University, Fullerton
- SMITH, Kathleen** (1997) ..... Fire Technology  
B.A., California State University, San Bernardino
- SMYTH, Pamela** ..... English  
M.A., California State University, San Bernardino
- STONE, Clarence E.** (1988) ..... Business Administration  
M.P.A., University of Southern California
- SULLIVAN, Jacquelyn** (1997) . . . . . Physical Education  
B.A., California State Polytechnic University, Pomona
- SWANSON, William Eric** (1977) . . . . . English/Psychology  
M.A., Claremont Graduate School  
M.B.A., California State University, San Bernardino
- TAYLOR, Clifford D.** (1995) . . . . . Psychology/Child  
Development  
B.A., California State University, Fullerton  
M.A., Pepperdine University at Malibu
- THOMERSON, KATHERINE J.** (1988) ..... English  
M.A., Wesleyan University Connecticut
- TOY, James E.** (1983) ..... Fire Technology  
A.S., Chaffey College, Rancho Cucamonga
- TYSON, Robert** (1994) ..... Emergency Medical Services  
B.A., Fort Lewis College, Durango
- URIA, Jose L.** (1989) ..... Spanish  
M.Ed., Azusa Pacific University
- VERDON, Richard** (1986) ..... Mathematics  
M.A., University of Redlands
- WAREHAM, Arlan K.** (1995) ..... Mathematics  
Ph.D., University of California, Riverside
- WEBSTER, Linda** (1994) ..... Computer & Information  
Sciences  
B.S., California State University, San Bernardino
- WEDDINGTON, Michael J.** (1990) ..... Fire Technology  
B.A., California State University, San Bernardino
- WHEELOCK, Donald** ..... Accounting  
M.A. Ed., California State University, San Bernardino
- WORD, Dan** (1997) ..... Emergency Medical Services  
B.A., Cogswell Polytech. College, Sunnyvale
- WRIGHT, Steven** ..... English  
M.A., California State University, San Bernardino
- WYSOWSKI, Michael E.** (1986) ..... Physical Education  
B.S., Illinois State University at Normal
- YOUNG, Galen** (1997) ..... Fire Technology  
B.A., Cogswell Polytech College, Sunnyvale

**PROFESSORS EMERITI**

- JOSEPH T. ALLEN (1954-1984) ..... Geology
- H.D. ANDERSON (1946-1978) ..... Foreign Language
- JAMES G. BISI (1968-1997) ..... Counseling
- ROGER C. ANTON (1946-1976) ..... President  
Named Professor Emeritus (posthumously) by the  
Board of Trustees, June 3, 1977.
- GEORGE ASHTON (1957-1978) ..... History
- OLEN BAGGETT (1965-1986) ..... Physical Education
- DORIS BOARDMAN (1961-1982) ..... Library
- JOSEPHINE E. BROHOLM (1947-1975) ..... Speech
- MARIAN T. CARTER (1970-1993) ..... Speech
- EDWARD L. CHAPIN, JR. (1953-1987).... Assistant Dean,  
Continuing Education and Community Services
- GORDON A. CLOPINE (1961-1997) ..... Geology
- RICHARD H. GATCHEL (1971-1987) ..... Philosophy/  
Religious Studies
- VIRGINIA M. GAUSTAD (1970-1987) ..... Office  
Administration
- KENNETH L. GRUB (1965-1982) ..... History
- WILLIAM H. HOYT (1955-1987)..... Physical Education
- EUGENE V. KADOW (1966-1995)..... Economics
- FRANCIS J. KLING (1965-1992) ..... Sociology
- CLARENCE D. LAMBERT (1965-1987) ..... Chemistry
- ARTHUR F. MILLER (1974-1989) ..... Psychology
- HAROLD B. PIGOTT (1946-1975) ..... English
- SYLVESTER L. PATRICK (1964-1987) ..... Counseling
- WALTER C. SCHUILING (1964-1984) ..... History and  
Politics
- V. DEAN STEWART (1950-1981) ..... Chemistry

**DEAN EMERITUS**

- DON A. YOWELL (1972-1987). Dean, Student Personnel  
Services

**VICE PRESIDENTS EMERITI**

- JAMES G. BISI (1968)... Vice President, Student Services
- GORDON A. CLOPINE (1961) ..... Vice President,  
Administrative Services and Professor of Geology/  
Geography

**CLASSIFIED EMPLOYEES**

- AGUILAR, Juanita**  
Admissions/Registration & Records Clerk II
- ALBRIGHT, Gavan**  
Laboratory Technician, Science
- APONTE, Christina**  
Admissions/Registration & Records Clerk III
- ARROWAY, Deborah**  
Admissions /Registrations & Records Clerk I
- AZELTON, Jim**  
Golf Course/Tennis Court Attendant
- BALTZ, Stephen P.**  
Custodial & Warehouse Supervisor
- BARRA, Victoria**  
Secretary I, Instruction Office
- BARTH, Clifford E. Jr.,**  
Maintenance Person
- BINGHAM, Kelly**  
Administrative Secretary, Occupational Education
- BIRD, WANDA**  
Food Service Worker II
- BOATMAN, John**  
Grounds Caretaker II
- BOGH, Wayne**  
Department Network Specialist
- BREAZILE, Sue**  
Secretary I, Fire Science
- BRISENO, Humberto S.**  
Grounds Caretaker II
- BRUNER-JONES, Sherri**  
Clerk Typist II, Teaching Aids
- BURGESS, William**  
College Police Officer
- BURNS, Carole A.**  
Laboratory Technician, Microbiology
- CAO, Truc**  
Custodian I
- COLE, Judith**  
Learning Resource Assistant
- COVINO, Darryl J.**  
Grounds Supervisor

**COX, Cheryl**  
Administrative Assistant to the President

**COX, Gerard**  
Cafeteria Manager

**CROOKS, Beth**  
Account Clerk I, Campus Business Office

**DE LA FUENTA, Norma**  
Food Service Worker I

**DIEHL, Carol**  
Bookstore Assistant II

**DONNELL, Ruby**  
Administrative Assistant I, Instruction Office

**EDGAR, Ellen C.**  
College Registrar

**EDWARDS, Leroy**  
Maintenance Person

**EELLS, Robert L.**  
Maintenance Supervisor

**FISCHER, Henry**  
Custodian I

**FITE, Patrick**  
Public Information Officer

**FURTADO, Trudy**  
Account Clerk II, Campus Business Office

**GIMPLE, Tina**  
Job Placement/Career Guidance Specialist

**HEEMSTRA, Diana K.**  
Bookstore Manager

**HOLMAN, Florence**  
Electronic Switchboard Operator

**HYDORN, Beverly A.**  
Administrative Secretary Continuing Education

**JAURE, Lucy**  
Secretary II, Counseling

**JOHNSON, Richard L.**  
Grounds Caretaker, II

**JOHNSTON, Dennis**  
College Police Supervisor

**KIESEWETTER, Nancy A.**  
Library Technical Assistant I

**KIRKHART, Patrick M.**  
Grounds Caretaker II

**KIRKHART, Richard**  
Grounds Caretaker II

**LEE, Bonnie**  
Custodial/Delivery Driver

**LITVINOFF, Linda**  
Secretary I, Respiratory Care

**LOVINGFOSS, Stanley W.**  
Laboratory Technician, Physics & Astronomy

**McINTOSH, Cheryl**  
Police Secretary/Dispatcher

**MECHIKOFF, Carmen**  
Library Technical Assistant I

**MERCADO, Kathleen**  
Admissions/Registration & Records Clerk III

**MILLER, Greg**  
Laboratory Technician, Chemistry

**MOSELEY, Linda K.**  
Clerk Typist II, Instruction

**NGUYEN, Ben**  
Custodian I

**NGUYEN, Long**  
Custodian I

**OLMOS, Jose G.**  
Grounds Caretaker II

**POFF, Lisa**  
Health Services Secretary

**PRITCHARD, Mary E.**  
Technical Assistant, Emergency Medical Services

**RACOSKY, Vincent B.**  
Audio-Visual Specialist III

## CALWORKS ADVISORY COMMITTEE

**REA, Marty**  
Food Service Specialist I

**RECORD, Laura F.**  
EOPS/CARE Program Assistant

**REGALADO, Arnold**  
Storekeeper II

**ROBERTS, Sandra**  
Financial Aid Specialist I

**SAENZ, Patricia**  
Clerk Typist II, Teaching Aids

**SANFORD, Ervin C.**  
Custodian I

**SHERMAN, Marilyn**  
Administrative Assistant, Student Services

**SOSA, Paul E., Jr.**  
Custodian I

**SOUSA, Juana**  
Financial Aid Coordinator

**SOUTHERLAND, Frances**  
Admissions/Registration & Records Clerk I

**SOWERS, Vickie**  
Library Technical Assistant II

**STEWART, Gwenn**  
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**STOCKMAN, Jacquelyn**  
Food Service Worker I

**SUTHERLAND, S. Gary**  
Theatre Technician

**TRAILL, Loral E.**  
Learning Resources Assistant

**VIEIRA, Ezequias**  
Custodian II

**WILLIAMS, Barbara**  
Secretary I, Disabled Student Services

**WINGLER, Jacquelyn**  
Clerk Typist I, Campus Business Office

**WINTERS, April**  
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BAHNER, Daniel

BORDELON, Cherry

BUTTON, Jan

CASTILLO, Antoinette

CLARK, Diane

CONTRERAS, Alex

COTA, Marco

EDGAR, Ellen

EGLAND, Eileen

FARHAR, Dennis

FERRACONE, Donna

GIACONA, Judy

GIMPLE, Tina

GRIFFITH, Bart

HARRISON, Gloria

HOLMLUND, Linda

JONES, Patty

KIBBY, Ron

KOSMATKA, Arnie

LICERIO, Marty

LIKENS, Mike

MATTHEWS, Damaris

MCCORMICK, Kim

MEDINA, Monique

MORRIS, Dalene

RIOS, Agustin

SAUTTER, Paul

SNOWWHITE, Mark

SEARLE, Jean

SOUSA, John C.

SOUSA, Juanita

STEWART, Gwenn

TAYLOR, JoAnn

VAJNA, Susan

WRIGHT, William

YAMAMOTO, June

## EMERGENCY MEDICAL SERVICES ADVISORY COMMITTEE

- CARNES, Sandra  
San Bernardino County, EMS
- CHAO, Kevin  
Clinical Manager  
American Medical Response
- ORTEGA, David  
Firefighter/Paramedic  
California Department of Forestry
- PETRILLA, Karen  
Riverside Country EMS
- ROMERO, Paul  
Manager  
Morongo Ambulance
- ROSE, ERIC  
Captain  
Southern California Fire EMS Officers
- SMITH, Virginia  
Paramedic Liaison Nurse  
San Antonio Community Hospital
- VEROSIK, Eileen  
Paramedic Liaison Nurse  
Redlands Community Hospital

## RADIOLOGIC TECHNOLOGY ADVISORY COMMITTEE

- DR. FUJIMOTO  
School Medical Director
- Preszler, Julie  
Clinical Instructor
- Guy, Joy  
Program Director
- Hudson, Al  
Department Manager
- Olivias, Suzanne  
Personnel Officer

## RESPIRATORY CARE PROGRAM ADVISORY COMMITTEE

- HOLMBLAD, Bruce, M.D.  
Musselman, Susan, R.R.T.  
Riverside Community Hospital
- GIL, Enrique, M.D.  
ERICKSON, Leif E., R.R.T.  
DEXTER, James, M.D.  
Redlands Community Hospital
- SHEPARD, Bruce, M.D.  
BROMAN, Don, R.R.T.  
LANGDON, Ed, R.R.T.  
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- SPECHT, Leonard, M.D.  
ANDERSON, Jennifer, R.R.T.  
Jerry L. Pettis Memorial Medical Center
- MALINOWSKI, Tom, R.R.T.  
Loma Linda University Medical Center
- BEACHKO, A.J., Attorney at Law
- KIBBY, Ron, Dean of Occupational Education  
Crafton Hills College
- BRAINARD, Tony, R.R.T.  
BRYSON, Ken, R.R.T.  
FRANKLIN, Brad, R.R.T.  
HULTEN, Gary, R.R.T.  
KOSMATKA, Amie, R.R.T.  
TAYLOR, Kathy, R.R.T.
- KIBBE, Mark A. (Second-year student)  
President, Beta II Club
- LYNN, David A. (First-year student)  
Vice President, Beta II Club
- ROBINSON, Mark I., M.D.  
HALLER, Colene, R.R.T.  
San Bernardino County Medical Center
- SHELDON, Richard L., M.D.  
Beaver Medical Clinic, Inc.
- HEGSTED, Douglas, M.D.  
LOCKRIDGE, Hank, R.R.T.  
HARTMAN, Lynne, R.R.T.  
Riverside County Regional Medical Center
- DAVIDSON, James, R.R.T.  
Foothill Oxygen Service, Inc.

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