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This Catalog may be purchased at the Chaffey College Bookstore, Campus Center East, for $3.00. To order by mail, send $5.00 to Catalog Sales, Instructional and Institutional Services, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002. Make checks payable to Chaffey College.
Chaffey College

1883 – 1997

5885 Haven Avenue, Rancho Cucamonga, California 91737-3002
909/887-1737, 822-4484
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A new world order is emerging all around us and is more defined by technology, economics, and communications than by politics and social issues. Some very startling developments are beginning to occur that will have profound effects on the way we live and interact with others. In 1995 the Library of Congress was made available to the public via the Internet and Thomas software. In the first four days, approximately 275,000 documents were downloaded. This may be the largest transfer of primary source material in history. It represents the tip of the iceberg of a new kind of knowledge revolution, one in which the user, or the student, defines his/her own needs, as opposed to professionally packaged offerings.

New farms now exist that are growing and sending to market genetically engineered fruits and vegetables. Microrobots are now capable of being swallowed, doing high-definition screenings of the digestive track, and allowing the physician to do on-the-spot laser surgery. Through the use of virtual reality, medical specialists are able to direct general practitioners through emergency surgical procedures that are saving lives. Groups of third graders from different countries are forming interest groups on the Internet. Quality college courses are now available on satellite television in several different languages. Increasingly, large corporations are selling off expensive real estate and contracting with their employees to work at home through use of computer networks. Suddenly, the soft skills (the ability to work effectively in teams, honesty and integrity, work ethic and responsibility, listening, customer orientation, ability to learn, motivation) are at least as important as the “hard skills” (reading, writing, computation, and technical skills). Demilitarization of the society has abolished thousands of middle-income jobs, and when coupled with other corporate downsizings, has significantly reduced the traditional middle class. These changes have come fast and they are being felt by more and more people.

One thing has become very clear with the many changes confronting us all—education has never been more important. One of the reasons there has been so much public interest in and debate about the quality of education is education is the primary vehicle for accomplishing the American dream: having a good-paying, meaningful job; owning one’s own home; making a contribution to one’s community and to society in general. Throughout the history of the United States, one could have access to the good life through hard work. Today, hard work is not enough and having a high school education is not enough. Some formal education beyond high school and in most cases continued education throughout one’s career is now a requirement of most good-paying jobs. Even the professions which have traditionally required advanced degrees beyond the baccalaureate now require continuous, lifelong education to stay current in one’s field.

Community colleges provide the most affordable and accessible entry point for Californians seeking to benefit from higher education. Community colleges also offer second and third chances for adults who need to upgrade their skills, prepare for a new career, start a business, complete the first two years of a bachelor’s degree, or to continually improve what they do well. Chaffey College has a proud history of service to the citizens of the west end of San Bernardino County. Most recently the college has replaced its computers on campus and remodeled all of its computer labs, significantly enhanced the graphic arts, science, and basic skills laboratories. The college operates an instructional center in Ontario, offers evening classes at many area high schools, and in the fall of 1996 will open a new instructional center in Fontana. The college has instituted a weekend college, offering Friday and Saturday classes to many who cannot attend classes during the week.

Chaffey Community College is your college. I welcome you to use us in whatever ways you need to fulfill your own personal educational and career plans. If you need assistance, the college has an excellent counseling staff ready to serve you.

Jerry W. Young
Superintendent/President
Schools and Services of the College

School of Arts and Humanities
Wayne Hubert, Dean
Art
Creative Arts
English
English-as-a-Second Language
Fine Arts
French
German
History
Humanities
Interior Design
Journalism
Museum-Gallery
Music
Philosophy
Photography
Physical Education
Physical Education: Athletics
Reading
Spanish
Theatre Arts

School of Business and Applied Technology
Louise Agos, Dean
Accounting
Aeronautics
Autobody Repair
Automotive Technology
Business Administration
Business and Office Technologies
Computer Information Systems
Computer Science
Consumer Studies
Electricity
Electronics
Fashion Design and Merchandising
Food Service Management
Hotel and Food Service Management

Economic and Community Development
Robert Pile, Dean
Business and Professional Development Institute
Center for Economic Development
Community Education
Community Services
Continuing Education
Customized Training
Office of International Trade
Vocational Education

Instructional and Institutional Services
Inge Pelzer, Dean
Admissions and Records
Basic Skills
Counseling (Guidance)
Disabled Students, Programs and Services
Fontana Learning Center
Institutional Research
Library Services
Ontario Education Center
Schedule and Catalog
Transfer and Career Center
Word Processing Services

School of Physical, Life, and Health Sciences
Margaret Greer, Dean
Astronomy
Biology
Chemistry
Dental Assisting
Drafting
Engineering
Environmental Technology
Geology
Health Science
Mathematics
Nursing: Associate Degree Nursing
Nursing: Vocational Nursing
Physics
Radiologic Technology
Science
Statistics
Student Health Services

School of Social and Behavioral Sciences
Carol Sayles, Dean
Anthropology
Broadcasting
Child Development
Children’s Center
Communication Studies
Correctional Science
Cooperative Education
Economics
Extended Opportunity Programs and Services (EOPS)
Financial Aid
Geography
Gerontology
Honors Program
International Education
Job Placement
Political Science
Psychology
Social Science
Sociology
The College

Chaffey College, one of the first colleges to be established in California, is a two-year public community college situated in an area of natural and tranquil beauty in Southern California. Its campus occupies 200 acres of rolling lawns and native foliage in the foothills of the majestic San Gabriel mountains. Founded in 1883 as a private college, Chaffey has been a publicly funded college since 1916 and is accredited by the Western Association of Schools and Colleges. Chaffey is a member of the American Association of Community Colleges, the Community College League of California, Servicemembers Opportunity Colleges (SOC), and is approved by the Office of Private Post-Secondary Education for Veterans Benefits.

Mission Statement

Our mission is to provide comprehensive, student centered community college education.

We are committed to developing equality by providing equal access to opportunity for our students, our faculty and staff and the District we serve.

We also affirm our commitment to provide service to the community and to enhance the quality of life within the college district.

We are committed to excellence.


Student Equity

The Governing Board, superintendent/president, faculty, and staff commit to actively pursuing equity for Chaffey College students of all ages, disabilities, diverse cultures, and alternate lifestyles through the implementation of the goals and objectives of the Student Equity Plan. Being sensitive to the personal, professional, and esthetic needs of its diverse populations and cultures, the college will incorporate into its educational process the richness of world cultures, languages, ethnic, and artistic pluralism that is strongly represented within our community.

We commit to respecting, celebrating, and integrating students' diverse cultures into all phases of campus life. We will provide leadership in creating a climate to ensure that all students, faculty, staff, and administrators share in the implementation of Chaffey College's equity goals.
History

Chaffey College represents the vision of George and William Chaffey, who founded the City of Ontario in the last quarter of the nineteenth century. Recognizing the need for an institution of higher learning, the Chaffey brothers donated land and established an endowment for a private college known as the Chaffey College of Agriculture of the University of Southern California. On March 17, 1883, the cornerstone of the college was laid at Fourth and Euclid in Ontario. The college closed for a brief period in the early 1900s due to meager financial resources and its building was occupied by the new Ontario High School. In 1906 the Chaffey endowment was legally separated from the University of Southern California and the reorganized Chaffey Union High School District became the beneficiary of the College Trust.

In 1916 the Chaffey Junior College of Agriculture was added as a postgraduate department to the high school. A separate junior college district was created in 1922 and in 1957 bonds were approved in support of a complete separation of the high school and college facilities.

Property was acquired in Alta Loma and a long-anticipated new college opened its doors in the spring of 1960.

Today, with this wealth of tradition and experience, Chaffey is proud to continue providing excellent programming in an atmosphere conducive to learning.

The District

The college district serves the population of the vibrant inland empire of western San Bernardino County, where the communities of Chino, Chino Hills, Fontana, Guasti, Montclair, Mt. Baldy, Ontario, Rancho Cucamonga (Alta Loma, Cucamonga, and El Rancho), and Upland are located. Four districts serving high school students are contained in these communities. They are the Chaffey Joint Union High School, the Chino Unified School District, the Fontana Unified School District, and the Upland Unified School District.

Administration and Governing Board

The superintendent/president is the chief administrative officer and is assisted by an executive vice president, vice presidents, deans, directors, and members of the faculty in bringing educational excellence to the community. The Governing Board has five members elected by district voters, and a student member elected by the student body.

Schools and Services

The college has four schools which provide an extensive range of the highest quality transfer and occupational classes. They are: Arts and Humanities, Business and Applied Technology, Physical, Life and Health Sciences, and Social and Behavioral Sciences. Instructional and Institutional Services and the Center for Economic development provide additional services and support. The college also provides many excellent student support services including career planning assistance, job placement, financial aid, health care, child care, and help in housing and transportation.

Curricula

The College offers lower division courses for students who plan to transfer to a four-year college or university, occupational courses for students who wish to gain competence in employable skills or who wish to improve their skills, and general education courses for all students to provide them with an awareness of the ideas and ideals of our cultural heritage.

Transfer programs are planned to meet the lower division requirements of four-year colleges and universities which divide their work into lower division and upper division and include introductory general education courses designed to ensure that students have the skills necessary for success in more advanced classes, to introduce students to a wide variety of academic services and give them a working understanding of the fundamental assumptions, theories and laws peculiar to each, and to expose students to the insights from each of the disciplines.

Occupational programs are kept current and latest information on occupational requirements is made available to students through interaction with community leaders, advisory committees, surveys of local needs, and cooperation with business, industrial, and public service organizations. In addition, Learning Centers, both on and off-campus, provide the community with resource centers for the development of basic skills needed for the GED or high school proficiency exams, improve their basic skills and secure tutoring and special supplementary materials.

Degrees

Students who successfully complete the requirements for graduation are awarded Associate in Arts and Associate in Science degrees. Students who complete the requirements of selected programs receive Certificates of Achievement.
Semester System

The College is organized on the semester system. The academic year includes two 18-week semesters and a six-week summer session.

In addition to the regularly scheduled classes, intensive short-term classes are offered. Some open-entry, open-exit classes allow for flexible scheduling.

Day and evening classes are available for full-time and part-time students. Daytime classes are scheduled from 8:00 a.m. to 4:30 p.m. Monday through Friday. Evening classes usually begin at 6:00 p.m. Monday through Thursday. Some laboratory and lecture classes may meet on Saturday. Occasionally, field trips are scheduled outside the normal class meeting time and may include weekends.

Faculty

The faculty is composed of men and women who have completed the rigid requirements for certification by the State of California. Each faculty member has demonstrated subject matter competency, the ability to teach that subject matter, and the motivation to remain current in his/her field.

Special efforts have been made to recruit a faculty that reflects the ethnic composition of the student body.

Faculty members come from all over the world. Their contributions are numerous to the communities in which they reside and to the teaching profession. They have been leaders of business and industry, Broadway entertainers, prize-winning scientists and writers, technical experts, scholars and instructors in other institutions from primary grades to graduate schools. They have worked in every field from accounting to zoology and share their rich experience with their students.

The faculty is an exciting, dynamic group of committed professionals. Each in his/her own way helps college students to achieve their educational goals and to lead more fulfilling lives.

Facilities

The college is equipped with science, engineering, foreign language, and reading laboratories as well as shops which meet the standards of occupational education. A wide selection of business machines, including word processors and computers, is available for instruction in accounting, computer technology, and office technology.

The Rex W. Wignall Art Museum/Gallery offers many exciting exhibits and programs which are open to the community as well as to students each academic year. Drama, musical and dance productions are held in the Theatre which accommodates 350 persons.

Audio-visual facilities are located in Wargin Hall, where closed circuit color videotape is made available to classrooms campus wide.

A television studio, photography studio, and graphic arts studio are located in the Vocational Education Building. A drafting laboratory is in the east wing of the building.

Other facilities include the Earl Sicosky gymnasium with a playing floor of 90’ x 116’ and a seating capacity of 2,000; Children’s Centers where children of student-parents receive care, a student center and lounge, cafeteria, health care, bookstore, post office, a free-speech area; and learning centers.

LIBRARY

The library provides an on-campus study area for students. Here, a main floor reading room and mezzanine provide ample seating for students. In addition to one large group study room, there are eight small group study rooms seating four to six students.

The college collection contains more than 73,000 volumes in the circulating and reference book collections and more than 250 different magazines and journals in the periodicals wing.

The library also provides the following services for students: video player/monitors to view videos in the library collections, electronic coin operated typewriters, IBM and Macintosh computers with word processing and vended card printers, microfilm readers / printers, copy machines and reserve desk for instructor-provided material.

Students who need help in finding information and materials and in the use of the library’s resources will receive ready and friendly assistance from librarians at the reference desk. The library is open 61 hours per week; 8 a.m. to 8 p.m. Monday, Tuesday, Wednesday, Thursday, 8 a.m. to 4 p.m. Friday, 9 a.m. to 2 p.m. Saturday.

OFF CAMPUS EDUCATION

Each semester Chaffey College offers evening credit classes in district high schools, and also maintains off-campus centers in Ontario, Fontana, and Rancho Cucamonga.

ONTARIO EDUCATION CENTER

The Ontario Education Center, 208 West Emporia, Ontario, provides courses in academic and vocational areas and most of the same student services that are offered on the main campus. Examples of some of the classes are accounting, business, business and applied technologies, child development, communication studies, computer information systems, consumer studies, correctional science, computer assisted drafting, economics, English, guidance, history, mathematics, philosophy, political science, psychology and others.
The center features a credit and non-credit open entry/open exit basic skills lab where students can study mathematics, English fundamentals, and reading. Learning resources include computers in the basic skills lab and computer lab. Two classrooms are devoted to teaching English as a Second Language and a laboratory serving students with special needs.

CENTER FOR ECONOMIC DEVELOPMENT
The mission of the Center for Economic Development, 223 West Emporia, Ontario, is to provide a variety of quality educational, training, and retraining opportunities, and special services to business, industry and government in a cost-effective manner. The purpose is to provide for a well-trained, literate, articulate and culturally diverse workforce. The Center offers a variety of educational training opportunities including Business and Professional Development, Customized Training, Community Services, and International Business.

Business and Professional Development Institute offers courses, programs, seminars, workshops, trade shows, and conferences that address the needs of the Inland Empire workforce. The programs are designed to assist the prospective entrepreneur with the information needed to develop and succeed in business and to provide access to career professionals seeking to advance their career and/or licensure requirements.

Customized Training, through its partnership with business, industry, and government, is designed to develop customized on-site training to meet their specific needs. Services include assessment and testing of employee skills and employee retraining to meet changing business needs.

Community Services provides avocational and recreational fee-based programs in personal development, health and fitness, and children's programs as well as additional general interest programs.

Office of International Trade provides international trade leads for business and works closely with federal, state, and regional agencies whose primary activity is international business. Other activities include trade shows, trade missions, seminars, and workshops.

FONTANA EDUCATION CENTER
The Fontana Education Center, 16855 Merrill Avenue, provides courses in academic and vocational areas and most of the same student services that are offered on the main campus. Examples of some of the classes are accounting, business and applied technologies, child development, communication studies, computer information systems, consumer studies, correctional science, economics, English, guidance, history, mathematics, philosophy, political science, and psychology.

The new Fontana Education Center has an open entry/open exit basic skills lab that offers instruction in mathematics, English fundamentals, English as a Second Language, reading, and, on a credit or non-credit basis.

LEARNING DEVELOPMENT CENTER (LDC)
The goal of the Learning Development Center, 9375 Ninth St., Rancho Cucamonga, is to provide vocational training and supportive programs and services in collaboration with other community agencies for students with physical, developmental, or learning disabilities. Students with a verifiable disability are eligible for the program and services of the Learning Development Center (LDC). Procedures required to attend the LDC include an interview, placement testing, and receipt of recent medical and psychological documentation. A written medical report must include the result of a PPD skin test. Students who are 18 years of age or older, or who are 16 years of age and have completed the eighth grade, may participate in the program.

The Chaffey College Foundation
The Chaffey College Foundation was organized in 1987 to support the activities and programs of the College. The Foundation coordinates fund-raising events and received gifts to the College. Its leaders have been instrumental in forging partnerships between the College and the communities it serves. The Foundation has encouraged College and community participation in a variety of intellectual, cultural, recreational, and social activities.

The Chaffey College Foundation is quickly becoming one of the most successful community college Foundations in Southern California. Established in 1987 by friends and alumni, the purpose of the Foundation is to preserve Chaffey College’s position of leadership by providing assistance to meet the needs of all students. Costs rise and resources decrease. According to Chaffey College President, Dr. Jerry Young, “The state of California has moved from providing public support to institutions of higher learning to providing public assistance to public education. This subtle distinction is having a profound impact. . .”
Admission, Registration, and Financial Information

Dates And Deadlines 1996–1997

SUMMER SESSION . . . . . . . . . . . . . . JUNE 17 – JULY 25
• First Day to apply for Summer Session . . . . . . . . April 8
• Priority Registration . . . . . . . . . . . . . . May 13
• Registration by PHONE for Continuing Students . . . . . . . . . . . . . . . May 14–31
• Registration & Program Changes
  for ALL Students . . . . . . . . . . . . . . . . . . . June 3–12
• Instruction Begins . . . . . . . . . . . . . . . . June 17
• Late Registration . . . . . . . . . . . . . . . . . . . June 17–18
• Last day to add classes
  without petition . . . . . . . . . . . . . . . . . . . . . June 20
• Independence Day Holiday Observed . . . . . . . . July 4
• Deadline for dropping full term classes;
  applying for Credit by Examination;
  applying for graduation; adding open-entry/open-exit classes . . . . . . . July 17
• Instruction Ends . . . . . . . . . . . . . . . . . . . . . July 23
• Final Examinations . . . . . . . . . . . . . . . . . . . July 24 & 25

FALL SEMESTER . . . . . . . . . . . . AUGUST 12 – DECEMBER 17
• First Day to apply for Fall Semester . . . . . . . . April 8
• Priority Registration . . . . . . . . . . . . . . July 1
• Registration by PHONE for
  Continuing Students . . . . . . . . . . . . . . July 2–25
• Registration & Program Changes
  for ALL Students . . . . . . . . . . . . . . . . . . . July 26–August 8
• General Staff Meeting -
  No Classes Held . . . . . . . . . . . . . . . . . . . . August 9
• Instruction Begins . . . . . . . . . . . . . . . . . . . August 12
• Late Registration . . . . . . . . . . . . . . . . . . . August 12–16
• Last day to add classes
  without petition . . . . . . . . . . . . . . . . . . . . . August 30
• Labor Day Holiday . . . . . . . . . . . . . . . . . . . September 2
• Veterans’ Day Holiday . . . . . . . . . . . . . . November 11
• Deadline for dropping full semester classes;
  applying for Credit by Examination;
  applying for graduation; adding open-entry/open-exit classes . . . . . . . October 1
• Instruction Ends . . . . . . . . . . . . . . . . . . . . . November 25
• Registration by PHONE for
  Continuing Students . . . . . . . . . . . . . . November 26–December 17
• Registration & Program Changes
  for ALL Students . . . . . . . . . . . . . . . . . . . December 18–20 & January 2–9
• New Year’s Day Observed . . . . . . . . . . . . . January 1
• Instruction Begins . . . . . . . . . . . . . . . . January 13
• Martin Luther King Holiday . . . . . . . . . . . . . January 20
• Late Registration . . . . . . . . . . . . . . . . . . . January 21–31
• Last day to add classes
  without petition . . . . . . . . . . . . . . . . . . . . . January 31
• Abraham Lincoln Holiday . . . . . . . . . . . . . February 14
• George Washington Holiday . . . . . . . . . . . . . February 17
• Deadline for applying for graduation and certificates . . . . . . . . . . . . . March 14
• Spring Break . . . . . . . . . . . . . . . . . . . . March 17–21
• Deadline for dropping full semester classes;
  applying for Credit by Examination; adding open-entry/open-exit classes . . . . . . . April 25
• Instruction Ends . . . . . . . . . . . . . . . . . . . . . May 14
• Final Examinations . . . . . . . . . . . . . . . . . . May 15–23
• Commencement . . . . . . . . . . . . . . . . . . . . May 22
• Memorial Day Holiday . . . . . . . . . . . . . . May 26

SPRING SEMESTER . . . . . . . . . . . . JANUARY 13 – MAY 23
• First Day to apply for
  Spring Semester . . . . . . . . . . . . . . . . October 1
• Priority Registration . . . . . . . . . . . . . . November 25
• Registration by PHONE for
  Continuing Students . . . . . . . . . . . . . . December 18–20 & January 2–9
• New Year’s Day Observed . . . . . . . . . . . . . January 1
• Instruction Begins . . . . . . . . . . . . . . . . January 13
• Martin Luther King Holiday . . . . . . . . . . . . . January 20
• Late Registration . . . . . . . . . . . . . . . . . . . January 21–31
• Last day to add classes
  without petition . . . . . . . . . . . . . . . . . . . . . January 31
• Abraham Lincoln Holiday . . . . . . . . . . . . . February 14
• George Washington Holiday . . . . . . . . . . . . . February 17
• Deadline for applying for graduation and certificates . . . . . . . . . . . . . March 14
• Spring Break . . . . . . . . . . . . . . . . . . . . March 17–21
• Deadline for dropping full semester classes;
  applying for Credit by Examination; adding open-entry/open-exit classes . . . . . . . April 25
• Instruction Ends . . . . . . . . . . . . . . . . . . . . . May 14
• Final Examinations . . . . . . . . . . . . . . . . . . May 15–23
• Commencement . . . . . . . . . . . . . . . . . . . . May 22
• Memorial Day Holiday . . . . . . . . . . . . . . May 26

The Schedule of Classes contains detailed information concerning registration, enrollment, and related administrative deadlines.
Admission to the College

All high school graduates, any person who has a Certificate of Proficiency or a G.E.D., and persons 18 years of age or older who can benefit from a course of study are eligible for admission. High school students, residents of other states and foreign countries, veterans and veterans’ dependents may apply under special regulations.

WHO MUST APPLY
Applicants who will attend Chaffey College for the first time (new students), or former students who have been away for one or more terms (returning students), must complete an application for admission. High school students must apply each term (See Educational Enrichment Program).

APPLICATION
Application forms are available in the Administration Building on the Alta Loma campus and at the Ontario Education Center.

Applications must be complete (Admissions staff cannot process incomplete applications) and returned in person to the Admissions Office or the Ontario Education Center. Refer to the Dates and Deadlines for submission dates.

Transcripts

Official college transcripts are required for:
1. Students who plan to graduate or complete a certificate at Chaffey College, and/or transfer to a four-year college
2. Veterans receiving educational benefits
3. Students who plan to apply for the radiologic technology and registered nursing programs
4. Students needing to show completion of course prerequisites
5. Students who have earned an associate’s degree or higher for exemption from assessment, orientation, and counseling

Official high school transcripts are required for:
1. Students who plan to apply for the radiologic technology, registered nursing, and vocational nursing programs (GED or high school proficiency in lieu of transcript)
2. High school students who plan to apply for the Educational Enrichment Program (must have a minimum 2.0 or higher GPA for high school work).

As a third party, Chaffey College is not permitted to copy transcripts from high schools or other colleges.

Assessment, Orientation, Counseling

All new first-time students are required by state regulation to participate in assessment, orientation, and counseling. These services include reading, writing, and mathematics testing, and a presentation on college programs and services. With the assistance of a counselor, students develop an educational plan that includes required classes and recommended student services to achieve their educational and career goals. Students may be exempt from portions of these services or may choose not to participate. Contact the Counseling Center for appointments and details. Throughout attendance at Chaffey College students are encouraged to use the many support services and to consult regularly with a counselor or a faculty advisor.

Registration

NEW AND RETURNING STUDENTS
Registration for new and returning students takes place according to the date and time indicated on the Registration Permit. Student or proxy may register on or after the assigned date and time stamped on the Registration Permit during the registration period. Registration takes place in the Admissions Office at the Alta Loma campus and at the Ontario Education Center. Students taking classes at the Fontana Learning Center may register at that site.

Students who wish to enroll in classes at other off-campus locations are encouraged to register during the regular registration period, but may register at the first class meeting on a space-available basis.

CONTINUING STUDENTS
Students who registered for at least one class at Chaffey College in the preceding term are considered continuing students and receive their registration packets in the mail. These students may complete their registration by phone or register in person on or after the date and time listed on the registration permit.

High school students attending through the Educational Enrichment Program.

I.D. CARD
The Admissions office issues an identification card to all students who apply to Chaffey College. The card is required for ALL transactions in the Admissions Office and serves as the College library card.

REGISTRATION PERMIT
After submitting the application, an applicant will receive a registration permit from Admissions. This permit indicates a date and time for registration.
Enrichment Program are not considered continuing students and must reapply for admission each term.

**PRIORITY REGISTRATION FOR STUDENTS WITH LIMITATIONS**

Students with physical or health limitations who are unable to attend regular registration or who need to have classes scheduled around health or mobility concerns must contact Physically Limited Student Services, 909/941-2380, to receive authorization to register at Priority Registration. Special accommodations are arranged for assessment, orientation, and counseling, as needed.

Priority registration is also available for students in the EOPS Program and Project Second Chance with appropriate authorization. Priority registration takes place the day before the start of regular registration.

**ALTERNATE CHOICE OF CLASSES**

It is recommended that students prepare an alternate list of classes to fit their schedule in the event their first choice of classes is not available. Classes are filled on a first-come basis. A list of open classes is posted at Admissions throughout the registration period.

**CLOSED CLASSES AND WAIT LISTS**

If a class is closed, a student will be registered in alternate class(es) as listed on the student's Registration Permit, providing the class(es) are open. If requested class is closed, student will be placed on the wait list. Wait lists are limited to 20 students. A student must attend the first class meeting to be considered for admission to a closed class.

**UNITS**

A student may register for a maximum of 18 units during telephone or on-campus registration. During Late Registration, the student can add an unlimited number of units.

**LATE REGISTRATION**

During the late registration period, students may register for any open class, as well as any closed class with instructor signature on a Program Change Form.

**PREREQUISITES**

Students are responsible for meeting prerequisites as stated in the class schedule and college catalog. See a counselor for assistance in determining eligibility for a specific class. Students registered in a class without having completed the prerequisite(s) may be dropped from the class.

**MULTIPLE ENROLLMENT**

A student may not enroll in more than one section of any course in the same term. Students will not be permitted to register for classes that are scheduled to meet at the same time or at overlapping times.

**SCHEDULE OF CLASSES**

Students may purchase a Schedule of Classes in the college bookstore or at the Ontario Education Center. The schedule of classes will be available prior to each registration period.

**ATTENDANCE AT THE FIRST CLASS MEETING**

Students who do not attend the first meeting of each class in which they are registered may be dropped from the class. However, it is each student's responsibility to officially drop any class they do not attend or stop attending.

**Testing**

**COUNSELING CENTER**

The Counseling Center, located in the Administration Building, administers tests required prior to registration and for career advisement. Appointments for most tests can be made by calling the Counseling Center, 909/941-2116. Exceptions are noted under the individual tests.

**ENGLISH PLACEMENT**

An English Placement Test (EPT) is required for students who wish to take English 450 or 1A. This test is included in assessment testing for new students. Results are valid for three years. Students may choose to take English 350 or Business and Office Technologies 455 without taking the test.

Students with limited English proficiency are encouraged to take the English-as-a-Second Language (ESL) test. The test results provide recommendations for appropriate ESL reading and writing courses.

EPT and ESL test dates are listed in the Schedule of Classes and in the Counseling office. Appointments are made in the Counseling Center, 909/941-2116.

**ARITHMETIC PROFICIENCY**

The Arithmetic Proficiency Test, or a passing grade on Math 305, is required of students seeking admission to the Nursing (ADN), Vocational Nursing (LVN), and Radiologic Technology programs.

The test is given at specified times the first three days of each term and on the hour in the Math Lab (Physical Science Build-
ing, Room 15) throughout the year. Check the self-paced mathematics classes in the Schedule of Classes for the laboratory hours.

MATH COMPETENCY
Students who plan to graduate must demonstrate mathematics proficiency by passing the Elementary Algebra Skills Examination (which may be taken only once) or by earning a minimum grade of C in Math 410 or higher level math.

No appointment is necessary to take the Algebra Skills Test. Contact the Math Lab (Physical Science Building, Room 15), 909/941-2370.

CAREER TESTING
Aptitude, interest, and personality tests are scheduled throughout the year. Contact the Counseling Center for details, 909/941-2116.

ACT AND SAT
Students interested in transferring to four-year colleges before completing 56 semester units may desire to take the American College Test (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) to determine their eligibility for transfer with freshman or sophomore standing. These tests are not required for admission to Chaffey College.

Application forms for the ACT and SAT are available in Counseling.

Fees
As a publicly supported community college, Chaffey provides low-cost education; students pay nominal fees at registration. In order that students not be denied access to a college education, the college offers financial aid to assist with financial obligations.

Fees are assessed each term and are to be paid in the Bursar’s office located at the Administration Building. Fees must be paid at the time of registration.

Fees are subject to change.

ENROLLMENT FEE
$13.00 per unit for California residents.

NON-RESIDENT TUITION
$121.00 per unit for tuition, plus $13.00 per unit enrollment fee.

Non-resident tuition will be charged students who have not established residency in the State of California for a period of one year prior to the day before classes begin.

HEALTH SERVICES
$10.00 Fall and Spring; $7.00 Summer. Many services for students are offered by the Health Services Office, including first aid, treatment for minor illnesses, health examinations, lab tests, individual and group counseling, consultation on health problems, video cassettes and handouts on numerous health topics. Certain laboratory tests and medications may require a fee.

The clinic hours are 7:30 a.m. to 7:30 p.m., Monday through Thursday, and 7:30 a.m. to 4:30 p.m., Friday. Services of physicians, nurse practitioners, and counselors are available by appointment by calling 909/941-2178.

FEE WAIVER
Waivers of enrollment fees, health fees, and a reduction in parking fees are available to:

- Students of families who receive Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI), or General Relief (GR)
- Dependents of certain deceased or disabled veterans
- Students or families with low income
- Students determined to have need per federal standards

Students needing assistance with payment of enrollment fees for the school year may contact the Financial Aid Office to determine eligibility for a fee waiver. Students who receive a fee waiver for the prior year must reapply for the current year. Fee waivers must be secured prior to registration. For more information, call the Financial Aid Office at 909/941-2194 or 941-2199.

ASSOCIATED STUDENTS
(Optional) $8.00 per semester; $5.00, Summer term. The ASCC Sticker Fee funds programs and activities throughout the academic term for which the fee is paid. ASCC sponsors $30,000 in scholarships (applications are available in the Student Activities Office for scholarships to be awarded in the Spring) interclub council, lecturers, special cultural events, book loan, Student Invitational Museum Exhibit, and holiday toy drive and library equipment.

ASCC fee entitles students to:

- 5% Bookstore discount
- Free admission to college theatre productions
- Discounts at participating community businesses, as listed in the Merchant Guide
- Free or reduced entry to all ASCC events
• Edwards Cinemas group discount tickets
• Giveaways

The ASCC fee is non-refundable.

ON-CAMPUS PARKING
• Auto Parking: $30.00 Fall and Spring; $20.00 Summer; $20.00 Fee Waiver Students
• Motorcycle Parking: $15.00
• Decal Display: $1.00

SUPPLEMENTARY
• Transcripts (two copies free): $5.00 after second request, allowing necessary processing time: $10.00 for immediate service
• Enrollment verification (two copies free): $5.00 after second request: $10.00 for immediate service
• Replacement Student ID Card: $5.00; Report lost or stolen ID card to Admissions and Library
• Replacement of Registration Permit: $5.00
• Credit by Examination: not to exceed $25.00
• College Catalog: $3.00 purchased in Bookstore; $5.00 mailed; Send request to Educational Services
• Class Schedule: $1.00 purchased on main campus or Ontario or Fontana Education Centers; $3.00 mailed; Send request to Educational Services.
• Career Testing: $15.00
• Auditing: $15.00 per unit
• Replacement of diploma or certificate: $10.00
• International (visa) student application fee: $35.00

MATERIAL FEES
Some classes require a materials usage fee. This charge is noted under the appropriate class listing.

FEE REFUNDS
Students enrolled in classes that are cancelled by the college, and students who officially drop, withdraw, or who have been dropped from a class before or during the first two weeks (10 days) of the semester, are eligible for refund of the enrollment, health, parking fees, non-resident tuition, and material charges paid at registration. The parking decal must be returned. A service fee of $10.00 will be charged for processing each Enrollment Fee Refund Request. No refund will be made for enrollment changes after the second week if the college is not responsible for the drop or withdrawal from class. Submit the Refund Request Form (available at the Bursar’s window) to the Bursar’s Office no later than 4:00 p.m. on the 10th day of the semester, or the 5th day of the Summer term, for verification.

RESPONSIBILITY
Student grades, transcripts, diplomas, and registration privileges will be withheld pending settlement of any outstanding obligation to the college.
A $25.00 fee will be charged for any returned check.

Financial Aid
The Financial Aid Office, located in Campus Center West, helps students determine what their expenses will be for each year of enrollment and offers financial aid in the form of grants, loans, work-study, fee waivers, and scholarships.

Most awards are a combination of the different kinds of aid. To qualify, students must be enrolled at least half-time in a degree, certificate, or transfer program, demonstrate financial need, maintain satisfactory academic progress, and be a citizen or permanent resident of the United States.

GRANTS
These awards do not require repayment. Most financial aid awards include some grant money.

LOANS
Loans must be repaid after students complete their education and over a period not to exceed ten years. Some loans offered have a very low interest rate.
Emergency short-term loans are available and are generally repayable in 30 days. Due to limited funds, emergency loans are given on a first-come/first-served basis.

CATALOG 1996–97
• Dependents of certain deceased or disabled veterans
• Students or families with low income
• Students determined to have need per Federal standards

Students in need of assistance to pay enrollment fees should contact the Financial Aid office for details before registering for classes.

APPLICATIONS
Students who complete all application materials before May 1 will receive first consideration for awards, although awards are written as long as funds are available. For more detailed information regarding guidelines and program eligibility, contact the Financial Aid Office. Financial aid counseling also is provided at off-campus Learning Centers.

EXPENSES
Estimated expenses for a single student living away from parents’ home based on minimum full-time load of 12 units per semester per year, excluding the Summer session are as follows:

<table>
<thead>
<tr>
<th>Expense</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books and Supplies</td>
<td>650</td>
</tr>
<tr>
<td>Transportation</td>
<td>900</td>
</tr>
<tr>
<td>Room and Board</td>
<td>5,670</td>
</tr>
<tr>
<td>Personal</td>
<td>1,620</td>
</tr>
<tr>
<td><strong>Total Estimated Expenses</strong></td>
<td><strong>$8,840</strong></td>
</tr>
</tbody>
</table>

Special Student Classifications

INTERNATIONAL STUDENTS
A limited number of international students, defined as “attending college while on an F-1 visa,” are admitted to Chaffey College in an effort to provide cultural enrichment for the international students and the college community.

Specific information regarding the admittance of an international student may be obtained from the Counseling Center.

Students with other types of visas (not F-1) may enroll through the Admissions Office.

VETERANS
Veterans or other students eligible for veterans’ benefits should contact the Admissions Office before beginning any application procedures.

• Transcripts
  Transcripts of all previous college work must be sent to the Admissions Office.

• Enrollment Status
  The VA has established this scale to determine enrollment for Veterans’ Benefits:

  **FALL OR SPRING**
  - 12 units or more: Full-time Student
  - 9-11 units: Three-quarter-time Student
  - 6-8 units: Half-time Student

  **SUMMER**
  - 6 units or more: Full-time Student
  - 5 units: Three-quarter-time Student
  - 3-4 units: Half-time Student

  A 3-unit enrollment is permissible in some instances.

  Each person who applies for VA benefits must have a stated objective and follow a program leading to completion of that objective; academic advisement is recommended each term to help achieve that objective.

• Academic Advisement
  If a veteran or eligible dependent has completed 24 units or more, or earned a college degree, he or she must consult a Chaffey College advisement counselor and complete the Program Check Form before an Enrollment Certification can be submitted to the Veterans Administration.

• Program Changes
  Veterans and eligible dependents are considered the same as all other students in regard to attendance and academic requirements by Chaffey College.

• Repayment of Benefits
  A veteran or eligible dependent who receives a grade of W in units for which he or she has received VA benefits will be required to repay all money received for those units. A reduction to fewer than six units during the term will require the student to repay all money received for the term. In either case, if extenuating circumstances exist, the veteran may qualify for a waiver of repayment for the Veterans Administration. (Check with the Veterans Service Area.)

• Tutorial Assistance
  Tutorial assistance is available to veterans and eligible dependents who are enrolled in six or more units. To be eligible for this special supplemental allowance, there must be a marked deficiency in a required course. However, there are other sources of tutorial assistance available to all Chaffey College students without charge.
• Military Credit
A veteran may request credit for military science and tactics. If this is approved, the student may be granted 2 semester units of elective credit towards graduation for every 180 days of active service (including basic training), to a maximum of 8 semester units (E.C. 78230). Military Credit does not exclude the student from meeting physical education requirements at Chaffey College. A copy of the DD214 or other official documents must be submitted to the Office of Admissions and Records to verify length of service and honorable discharge.

Elective credit toward graduation from Chaffey College for service schools completed while serving in the Armed Forces, Armed Forces Reserve, or National Guard may also be requested. A separate request for evaluation must be submitted for each school completed and exact information must be provided to complete a proper evaluation and verify completion of service school training. A maximum of 15 semester units for basic training plus service schools completed may be granted to a veteran toward graduation from Chaffey College.

EDUCATIONAL ENRICHMENT PROGRAM
High school students who are sixteen years of age or who have completed tenth grade, and who maintain a minimum overall GPA of 2.0 (C average), are eligible to enroll in Chaffey College courses. During the regular academic year, students must maintain minimum-day enrollment in high school. High school principals or authorized representatives (counselors) may recommend one degree-applicable course per term per student.

Students should enroll in a course at the college where there is a reasonable expectation for success and where the student can benefit from the unique academic or occupational offerings of the college.

Students must submit an Educational Enrichment Form with official high school transcripts and emergency contact information. Students must also participate in Assessment, Orientation, and Counseling prior to their first term of attendance. The application forms and high school transcripts must be resubmitted each application period the student attends Chaffey College while still in high school.

COOPERATIVE EDUCATION / WORK EXPERIENCE
Cooperative Education (work experience) provides students with the opportunity to use their part- or full-time job to earn elective credit. Internships are available in many disciplines. Students obtain practical on-the-job experience and knowledge related to their career or educational goals. Students gain an understanding of the relationship between classroom theory and the world of work and improve their employment opportunities. Under the supervision of college faculty and the job supervisor, students prepare a job-related learning plan which serves as a guide to their cooperative education experience.

Chaffey College offers three types of Cooperative Education programs: Career Field Studies for students planning to transfer to four-year colleges and working in positions related to their course of study; Occupational Work Experience for students enrolled in occupational programs and working in related positions; and General Work Experience for students seeking entry-level job skills and exploring career options. The Cooperative Education staff offers career exploration seminars for credit.

The Cooperative Education Office is located in Voc. Ed., room 74, center section, first floor. Phone 909/941-2499.

RESERVE OFFICER TRAINING
Army ROTC
Army ROTC is available to men and women at Chaffey College through cross enrollment, at no expense to the student, at Claremont McKenna College. Students may enter the Basic Program (Freshman/Sophomore) in the fall or winter term. Basic Program students incur no service obligation.

Two- and three-year scholarships are available for full time, qualified students at three tiered amounts, offering full or partial tuition, $450 per year for books, and $150 per month tax free personal allowance. Two-year Guaranteed Reserve Forces Duty scholarships are also available, offering students the opportunity to earn extra money each month at a Guard or Reserve unit while still at school.
Students must complete the Advanced Program (Junior/Senior) years at a four year college. Claremont has resident Army ROTC programs on these campuses: Claremont McKenna, Harvey Mudd, and Scripps Colleges; Cal State University San Bernardino, Cal Poly, Pomona; and Cal State University Fullerton, and is cross enrolled with 31 other colleges and universities in the Inland Empire. Upon completion of all undergraduate and ROTC requirements, students are commissioned as Second Lieutenants in the U.S. Army or Army Reserve/National Guard.

Post graduate scholarships or internships are also available in medicine and law.

Contact the Scholarship Advisor at Claremont McKenna College for details on scholarships, key dates, and enrollment information at 909/621-8102 or 909/624-7965.

Air Force ROTC

The Air Force Reserve Officer Training Corps (ROTC) program is offered through the University of Southern California (USC) in Los Angeles, and at Harvey Mudd College in Claremont.

Both two-year and four-year Air Force ROTC programs are available to all qualified, full-time students. Academic units earned in this program can count as elective units toward fulfillment of graduation requirements (check with your school and your academic department). In order to complete the Air Force ROTC requirements, you must commute to a school that offers Air Force ROTC classes.

Graduation and successful completion of Air Force ROTC leads to a commission as an officer in the United States Air Force. Competitive scholarships are available to qualified cadets and students. Scholarship students will receive full or partial tuition, required fees, and textbook reimbursement. Students contracted into the College Scholarship Program, or Professional Officer Course, will receive a non-taxable allowance of $150 per month.

Students interested in the two-year program must contact the Air Force ROTC detachment they are interested in attending at the end of the fall term of their sophomore year or the December-January time frame prior to entering the two-year program.

For additional information contact:
AFROTC DET 080
University of Southern California
3560 Watt Way, PED 111
Los Angeles, CA 90089-0651
213/740-2670
### Definitions

#### UNIT OF CREDIT
The California State Education Code defines a college unit of credit as approximately one hour of class plus two hours of study per week, or three hours of laboratory per week, carried through the term.

<table>
<thead>
<tr>
<th>Class</th>
<th>Hours per week</th>
<th>Unit of Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Laboratory</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Independent Study</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Self-paced</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Studio</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Work Experience</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

#### UNIT LOAD
The number of units a student enrolls in each semester. An average of 15 units each semester is necessary for a student to progress at a rate which may lead to graduation in four semesters (two years).

To be considered a full-time student, a student must carry a minimum of 12 units per semester.

#### UNIT CONVERSION—QUARTER TO SEMESTER
The ratio of quarter to semester unit is 3:2. Use the following conversion table to compare quarter with semester units.

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.67</td>
</tr>
<tr>
<td>2</td>
<td>1.30</td>
</tr>
<tr>
<td>3</td>
<td>2.00</td>
</tr>
<tr>
<td>4</td>
<td>2.67</td>
</tr>
<tr>
<td>5</td>
<td>3.00</td>
</tr>
<tr>
<td>90*</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Units required for associate degree / junior status at the university.

#### PREREQUISITE
A course (or qualification) needed before a student may register for a subsequent course. It is the student’s responsibility to comply with prerequisites of all courses for which he or she enrolls. Course prerequisites are listed in this catalog and in the Schedule of Classes.

#### COREQUISITE
A course which must be taken at the same time as another course.

#### RECOMMENDED PREPARATION
Previous training or courses which help a student successfully complete a subsequent course.

### Attendance

#### GENERAL
Ideally, students are expected to attend every meeting of every class for which they are enrolled. In general, however, no requirement is made relative to the minimum number of classes which students must attend.

Instructors may develop specific policies and procedures related to attendance for their individual classes. These policies and procedures are distributed to students, in writing, at the beginning of the term, and it is expected that students will adhere to the standards set forth.

#### FIRST CLASS MEETING
Students are required to attend the first meeting of each class in which they are registered or they may be dropped from the class.

#### NOTE
Please remember, it is a student’s responsibility to drop or withdraw from classes in which they are registered but cannot attend. Do not—do not rely on instructors to drop or withdraw enrollment.
ABSENCE FROM CLASS
The student is responsible for completion of the required assignments. Should a student find it necessary to be absent from class, he or she should make arrangements with the instructor, before the absence, to complete all assignments for the class missed. It is an instructor’s option to provide makeup quizzes, examinations, lectures, or lab work missed due to absence.

Final Examinations
Final examination hours and dates are published in the Schedule of Classes. Final examinations for short-term classes are given during the last class meeting.

The established final examination schedule cannot be changed without approval from the Executive Vice President. Students may petition to take a final examination at a non-scheduled time due to exceptional circumstances. The petition, which must include the instructor’s approval and signature, is available from and returned to the Admissions Office.

Honors Program
The Honors Program offers enriching experiences to improve the quality of education, provide challenges, and motivate academically talented students who strive for advanced academic achievement toward established long-range educational goals.

Students are offered courses with particular rigor and subject enrichment, along with opportunities for involvement in service activities. Additionally, these students may be given guaranteed transfer priority to those colleges with articulated agreements with Chaffey. Transcripts of graduating honors students document that students have earned honors credits—records highly regarded by any accredited college or university. Chaffey College has articulated Honors Programs with UCLA, UCR, USC, Pomona, Chapman, and Pepperdine University.

CRITERIA FOR ENROLLMENT
- High school GPA of 3.25 or college GPA of 3.00 after the minimum of 12 units of transferable courses.

Plus one of the following:
- Two letters of reference from high school or college faculty members which address a student’s academic abilities and motivation.
- Combined SAT score of 1000 or above, or ACT score of 26.
- Successful completion of two Chaffey honors courses with grades of A or B, OR completion of three advanced placement classes in high school.
- Evidence of special competence or creativity.
- Nomination by a Chaffey faculty member.

CRITERIA FORFULFILLMENT OF HONORS PROGRAM
- GPA of 3.00 in transferable courses
- GPA of 3.00 in honors courses.
- Completion of 18 semester units in Chaffey Honors Program (up to 6 units may be accepted from another institution).
- Completion of Associate Degree, or fulfillment of admissions requirement to a 4-year institution.
- Submission of "Intent to Complete Honors Transfer Program" form.
- Community service and enrichment activities.

Affiliation
Chaffey is a member of the National Collegiate Honors Council, the Western Regional Honors Council, and the Honors Transfer Council.
### Grades and Grade Point Average

#### MEANING OF GRADE SYMBOLS

Grades are based upon the quality of a student's work in credit classes within the framework of the college's philosophy, academic standards, and state regulations.

Grades, grade points awarded, and symbols used by Chaffey College are as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Definition</th>
<th>Policy for Repeating Course with this Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
<td>Excellent</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>Good</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>Satisfactory</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>Passing, less than satisfactory</td>
<td>Permitted. Original D will remain but will not be computed.</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Failing</td>
<td>Permitted. Original F will remain but will not be computed.</td>
</tr>
<tr>
<td>CR</td>
<td>0</td>
<td>Credit: At least satisfactory</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>NC</td>
<td>0</td>
<td>No credit. Student did not fulfill academic requirements of course. (Only assigned for courses with CR/NC option and credit by exam.)</td>
<td>Permitted. Original NC will remain but will not be computed.</td>
</tr>
<tr>
<td>W</td>
<td>0</td>
<td>Withdrawal. Assigned for students who officially withdraw from a class between 5th and 14th week.</td>
<td>Permitted. Original W will remain but will not be computed.</td>
</tr>
<tr>
<td>I</td>
<td>0</td>
<td>Incomplete</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>IP</td>
<td>0</td>
<td>In progress. Grade awaits completion of course work which extends beyond end of term.</td>
<td>Permitted. Original IP will remain but will not be computed.</td>
</tr>
<tr>
<td>RD</td>
<td>0</td>
<td>Report delayed.</td>
<td>Not permitted.</td>
</tr>
<tr>
<td>MW</td>
<td>0</td>
<td>Military withdrawal. Students who receive military orders compelling withdrawal from classes may be permitted to withdraw at any time during a term with no adverse impact on academic records or enrollment status. Upon verification of such orders, the MW symbol shall be assigned, and upon request, enrollment fees will be refunded.</td>
<td>Not permitted.</td>
</tr>
</tbody>
</table>

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

An IP grade assumes a student is making satisfactory academic progress and that the student's attendance records meet class standards.

The appropriate evaluative grade and unit credit will be assigned and will appear on the student's permanent record for the term when the course was completed. The IP may be assigned only one time for each class.

If a student who receives an IP grade does not re-enroll in that course during the following term, an alternate grade, (A, B, C, D, F, CR, or NC) submitted by the instructor at the time the IP was assigned, will be entered on the student's permanent record.

#### GRADE POINT AVERAGE

The cumulative grade point average (GPA) is computed by dividing the total number of units a student has attempted into the total number of grade points the student has earned.

Units for which symbols of W, CR, NC, I, IP, or RD are assigned are not counted in units attempted.

**Example:**

<table>
<thead>
<tr>
<th>Attempted Grade Points</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 units</td>
<td>4.0 points</td>
</tr>
<tr>
<td>4 units</td>
<td>4.0 points</td>
</tr>
<tr>
<td>3 units</td>
<td>3.0 points</td>
</tr>
<tr>
<td>2 units</td>
<td>2.0 points</td>
</tr>
<tr>
<td>1 unit</td>
<td>1.0 points</td>
</tr>
</tbody>
</table>

#### Grade Changes

**FINAL GRADES**

Grades given for any course generally are determined by the instructor, and in the absence of mistake, fraud, bad faith, error, or incompetency, are final.

**EXCEPTIONS**

When a student repeats a course in which he or she previously received a grade of D or F, or when a student repeats a course as authorized in the catalog, the repeat will be considered unofficial, and the appropriate grade will be entered on the student's permanent record.

If a student repeats a course in which he or she previously received a grade of A, B, or C, and the course is not authorized for repeat in the catalog, the repeat will be considered unofficial, and no grade will be entered.

If a grade has been incorrectly entered on a student's permanent record during computer services procedures, the error will be corrected.

Withdrawn/Unofficially Withdrawn Passing (W/U/WP) grades were authorized by the catalog from the 1939-40 school year through the 1969-70 school year. These grades will be changed to W (Withdrawn) on the student's permanent record prior to the release of the transcript. No penalty is attached to the W grade.
Program Changes

ADDS
Registered students may add one or more classes to their schedules during late registration, or they may add open-entry, open-exit classes, short-term classes, up to the 14th week of the fall/spring term, and special topics or special topics laboratory classes during a term. Adds cannot be processed by mail.

DROPS OR WITHDRAWAL
Registered students may drop one or more classes and still attend at least one class, or they may withdraw officially from all classes and no longer attend college. Drops or withdrawals must be done in the Admissions Office. A student may drop or withdraw, or be dropped by an instructor, only before 75% completion of a class. (See Grades and Grade Point Average.)

A student who drops a class or is dropped by an instructor on or prior to 30% of the course or the fourth week (whichever is less), will receive no entry on the student's permanent record for that class.

A student who drops a class or is dropped by an instructor after 30% of the course, and on or before 75% of the course, will receive a W grade for that class.

Students may be dropped for lack of academic achievement or attendance. Students should not rely on instructors to drop or withdraw them. Failure to officially drop or withdraw by the drop deadline may result in the assignment of an F (Failing) grade. Drops or withdrawals cannot be processed by mail.

Course Repetition

AUTHORIZATION FOR REPEITION
Course repetition is allowed under certain circumstances:

A. Each repeatable course must be identified in the college catalog.
B. Each identified course is one in which course content differs each time it is offered, and each student who repeats the course is gaining an expanded educational experience for one of the following reasons:
   1. Skills or proficiencies are enhanced by supervised repetition and practice within class periods; or
   2. Active participatory experience in individual study or group assignments is the basic means by which learning objectives are obtained.

A student may not repeat a course for which he or she has received an I (Incomplete) grade. A student has one (1) year to complete an I (Incomplete) grade. When the I grade is reconciled, the above policies are in effect.

A student may repeat a course for which he or she has received an IP (In Progress) grade by enrolling for that course in the subsequent term to attempt earning a satisfactory grade. An IP grade may be assigned only one time for each course and is limited to open-entry/open-exit courses.

A student may repeat a course in which he or she has received a grade of A, B, C, or CR when that student's level of competency in that course has diminished over a period of time. The student must petition to retake the course prior to registration.

To ensure a true and complete academic history, the course identification, title, units attempted and earned, and substandard grade(s) are not removed but are instead lined out on a student's permanent record. The lined out grade and grade points are then disregarded in the computation of the student's grade point average.

COURSE REPETITION FOR SUBSTANDARD GRADES
Students may repeat a course to remove a substandard grade from his or her permanent record, whether that grade was received at Chaffey or at another accredited institution. A substandard grade is D, F, or NC.

Students who have attempted a course two (2) times and have received a substandard grade (D, F, or NC) must petition to enter the course PRIOR to registering for a subsequent attempt to earn a satisfactory grade (A, B, C, or CR). Students who enroll in the class without an approved petition may be excluded from the class. (Reference: Title V, Sections 55761, 55762, 58161.)

To ensure a true and complete academic history, the course identification, title, units attempted and earned, and substandard grade(s) are not removed but are instead lined out on a student's permanent record. The lined-out grade and grade points are then disregarded in the computation of the student's grade point average.

VETERANS
The college's course repetition policy may be different from that of the Veterans Administration. Students receiving Veterans' educational benefits should check with the Veterans Services area in Admissions before repeating any course.

Probation and Dismissal

UNSATISFACTORY WORK
Notices signing unsatisfactory work (D or F grades) may be distributed to students after the midterm examinations by instructors. A student who receives such notice should consult with the instructor and a counselor to avoid either academic probation or dismissal.

ACADEMIC PROBATION
A student who has attempted at least 12 semester units as shown by the official academic record shall be placed on academic probation if the student has earned a cumulative grade point average below 2.00 in all units.

PROGRESS PROBATION
A student who has enrolled in a total of at least 12 semester units as shown by the official academic record shall be placed on progress probation when the percentage of all units in which the student has enrolled and for which entries of W, I, and NC are recorded reaches or exceeds fifty percent (50%).

REMOVAL FROM PROBATION
A student on academic probation for a grade point deficiency shall be removed from probation when the student's accumulated grade point average is 2.00 or higher.

A student on progress probation because of an excess of units for which W, I, and NC grades are recorded will be removed from probation when the percentage of units in this category drops below 50%.
APPEAL
A student who wishes to appeal probationary status may do so through a counselor in the Counseling Center. Students placed on academic or progress probation will be notified of same by mail.

ACADEMIC DISMISSAL
A student who has attempted at least twelve (12) semester units at Chaffey College, as shown by official permanent records, will be subject to dismissal when at least one (1) of the following conditions occurs:

A. A student who is on academic probation shall be subject to dismissal if the student earns a cumulative grade point average of less than 1.75 in all units attempted in each of three (3) consecutive semesters, excluding Summer session.

B. A student who has been placed on progress probation shall be subject to dismissal upon receipt of recorded grades of W, I, or NC in 50% or more of all enrolled units during three consecutive semesters, excluding Summer session.

REINSTATEMENT
A student who has been dismissed may apply for readmission after one semester following the date of dismissal. A student may appeal a dismissal or apply for readmission by filing a petition for Readmission Approval. This petition will be reviewed by a scholastic standards committee. Petitions are available in the Counseling Center. A student readmitted after academic dismissal will remain in the college to a student.

A student who has attempted at least twelve (12) semester units at Chaffey College, as shown by official permanent records, will be subject to dismissal when at least one (1) of the following conditions occurs:

1. The student earns a cumulative grade point average of less than 1.75 in all units attempted in each of three (3) consecutive semesters, excluding Summer session.

2. The student has been placed on progress probation and the student has received W, I, or NC in 50% or more of all enrolled units during three consecutive semesters, excluding Summer session.

MISCELLANEOUS
For the purpose of this section on academic dismissal, semesters are considered consecutive on the basis of student enrollment.

Dismissal is for one semester, unless the student is allowed to re-enter under Special Probation.

Dismissed students will be notified by mail and are encouraged to confer with a counselor. Students will be dismissed according to the following stipulations:

A. Students whose Fall grades subject them to academic dismissal will be notified in the Spring semester and will be dismissed for the Fall semester, and

B. Students whose Spring semester grades subject them to academic dismissal will be notified during the Summer recess and will be dismissed for the Fall semester.

In computing the grade point average, classes taken on a credit/no credit basis will be disregarded, since they do not count as units attempted or toward grade points earned. Grades of W and I are disregarded for the same reason.

REGULATIONS FOR DISMISSED STUDENTS
A student, applying for admission to Chaffey College, who is under academic dismissal from another community college, college, or university is subject to the same reinstatement policies and procedures as a student who is under academic dismissal from Chaffey College. If it is determined that the student is subject to dismissal under Chaffey College standards, the student will not be eligible for admission for a period of one semester.

ACADEMIC RENEWAL WITHOUT COURSE REPETITION
The purpose of Academic Renewal (Sections 55764 and 55765 of the California Administrative Code) is to disregard students' previously recorded substandard academic performance, when such work does not reflect current demonstrated ability. As a consequence, Academic Renewal allows students the benefits of their current level of ability and performance and does not permanently penalize them for poor performance in the past.

The Academic Renewal procedure is intended to facilitate the completion of requirements necessary for an academic degree or certificate at Chaffey College. Approval of the request for Academic Renewal is subject to the following conditions:

A. Academic Renewal would be applicable for work completed at any institution up to a maximum of two semesters (or three quarters) and a summer session, which need not be consecutive.

B. A time period of at least two years must have elapsed since the end of the term of substandard work to be disregarded.

C. Evidence of academic ability since the semester (or quarter) in question shall include one of the following:

1. 16 semester units with a minimum of 3.0 GPA.
2. 20 semester units with a minimum of 2.5 GPA.
3. 24 semester units with a minimum of 2.0 GPA.

D. Work taken during the disregarded semester(s), even if satisfactory, will not be applied toward unit requirements. However, subject credit will be allowed for any course satisfactorily completed.

E. A student must include all work, including academic renewal term(s), in the computation of cumulative grade point average toward honors at graduation.

F. The permanent academic record shall be annotated in such a manner that all work remains legible, ensuring the true and complete academic history.

G. A student may petition only once to eliminate grade point calculations and credits from portions of previous college work.

Students should be aware that other colleges and universities may have different policies concerning academic renewal and may not honor this policy.
Credit for Transfer Work

GRANTING OF CREDIT
Credit for college-level courses completed at other accredited education institutions will be evaluated upon receipt of an official transcript in the Admissions Office. Full unit credit normally will be granted. Further information regarding the following may be obtained from the Admissions Office:

1. United States Armed Forces Institute (USAFI)
2. University of California Extension
3. Out-of-state colleges and universities
4. Nursing schools
5. Foreign colleges and universities
6. Correspondence courses
7. Military experience
8. Private colleges

Table of Nontraditional Credit

<table>
<thead>
<tr>
<th>SOURCES OF NONTRADITIONAL CREDIT</th>
<th>CREDIT ACCEPTED</th>
<th>PERCENTILE, SCALED SCORE, OR MINIMUM</th>
<th>MAXIMUM CREDIT ACCEPTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Military-sponsored programs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. USAFI college-level courses (DANTES)</td>
<td>c</td>
<td>50th %</td>
<td>No Maximum</td>
</tr>
<tr>
<td>b. Community College of the Air Force</td>
<td>c</td>
<td>Official Transcript</td>
<td>No Maximum</td>
</tr>
<tr>
<td>2. College Entrance Examination Board (CEEB) Advanced Placement Examinations</td>
<td>c</td>
<td>3, 4, 5</td>
<td>No Maximum</td>
</tr>
<tr>
<td>3. English Equivalency Examination of CSU</td>
<td>c</td>
<td>Pass for College Credit</td>
<td>6 units</td>
</tr>
<tr>
<td>4. Transcripts (official) from regionally accredited institutions for:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Institutional credit by examination</td>
<td>c</td>
<td>Credit</td>
<td>No Maximum</td>
</tr>
<tr>
<td>b. Television courses</td>
<td>c</td>
<td>Credit</td>
<td>No Maximum</td>
</tr>
<tr>
<td>5. Credit recommendations of the ACE Guide to the Evaluation of Educational Experience in the Armed Services</td>
<td>c</td>
<td>By Petition</td>
<td>9 Units</td>
</tr>
<tr>
<td>a. Military service</td>
<td>c</td>
<td>By Petition</td>
<td>7 Units</td>
</tr>
<tr>
<td>b. Approved Academic Service Schools</td>
<td>c</td>
<td>From Petition</td>
<td></td>
</tr>
<tr>
<td>6. Chaffey College Credit by Examination</td>
<td>c</td>
<td>Credit</td>
<td>No Maximum</td>
</tr>
<tr>
<td>7. University of California Extension</td>
<td>c</td>
<td>Passing Grade</td>
<td>No Maximum</td>
</tr>
<tr>
<td>8. Upper-division credit from an accredited institution of higher learning</td>
<td>c</td>
<td>Passing Grade</td>
<td>No Maximum</td>
</tr>
<tr>
<td>9. Correspondence courses from an accredited institution</td>
<td>c</td>
<td>Passing Grade</td>
<td>No Maximum</td>
</tr>
<tr>
<td>10. Non-accredited institutions</td>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Graduate credit from an accredited institution</td>
<td>c</td>
<td>Passing Grade</td>
<td>No Maximum</td>
</tr>
<tr>
<td>12. Foreign colleges and universities</td>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. ROTC</td>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Military credit assigned by other institutions</td>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Religious course work</td>
<td>c</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. College-Level Examination Program (CLEP) general examinations:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. English composition</td>
<td>c</td>
<td>500</td>
<td>6 Units</td>
</tr>
<tr>
<td>b. Humanities</td>
<td>c</td>
<td>500</td>
<td>6 Units</td>
</tr>
<tr>
<td>c. Mathematics</td>
<td>c</td>
<td>500</td>
<td>6 Units</td>
</tr>
<tr>
<td>d. Natural sciences</td>
<td>c</td>
<td>500</td>
<td>6 Units</td>
</tr>
<tr>
<td>e. Social sciences</td>
<td>c</td>
<td>500</td>
<td>6 Units</td>
</tr>
<tr>
<td>17. College-level Examination Program (CLEP) subject examinations</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Credit by Examination

PRIOR EXPERIENCE
Registered students who have substantial prior experience in the content of college-level courses and who can present evidence may petition to receive credit for courses listed in the college catalog which are approved for Credit by Examination.

There are four options:

1. College Entrance Examination Board (CEEB)
   Chaffey College recognizes the Advanced Placement Program of the College Entrance Examination Board. Students who have completed the course work and testing in high school may be eligible for credit by examination.

2. College Level Examination Program (CLEP)
   Chaffey College recognizes the College Level Examination Board Test in two areas: General Examinations and most Subject Examinations. Students who wish to receive credit by examination for successful completion of this examination must forward official test results to the Chaffey College Admissions Office.

3. English Equivalency Examination of the California State University (EEE of the CSU)
   Chaffey College recognizes the English Equivalency Examination of CSU. Students who wish to receive credit by examination for English 1A and 1C through successful completion of this examination must forward official test results to the Chaffey College English Department and the Admissions Office.

4. Testing through Chaffey College Instructors
   Any course listed in the course description section of the Chaffey College catalog bearing the designation (Cx) after the course title may be challenged for credit by examination with the consent of an instructor in the appropriate administrative unit. The examination may consist of written, oral, and/or demonstrative or manipulative portions.

It is the policy of Chaffey College that only unit credit is granted upon successful completion of any of the four options offered above. No letter grade will be assigned.

Auditing

Pursuant to Education Code 72252.3, it is the policy of the district to provide students who are otherwise qualified to enroll in credit courses an opportunity to audit specific credit courses. An auditing fee of $15.00 per unit may be charged (Instructional Policy 6.13.1).
Policies and Regulations

Statement of Equal Opportunity

Chaffey College is an equal opportunity, affirmative action employer. The college does not discriminate on the basis of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age or sexual orientation.

In accordance with Title IX regulations, Chaffey College offers equal academic, occupational, and extracurricular opportunities to its district community regardless of the sex of the individual. Steve Menzel, Title IX Coordinator, can answer questions regarding sex discrimination. He is also the ADA (Americans with Disabilities Act) coordinator, and is able to answer questions regarding the ADA which extends federal civil rights protection in several areas, to people who are considered disabled. He may be reached at Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA; telephone: 909/941-2300.

In accordance with Section 504 of the Rehabilitation Act, Chaffey College abides by the regulation that “no otherwise handicapped individual” shall be excluded from participation in programs and services offered by the college “solely by reason of the handicap.” Dr. Inge Pelzer, 504 Compliance Officer, can provide information and answer questions regarding access for disabled students. She may be reached at Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA; telephone 909/941-2157.

Chaffey College is authorized under federal law to enroll non-immigrant and alien students. In accordance with Title IX regulations, the lack of English language skills will not be a barrier to admission and participation in Vocational Education programs.

Normas Contra Discriminacion

Chaffey College es un empleador de igualdad en oportunidad, de acción afirmativa. El colegio no discrimina a base de raza, color, credo, origen nacional, linaje de antepasados, sexo, condición matrimonial, incapacidad, afiliación religiosa o política, edad u orientación sexual.

En conformidad con los reglamentos de Titulo IX, Chaffey College ofrece oportunidades académicas, ocupacionales y extracurriculares a la comunidad de su distrito, indiferente al sexo del Individuo. Steve Menzel, Coordinador de Titulo IX, puede contestar preguntas en cuanto a discriminación sexual. El Sr. Menzel es el Coordinador del programa ADA (Acta de Americanos con Incapacidades), y él puede informarle acerca del ADA que provee protección civil federal en varias áreas a personas incapacitadas. A él se le puede localizar en Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA; teléfono: 909/941-2300.

En conformidad con la Sección 504 del Acta de Rehabilitación, Chaffey College sostiene el reglamento que “ningun individuo desventajado de alguna manera” será exceptuado de participación en programas y servicios ofrecidos por el colegio “solamente por su desventaja.” La Dra. Inge Pelzer, Oficial de la Sección 504, puede darle información y contestar a preguntas en cuanto a servicios para los estudiantes incapacitados. Se puede comunicar con la Dra. Pelzer en Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA; teléfono: 909/941-2157.

De acuerdo con los regalmentos de Titulo IX, la carencia de destrezas en el idioma ingles no será barrera para admisión y participación en programas de Educación Vocacional.
Open Courses

It is the policy of this district that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully opened to enrollment and participation by any person who has been admitted to the College and who meets such prerequisites as may be established pursuant to Chapter II, Division 2, Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

Compliance

The Governing Board of Chaffey College has established rules and regulations governing the behavior of students and penalties for violations thereof required by the California Education Code Section 22635 of every community college.

Discipline and Student Conduct

Chaffey College, as a tax-supported institution, is committed to compliance with state and federal law. As an institution of higher education, the college is committed to providing an orderly environment that is conducive to student learning. When the conduct of a student transgresses the bounds of law and interferes with the normal processes of education, the college must take appropriate action.

GRIEVANCE PROCEDURES

Procedures for disciplinary and/or grievance/appeal hearings may be secured in the Student Activities Office. Student disciplinary policy and procedures and student grievance policy and procedures are available in the Educational Services Office.

CHEATING

To present someone else’s work as one’s own is cheating. Copying, crib notes, illicit access to old exams are examples of cheating. Ghost written research papers, plagiarism, and use of unacknowledged sources are examples of misrepresentation of someone else’s spoken or written work as the student’s own. The submission of work which is not a product of the student’s own effort is dishonest and is subject to severe disciplinary action up to and including expulsion from the college. Further details about this discipline policy are available in the Student Activities Office.

SEXUAL HARASSMENT

Harassment on the basis of sex is a violation of Title VII of the 1964 Civil Rights Act and Section 12940, et seq., of the California Government Code. The definition of sexual harassment is: unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature. Students concerned with acts of sexual harassment are encouraged to meet with the appropriate dean, Educational Services, or Trudy Thomas, Director of Employee Relations and legal affairs, telephone 909/941-2643.

Traffic and Parking Regulations

Any motor vehicle classified under state law and parked on the Rancho Cucamonga campus between the hours of 7 a.m. and 11 p.m. Monday through Friday, must display a valid parking decal or park yourself receipt.

Parking decals may be purchased in the Bursar’s Office in the Administration Building. Vehicles not displaying a valid parking decal are subject to citation for violation of the Chaffey College district policy, Chapter 7, Paragraph 7.8.17.

No person who has been issued a parking permit shall give, lend or allow any person to use such permit to obtain parking privileges to which he or she is not entitled.

Owning a proper permit does not guarantee a parking space close to an individual’s destination. Each student is responsible for locating and parking within a properly marked parking space. Areas that are not clearly marked for parking are designated as “No Parking” areas.

In compliance with California State Law, each owner/operator of vehicles operated or parked on Chaffey College property is required to possess a current valid driver’s license and current proof of insurance. Each such owner/operator shall furnish this license and proof of insurance to any peace officer/College

The Student On Campus

Civil law and district policies give the college student a number of rights on campus nonstudents do not enjoy. Similarly, the body of people who work and go to classes at Chaffey do so in the spirit of community, a fact which imposes responsibilities of college citizenship.
Public Safety Officer/Representative upon request.

All persons driving vehicles on the campus are required to comply with the traffic laws of the State of California (Reference: Vehicle Code, Section 670, 21113).

Maximum speed limit on campus is 25 miles per hour, and the maximum speed limit in the parking lots is 15 miles per hour.

No vehicles will be driven on sidewalks, footpaths, patio or court areas except by special permission of the Campus Public Safety Department (Reference: Vehicle Code, Section 21113).

Barriers, fences, or posts may be placed at any point deemed necessary for safety or convenience. Removal of these barriers, fences, or posts is grounds for issuance of a citation.

Parking is permitted in spaces specifically marked. Parking spaces designated “Carpool” are for staff carpoolers only! Violators will be cited and assessed a fine. Citations for unauthorized carpool violations DO NOT have the right of appeal at the college level.

Parking is prohibited in loading zones, posted areas, or along red curbs.

Backing into parking stalls or taking up more than one parking stall is prohibited. Reserved parking spaces may be used only by vehicles displaying a reserved parking permit. Citations will be issued to those in violation.

Physically handicapped students may be given special parking privileges which will be evidenced by a permit. This permit is available in the Physically Limited Student Services Office.

Visitor parking spaces may be used by those who secure a Visitor Pass from the switchboard operator in the Administration Building, the College Bookstore, the Student Programs Office, Campus Public Safety Department, or the department in which they are visiting. Neither registered students nor staff members may park in a visitor’s space. A citation will result. Limited time parking spaces are strictly monitored. Limited time parking spaces are marked with a green curb.

Violators of the above regulations with regard to traffic and parking are subject to a citation payable at the Campus Public Safety Department.

Continued violations of the above regulations with regard to traffic are subject to severe disciplinary action by the College administration.

For more detailed information, consult the Parking and Traffic Regulations brochure available in the Campus Police Department office.

Distribution of Literature

Permission for distribution of literature on campus is obtained from the Student Activities Office. The following kinds of literature may not be distributed or displayed without the consent of the Student Activities Director: literature advertising off-campus activities sponsored by an individual or group not connected with the college; literature for which there is a charge or donation required or requested, either explicitly or implicitly; literature whose legality is in question. No literature may be displayed or distributed which solicits funds except with the approval of the Student Activities Office. Soliciting is not encouraged. Advertisements by non-student parties are directed to the student newspaper, The Breeze.

Literature which is not in conflict with the above stipulations may be posted and otherwise displayed in the Campus Center complex, and the bulletin boards immediately adjacent to them in the patio area and the Campus Center Student Free Speech Area. Students or student groups wishing to post in other areas of the campus should confer with the Student Activities Office for the policies and procedures governing the areas. No literature may be taped or otherwise affixed to a painted surface. Some bulletin boards in the Campus Center complex have been designated to serve specific functions. When in doubt, the student should contact the Student Activities Office. No flyers may be posted on cars!

Use of Campus Facilities

The use of district facilities may not interfere in any manner with the normal educational activities of the college nor may the use of district facilities be inconsistent with the purposes of the college program.

Procedures and fees for the use of district facilities may be obtained in the Facilities Rental Office, 909/941:2683

Collection and Raising of Funds

Students or faculty members may not be solicited to contribute funds to any organization which is not directly under the jurisdiction of Chaffey College without the express permission of the college administration.

Likewise, no non-student group or individual may collect funds on campus or have campus groups collect for them on campus without prior approval of the college administration.
Scheduled Classes

A list of classes added after publication of the Schedule of Classes will be available during each registration period in the Administration Building, Bookstore, and Counseling Center. Students may not enroll in more than one section of any course in the same term.

SUBJECT TO CHANGE
All Chaffey College policies, regulations and courses are subject to change without notice at the discretion of the Governing Board.
Student Affairs

STUDENT ACTIVITIES
The Office of Student Activities promotes events and coordinates programs that provide students with an opportunity for educational and social growth outside the classroom. Student Activities, located in Campus Center East, lower level, provides office space and administrative support for student government. Services for students include the Student Lounge in Campus Center East, the housing notebook, publication of a Student Handbook, the Dean’s Honor List, graduation, scholarships, cultural events, and information on student organizations. Student government and clubs are under the auspices of Student Activities. Currently, there are thirty chartered clubs on campus.

ASSOCIATED STUDENTS
The Associated Students of Chaffey College (ASCC), an organization to which every currently enrolled credit-class student belongs, is governed by the Campus Council. Its membership is composed of eighteen representative Chaffey students. The Campus Council consists of two bodies, an executive body (President, Vice President of Administration, Activities Commissioner, Finance Commissioner, ICC Coordinator, and Secretary) and the Senate (six elected positions and six appointed positions). There is also a Student Trustee who serves as liaison between the Chaffey College Governing Board and the students. The Campus Council holds weekly meetings throughout the academic year. The ASCC campuswide activities program and Inter-Club Council are primarily supported through the payment of the ASCC fee. This fee entitles students to the ASCC Gold Card with numerous campus and community discounts. An annual scholarship program in spring awards $25,000 in funds generated by the fee.

CLUBS AND ORGANIZATIONS
The Inter-Club Council oversees the activities of all clubs and organizations which have renewed their charters for the current school year (via submission of annually required forms). Certain organizations are professional or vocational while others are recreational, cultural, religious, or service-oriented. All are administered by students for the benefit of students. Each club or organization is required to have a full-time faculty/staff advisor in order to be recognized by the Chaffey Community College District. Active clubs and organizations in the past include the following:

- Alpha Gamma Sigma (honor society)
- American Society of Engineers and Architects
- Anthropology Society
- Associated Press
- Black Student Union
- Ceramic Club
- Chinese Club
- Environmental Club
- Flying Club
- French Club
- Geology Club
- Indian Subcontinent Club
- Islamic Club of Chaffey College
- International Student Club
- Kabataan
- Kappa Sigma Nu (Nurses)
- Korean American Student Association
- Lambda Student Association
- MECHA
- Minerva Circle
- Model United Nations
- No Color Lines
- One Over One
- Sigma Iota Delta
- Ski and Snowboard Club
- Spanish Club
- Television Broadcasting Club
- Together Plus
- Vietnamese Club
Publications

The Breeze is the official student publication on campus. Published twice a month, the newspaper is written and edited by students enrolled in Newspaper Production, Journalism or English 61ABCD.

Other publications include descriptive bulletins and brochures about programs and services of the college and are available in the Student Activities Office and the Counseling Centers. Any other publications to be distributed on campus must conform to district policies and procedures. For further information contact the Student Activities Office, 941-2635.

Athletics

Playing under the name of The Panthers, the men’s and women’s teams compete in the Foothill Athletic Conference. The men’s athletic program offers competition in football, basketball, baseball, swimming, track, and water polo. The women’s athletic program includes competition in basketball, softball, swimming, track, and volleyball.

ATHLETIC ELIGIBILITY

Chaffey College is a member of the Foothill Conference. Intercollegiate athletic competition is governed by the California Community College Commission on Athletics.

To be eligible for competition, student athletes must be enrolled in a minimum of 12 units during the season of sport (9 of those units must be degree/certificate applicable). Between seasons, student athletes are required to complete 24 units, and maintain a minimum 2.00 GPA. Consult the Athletic Advisor in Counseling Center to determine athletic eligibility and to complete a student educational plan.

FACILITIES

The gymnasium, used by both men and women students, has a seating capacity of 2,000. The upper level provides bleachers, a dance room, and a weight room. The women’s dressing room and a classroom are located on the west side of the building. The men’s locker room for the athletic teams and a classroom are located on the east side.

Adjacent to the gymnasium are eight tennis courts, a 4200-seat stadium with football field and track, a baseball field, handball courts, and two additional fields for physical education and athletic activities. The diving and swimming pools are immediately south of the gymnasium.

Housing

Since the college has no dormitory facilities, students not living at home must make their own arrangements for living quarters. Chaffey College assumes no responsibility for the inspection or approval of student housing.

As a service to students, the Student Activities Office in the Campus Center maintains a book of available housing to be found in the nearby communities. Listings include room and board, rooms only, roommates, rooms with kitchen privileges, apartments, houses, and opportunities to work for free room and board. Rental rates may vary. No charge for listing ads.

Student Services

Educational, vocational, and personal counseling are available to all students in order to assist them in developing appropriate and realistic goals. General counseling services regarding programs offered at Chaffey College are available to everyone at no charge.

COUNSELING AND TRANSFER
AND CAREER CENTER

The Counseling Center and Transfer and Career Center offer students information on all academic and vocational programs at Chaffey College. Counseling services include assessment and orientation for new students, how and when to prepare for transfer to a four-year college, evaluation of course work taken at other colleges, applications for graduation and for certificates, processing of waivers and petitions, opportunities to meet with representatives from four-year colleges, and referrals to other agencies on campus and in the community. The Counseling and Transfer and Career Centers are valuable resources for students’ questions and concerns.

Career Planning is an important concern for many students. To assist Chaffey College students and members of the community in formulating realistic career goals, professional counselors who specialize in career decision making are on staff in the Counseling Center and Transfer and Career Center. Evaluation of interests, aptitudes, values, individualized resume writing and job interview techniques are services provided to assist students in reaching career goals. SIGI+ and Eureka, computerized career search systems, are available for use by students.

Regularly scheduled classes in Career Exploration and Planning, Orientation to College, College Survival Skills, and Employment Planning are listed in the Schedule of Classes each term under Guidance.

Career testing for aptitude, personality, values, and interests is available through the Counseling Center to help students identify careers of interest. Contact the Counseling Center, 941-2116, for details. A $15.00 fee must be paid at the Bursar’s window before scheduling tests.

The Ontario Education Center is staffed with a counselor who provides educational, career, and personal counseling. Contact the Ontario Education Center for information, 477-2900.

DISABLED STUDENT PROGRAMS
AND SERVICES

Chaffey College maintains a strong commitment to serving people with developmental, learning, physical, communicative, psychological disabilities and acquired brain injuries, who desire postsecondary academic or vocational education.

1. Learning Resource Program: The goal of this program is to provide equal access to postsecondary education for students who are experiencing difficulties in mathematics, reading, written or oral expression, listening comprehension, language mechanics, and spelling. Credit and non-credit classes are offered in reading, language, mathematics, and study skills. These courses are listed under Basic Skills in the Schedule of Classes. Student participation in the program is strictly voluntary. Supportive services include but are not limited to the following:
Educational evaluations
Individual educational planning
Prescriptive learning planning
Class support and tutorial assistance
Test-taking facilitation
Referral services
Academic vocational counseling
Verification of measurable progress
Interested persons are encouraged to contact one of the three Educational Resource Center locations:

CHAFFEY COLLEGE
LEARNING CENTER WEST
Rancho Cucamonga, CA 91737-3002
909/941-2332

FONTANA EDUCATION CENTER
16855 Merrill Avenue
Fontana, CA 92335
909/350-3596

ONTARIO EDUCATION CENTER
208 West Emporia Street
Ontario, CA 91762
909/477-2925

2. Physically Limited Student Services: The aim of the program is to intervene when students' physical, communicative, and/or psychological limitations interfere with the instructional process; thus allowing Chaffey students an equal opportunity to quality education. This is accomplished by providing a wide spectrum of supportive services which includes, but is not limited to, the following:
- On-campus transportation
- Adapted parking
- Priority registration
- Adaptive equipment
- Notetaker service
- Reader service
- Test-taking facilitation
- Liaison and referral services
- Counseling
- Adaptive P.E.
- Priority book-buy
- Print enlargement
- Campus orientation

Classes designed to assist students with physical disabilities are also offered off campus, in convenient community locations. Courses are based on individual student need and may include the following:
- Therapeutic Recreation
- Cognitive Retraining
- Language, Mathematics, and Reading Development
- Guidance

Interested persons are encouraged to call the Physically Limited Student Services, 909/941-2380, (push #2 for the office), or TDD, 909/466-2828, or stop by Campus Center West-18 for further information

3. Learning Development Center: The goal of this program is to provide an academic and transitional work program for students with disabilities. The academic component focuses on, but is not limited to the following classes:
- Survival Reading
- Vocational Skills Training
- Career Preparation
- Applications
- Resume Writing
- Career Explanation
- Interview Techniques
- Career Success
- Work Attitudes
- Job Retention
- Job Seeking Skills
- Job Club

Vocational skills classes are used as a means to teach, observe, and assess appropriate work behaviors, responsibility, speed, accuracy, stamina, and other skills necessary for successful job placement.

Interested persons are invited to phone the Learning Development Center at 909/980-7433 or visit the facility located at 9375 Ninth Street, Rancho Cucamonga, CA 91730.

JOB PLACEMENT
The Job Placement Office (Vocational Education Building, Room 77, First Floor, 941-2339) provides job referrals and personnel services to current and former Chaffey College students on an appointment basis. The office maintains current listings of jobs available on and off campus. As a service to local employers and interested students, the Job Placement staff assists applicants in determining job qualifications and making first contacts with employers.

Job Placement also provides information on student pay rates, prepares payroll documents for students who are employed on campus, and completes employment verification forms for student employees.

CAMPUS CENTER
The Campus Center is open day and evening during school hours. Its primary function is to unify the campus. It is a meeting place for students, faculty and administration where, together or individually, they may relax, join in significant dialogue, and enjoy a variety of activities.

The center is divided into east, west, and south wings, separated by the Campus Center Court which provides students a place to express their personal views publicly, and to hear those of other students and of off-campus speakers. Offices and/or services available in the Campus Center are:

East
- Associated Student Body Government Office
- Bookstore
- Student Activities
- Student Lounge
- Transfer and Career Center
West
- EOPS
- Cafeteria
- ERC
- Learning Center
- Financial Aid Office
- Food Service Management Lab
- Health Services Office
- Physically Limited Student Services
- Staff Lounge

BOOKSTORE
The Bookstore in Campus Center East is open throughout the year for the convenience of students in obtaining textbooks and supplies needed for classes. Gifts, novelties, and other items of interest are also available.

EXTENDED OPPORTUNITY PROGRAMS AND SERVICES (EOPS)
The Extended Opportunity Programs and Services (EOPS) office is located in the Harry D. Wiser Actuation Center (north of the Cafeteria). EOPS is a state-funded program intended to provide support services to financially and educationally disadvantaged students. Program participants are eligible for priority registration, academic and personal counseling, peer advisement, individual tutoring, and assistance in paying college fees and buying books. Bilingual staff members are available to assist students who speak limited English. Additional benefits and services are available through the CARE program to EOPS students who are single parents with children under six years of age and receiving public assistance.

Further information and eligibility requirements may be obtained from the EOPS Office.

STUDENT HEALTH SERVICES
Student Health Services provides varied services for students. These include first aid, treatment for minor illnesses, health examinations, birth control, family planning, T.B. testing, laboratory testing, consultation regarding health problems, individual and group counseling, and video cassettes and handouts on numerous topics. A $10.00 Health Fee is charged at the time of registration. In addition, certain laboratory tests and medications may require an additional fee. Brochures and pamphlets on student insurance and health-related subjects may be obtained in Student Health Services. Our clinic hours are 7:30 a.m. to 7:30 p.m., Monday through Thursday, and 7:30 a.m. to 4:30 p.m., Friday. Services of physicians, nurse practitioners and counselors are available by appointment.

Health Services exists for all students. Students are encouraged to visit the office, located in Campus Center West (west of the cafeteria).

ADMISSIONS AND RECORDS
The Office of Admissions and Records provides numerous services to students and members of the community. The Office provides general information about the college, and accepts applications for admission. Students register, add, drop, and withdraw from classes through this office. Petitions to enter class late, transcripts, credit by examination, and enrollment verifications are all initiated via this office. Admissions and Records maintains grade reports, student academic records, courses taken, units attempted, units earned, grades, grade points, graduation dates, military credit, non-credit enrollment, athletic eligibility and other data and prepares class roll sheets, diplomas, and certificates. The Veterans Services Office is located in the Office of Admissions and Records.

CHILDREN’S CENTERS
In March 1975 the Chaffey College Governing Board approved the establishment of Campus Child Development Services for the children of Chaffey College students. On the main campus the Children’s Center is located in the northwest corner. Child care is also available at the off-campus Cucamonga Children’s Center facility.

The Children’s Centers have three interrelated purposes that provide:

1. High-quality care and educational experiences for children admitted;
2. A service to student-parents so they may more easily pursue their educational goals;
3. A learning opportunity for students enrolled in courses related to children and their development.

Each center is licensed by the State of California to serve a specific number of children during day and evening hours. A limited program is available during regular Summer session.

The Children’s Centers are staffed by outstanding professional and paraprofessional people. They have well-rounded programs emphasizing the educational, physical, and social development of children, along with instruction in effective parent-child interaction concepts and practices. Parents are required to participate in the daycare program two hours each week.

All children are welcome to the Children’s Centers, regardless of sex, race, religion, ethnicity, national origin, or physical handicap. The day programs serve children 2 years of age through kindergarten age. The evening program serves children 2 through twelve years of age. All children must be in good health, and parent(s) must meet the student-parent criteria. Student-parent criteria: A student-parent is any person registered to attend classes at Chaffey College who has legal custody of a child. Consideration for children with special needs will be evaluated during the application process.

Student-parents are required to have a declared vocational or academic goal which they are actively pursuing.

Daytime services of the Children’s Centers are free to those student-parents who qualify and who follow application procedures. According to state law student-parents who do not meet the financial requirements are subject to a sliding fee based on provable income. A nightly rate is charged for each child enrolled in the evening program.

Further information may be secured at the Children’s Centers.
Graduation Requirements and Programs of Study

Statement of Philosophy

The Associate Degree

An associate degree from Chaffey College symbolizes more than an accumulation of units. It represents successful efforts on the part of the student to complete a series of learning experiences designed to enhance insights, develop competencies, and increase knowledge. Although the degree requirements include the widest possible variety of choices for all students, the framework of curricula has been established by the faculty in compliance with state law and community expectations. Each associate degree is a unique expression of achievement designed to ensure:

• An ability to read and write the English language at an acceptable collegiate level.
• An appreciation of the importance of esthetic and/or ethical values to humankind.
• An understanding of significant scientific principles and methods.
• An ability to apply mathematical concepts.
• A perspective designed to enhance the understanding of a pluralistic society.
• An appreciation of the importance of physical fitness and wellness.
• Learning skills sufficient to support lifelong intellectual pursuits.

In addition to these accomplishments, the student shall possess sufficient depth in a selected field of knowledge to contribute to lifetime interests.

General Education

We believe that education makes us what we are and is the well-spring of what we are to become; it is humankind’s most important enterprise and one of life’s greatest privileges. General education comprises a body of knowledge that persons should study and should know to comprehend the modern world beyond their own career objectives. General education is ideas, belief, knowledge, theories, skills and values, and thus transcends any single discipline, any single religion, or any single culture. General education is not specific application, techniques, or technology. The enlightened mind is interdisciplinary and multicultural and has a global view of self and of society. The general education program is framed in the following ideals:

1. Each student should develop sufficient skills and methodologies to pursue his/her education. Each student should read competently enough to understand primary sources, should write well enough to communicate clearly, and should have sufficient skills and knowledge of technology to verify and quantify the problems of every day life.
2. The student should have basic science literacy sufficient to read and evaluate critical issues in areas such as the environment, health, the physical world, and emerging technologies.
3. The student should have a basic understanding of social institutions sufficient to articulate the problems of society, politics, economics, and world affairs as an educated voice of society.
4. The student should develop a knowledge and appreciation of attitudes, beliefs, values, and traditions of other cultures as well as his/her own.
5. The student should be exposed to the esthetic side of culture with sufficient knowledge to have critical and culturally inclusive ideas in the humanities. Participation in the arts as a means of self expression is encouraged.
6. The student should have an understanding of culture and be able to integrate it with new knowledge, new consciousness, and new values in an interdisciplinary way.

It is our objective to develop in each student, through the general education program, a sense of discovery about himself/herself and about this world. It is hoped that this will lead to a greater personal sense of self, to an understanding of the world community, to a necessary integration of environment and technology, and an appreciation of what is good and beautiful.

— The Chaffey College Faculty Senate
Graduation Requirements

The minimum requirements for graduation with the degree of Associate in Arts or Associate in Science are specified by the Board of Governors of the California Community Colleges and the Chaffey College Governing Board. The associate degree will be granted upon completion of 60 semester units of work and the fulfillment of the following specific requirements:

UNIT AND SUBJECT REQUIREMENTS FOR THE ASSOCIATE DEGREE

I. General Education (minimum 18 units)
   Complete the requirements stated under "General Education." (Note: Students who are qualified to be certified for the CSU General Education pattern of classes or the IGETC pattern of classes also fulfill the Associate Degree General Education for Chaffey College.)

II. Major Requirements (minimum 18 units)
   Satisfy one of the following options:
   Option A. Complete an associate degree program as described under "Programs of Study" in the Chaffey College catalog.
   Option B. Complete the California State University (CSU) General Education course pattern for a major in General Education.
   Option C. Complete the Intersegmental General Education Transfer Curriculum (IGETC) for a major in University Studies.

III. Multi-Cultural/Gender Studies
   (minimum one course — see list of approved courses)

IV. Physical Education, Recreation, and Wellness
   (minimum 3 units — see list of approved courses)

V. Electives
   (any additional units necessary to meet minimum degree unit requirement)

Minimum total units required for degree — 60 units

BASIC SKILLS COMPETENCY REQUIREMENTS FOR GRADUATION

I. Writing
   The student must pass with a minimum grade of C or better in one of the following courses:
   Business and Office Technologies 88
   English 450, 1A
   English as a Second Language 450

II. Reading
   The student must pass with a minimum grade of C in any course in literature, anthropology, economics, sociology, psychology, history, philosophy, or political science that is applicable to the General Education requirement of the Associate Degree.

III. Mathematics
   Mathematics competency may be met by passing the Elementary Algebra Skills Examination (may be taken only one time) or by passing with a minimum grade of C in any one of the following courses:
   Social Science 10
   Statistics 10

IV. Computer Literacy
   Computer literacy may be met by completion of one of the following:
   1. Pass with a minimum grade of C in one of the following:
      Art 67A, 67B, 68A, 68B, 68C, 71, 72
      Computer Science 1, 20, 21
      Drafting 40, 41, 43, 53
      Health Science 405
      Music 12
      Photography 456
      Social Science 11
      Theatre Arts 10
   2. Pass with a minimum grade of B an appropriate articulated high school course.
   3. Pass a computer literacy examination (both written and hands-on) administered by the college.

OTHER REQUIREMENTS FOR GRADUATION

I. Scholarship Requirements for Graduation
   A minimum grade point average (GPA) of 2.00 (C average) in degree applicable units attempted.

II. Residence Requirements for Graduation
   A minimum of 12 units must be earned at Chaffey College.

III. Application for Graduation
   Students must file a formal application for graduation in the College Counseling Center. Students may graduate at the end of any semester or Summer session. Refer to the college calendar for application deadline dates.

IV. Continuous Attendance
   The preceding graduation requirements apply to students entering the 1996-97 school year. Students who enrolled prior to Summer 1996 and who have maintained continuous attendance (attendance in at least one semester or two quarters excluding Summer sessions each calendar year—January 1 through December 31—as indicated on a permanent record) at any accredited college have the option of meeting the current requirements or those in effect at the time continuous attendance began. In the event that required courses have been discontinued, students may petition for substitution by making an appointment with a counselor in the Counseling Center.
General Education

A. Language and Rationality
(minimum of 2 courses)

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<tr>
<th>English Composition</th>
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<tr>
<td>(one course with a grade of C)</td>
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<tr>
<td>Business &amp; Office Technologies 88</td>
</tr>
<tr>
<td>English 450, 1A</td>
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<tr>
<td>English as a Second Language 450</td>
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Communication and Analytical Thinking
(one course)

| Communication Studies 2, 4, 6, 8 |
| Computer Information Systems 1 |
| Computer Science 1 |
| English 1B |
| Philosophy 76 |
| Social Science 10 |
| Statistics 10 |

B. Natural Sciences
(one laboratory science course)

| Anthropology 1 & 1L |
| Biology 1, 2, 3, 4, 20, 22, 23 & 23L, 50, 57 |
| Chemistry 9, 10, 20A |
| Earth Science 1 & 1L, 5 & 5L |
| Geography 4 & 5 |
| Geology 1, 2 |
| Physics 5 & 6, 20, 44, 45 |

C. Humanities
(minimum 4 units—at least two courses required, one from each of the following categories)

Arts (one course)

| Art 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 25A, 38, 42, 62A, 64 |
| Broadcasting 10, 20, 30 |
| Communication Studies 14 |
| Fashion Design 20, 421 |
| Fine Arts 50 |
| Interior Design 11, 12, 13 |
| Music 1, 2A, 2B, 3A, 4, 12, 20, 21, 26, 31, 32, 33, 42, 60, 62 |
| Photography 1, 10, 13 |
| Theatre Arts 1, 7, 8, 20, 21, 23, 49 |

Humanities (one course)

| English 1C, 7A, 7C, 7D, 30, 31, 32, 33, 68, 70A, 70B, 71, 75A, 75B, 76, 78, 80A, 80B, 81 |
| Economics 1A |
| French 1, 2, 3, 4 |
| German 1, 2, 3, 4 |
| History 1, 2, 5, 6, 9, 10 |
| Humanities 1A |
| Philosophy 70, 72, 80, 81, 82 |
| Spanish 1, 2, 3, 4, 5, 11, 12 |

D. Social and Behavioral Sciences
(minimum 4 units—at least two courses required, one from each of the following categories)

American Institutions (one course)

| Consumer Studies 11 |
| Economics 1, 2, 4, 6, 10 |
| Geography 10 |
| History 17, 18, 25, 50, 51, 70, 71 |
| Political Science 1, 2, 3, 7, 10, 21, 32 |

Behavioral Sciences (one course)

| Anthropology 2, 2 & 2L, 3 |
| Child Development 2, 4 |
| Communication Studies 12, 74, 76 |
| Correctional Science 8 |
| Geography 1, 11 |
| Gerontology 18, 21 |
| Psychology 1, 21, 25, 65 |
| Sociology 10, 18 |

Multi-Cultural/Gender Studies
(minimum one course—may also meet other associate degree course requirements)

| Anthropology 3 |
| Art 6 |
| Biology 11, 12, 15 |
| Child Development 26 |
| Communication Studies 74, 76 |
| Correctional Science 8, 409 |
| English 70A, 70B, 76 |
| Fashion Design 421 |
| Food Service Management 25 |
| Geography 1, 10, 11 |
| Gerontology 18, 22 |
| Health Science 430 |
| History 9, 10, 25, 50, 51, 70, 71 |
| Humanities 1A |
| Interior Design 13 |
| Music 26 |
| Philosophy 81, 82 |
| Physical Education Lecture 23, 421 |
| Political Science 21 |
| Social Science 22 |
| Sociology 10, 14, 18 |

Physical Education, Recreation and Wellness
(minimum 3 units - may also meet other associate degree course requirements)

| Biology 12, 13, 14 |
| Child Development 21 |
| Consumer Studies 10, 15, 40 |
| Food Service Management 15 |
| Gerontology 10, 22, 25, 31, 412 |
| Health Science 412 |
| Physical Education Lecture 4, 10, 14, 15, 20, 23, 31 |
| Physical Education Activity |
| (all one-half and one-unit activity classes) |
| Physical Education Team (all two-unit team sports) |
| Physical Education Adaptive (all adaptive classes) |
| Psychology 5 |
| Social Science 17, 22 |
| Sociology 16 |

Graduates from the ADN and LVN programs meet this requirement.

NOTE: Students completing the CSU General Education or IGETC general education pattern must also complete the “Multi-Cultural / Gender Studies” and “Physical Education, Recreation, and Wellness” requirements as part of their 60 unit requirement to earn the associate degree.
Degree and Certificate Programs

PROGRAMS OF STUDY LEADING TO AN ASSOCIATE IN ARTS DEGREE

Anthropology
Art
Communication Studies
Economics
English
Fine Arts
Foreign Language:
French
German
Spanish
General Education
History
Humanities
Liberal Arts and Sciences
Music
Philosophy
Religious Studies
Photography
Physical Education
Political Science
Psychology
Social Science
Sociology
Theatre Arts
Dance
University Studies

PROGRAMS OF STUDY LEADING TO AN ASSOCIATE IN SCIENCE DEGREE

Accounting
Aeronautics
Art/Graphic Communication:
Computer Graphics
Art/Visual Communication:
Illustration
Autobody Repair Technology
Automotive Technology
Biology
Broadcasting
Business Administration
Business and Office Technologies:
Office Management
Professional Administrative Assistant
Chemistry
Child Development
Computer Information Systems
Consumer Studies
Aerobic Fitness and Nutrition
Correctional Science
Dental Assisting
Dietetic Technician
Drafting Technician:
Architectural
Electrical
Mechanical
Earth Science
Electricity, Industrial
Electronics

Engineering
Environmental Technology
Fashion Design
Fashion Merchandising
Geography
Geology:
Basic Geology
Preprofessional Geology
Gerontology
Hotel and Food Service
Management:
Food Service
Hotel Management
Interior Design
Management
Mathematics
Merchandising
Music, Commercial
Nursing: A.D/V.
Nursing: Vocational
Physical Science
Physics
Radiologic Technology
Small Business Entrepreneur Supervision

PROGRAMS OF STUDY LEADING TO EMPLOYMENT AND/OR CERTIFICATE

Students desiring occupational or vocational training may choose a certificate program as their objective. Certificate programs are usually one-year (sometimes two-year) educational programs which offer the courses needed to prepare for employment. All courses required for a certificate must be completed with a minimum grade of C. Students apply for a certificate in the Counseling Center.

Accounting
Accounting Paraprofessional
Aeronautics:
Basic Helicopter Maintenance
Art/Graphic Communication:
Computer Graphics
Art/Visual Communication:
Illustration
Autobody Repair Technology
Automotive Technology
Biology
Broadcasting
Business Administration
Business and Office Technologies:
Office Management
Professional Administrative Assistant
Chemistry
Child Development
Computer Information Systems
Consumer Studies
Aerobic Fitness and Nutrition
Correctional Science
Dental Assisting
Dietetic Technician
Drafting Technician:
Architectural
Electrical
Mechanical
Earth Science
Electricity, Industrial
Electronics

WordPerfect for Windows
Specialist
Child Development:
Beginning
Intermediate
Advanced Administration
Computer Information Systems
Microcomputer Applications:
Business Presentation
Media
Microsoft Excel
Microcomputer Business Applications
Microcomputer Support Specialist
Consumer Studies
Aerobic Fitness and Nutrition
Correctional Science
Culinary Arts
Dental Assisting
Dietetic Service Supervisor
Drafting Technician:
Architectural
Electrical
Mechanical
Electricity, Industrial:
Level 1
Level 2
Electronics:
Basic Electronics Technician
Electronics Service Technician
Telecommunications Technician
Environmental Technology
Fashion Design
Fashion Merchandising
Gerontology
Hotel and Food Service Management:
Food Service
Hotel Management
Interior Design
Management
Merchandising
Music, Commercial
Nursing: Vocational
Photography, Still
Physical Education:
Aquatics
Wellness
Radiologic Technology
Small Business Entrepreneur Supervision

Some programs of study may lead to certification or licensure by state or national agencies. These programs are indicated by italic type.
Programs of Study

Accounting

The accounting program is designed to serve three functions: (1) to prepare non-transfer accounting students for entry level positions by making the accounting certificate and/or the two-year degree in accounting available to them; (2) to prepare transfer accounting students with appropriate background for upper division courses; and (3) to provide non-accounting majors with sufficient expertise to enable them to make intelligent use of accounting information.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 1B</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>STAT 10</td>
<td>Elementary Statistics</td>
<td>4</td>
</tr>
</tbody>
</table>

Requirements for the Accounting Certificate:

- Pass proficiency examination in touch system calculation OR take:
- ACCTG 345 Touch-Key Skill Development 1/2

Plus 4 courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 450</td>
<td>Federal Tax Principles</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 435</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
<td>3</td>
</tr>
<tr>
<td>BUS 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>CIS 60A</td>
<td>Fundamentals of Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft</td>
<td>1/2</td>
</tr>
<tr>
<td>CIS 413B</td>
<td>Advanced Microsoft Excel</td>
<td>1/2</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Accounting Paraprofessional

This program emphasizes the development of skills and concepts necessary to obtain entry-level positions in small businesses which use computerized accounting systems.

Requirements for the Paraprofessional Accounting Certificate:

- BUSOT 445A Beginning Word Processing: Microcomputer Software 3
- BUSOT 455 Fundamentals of English for Business 3
- CIS 1 Introduction to Computer Information Systems 3
- Pass proficiency examination in touch system calculation OR take:
- ACCTG 345 Touch-Key Skill Development 1/2

Plus 1 course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 435</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft</td>
<td>1/2</td>
</tr>
<tr>
<td>CIS 413B</td>
<td>Advanced Microsoft Excel</td>
<td>1/2</td>
</tr>
</tbody>
</table>

Aeronautics

This program leads to the Federal Aviation Administration Airframe and Powerplant ratings, holders of which command a wide choice of employment opportunities in commercial or general aviation. Both the "A" and the "P" sections at Chaffey College are courses approved by the FAA which are continually updated to meet industry standards. In order to fulfill the 1900-hour FAA experience requirements, full-time enrollment for a minimum of four semesters is required.
Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 10</td>
<td>Materials, Processes, and Inspections</td>
<td>4 1/2</td>
</tr>
<tr>
<td>AERO 11</td>
<td>AERO Science and FAA Regulations</td>
<td>4 1/2</td>
</tr>
</tbody>
</table>

Plus 7 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 13AB</td>
<td>General Aeronautics Laboratory</td>
<td>1 1/2</td>
</tr>
<tr>
<td>AERO 14ABCD</td>
<td>General Aeronautics Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Plus Option A or Option B:

OPTION A: Powerplant ("P" License)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 20</td>
<td>Powerplant Theory &amp; Maintenance</td>
<td>4 1/2</td>
</tr>
<tr>
<td>AERO 21</td>
<td>Powerplant Systems &amp; Components I</td>
<td>4 1/2</td>
</tr>
<tr>
<td>AERO 22</td>
<td>Powerplant Systems &amp; Components II</td>
<td>4 1/2</td>
</tr>
</tbody>
</table>

Plus 10 1/2 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 23ABC</td>
<td>Powerplant Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AERO 24ABCDEF</td>
<td>Powerplant Laboratory</td>
<td>1 1/2</td>
</tr>
</tbody>
</table>

OPTION B: Airframe ("A" License)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 30</td>
<td>Airframe Structures</td>
<td>4 1/2</td>
</tr>
<tr>
<td>AERO 31</td>
<td>Airframe Primary Systems</td>
<td>4 1/2</td>
</tr>
<tr>
<td>AERO 32</td>
<td>Airframe Auxiliary Systems</td>
<td>4 1/2</td>
</tr>
</tbody>
</table>

Plus 10 1/2 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 33ABC</td>
<td>Airframe Laboratory</td>
<td>1 1/2</td>
</tr>
<tr>
<td>AERO 34ABCDEF</td>
<td>Airframe Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

Note:

1. After successful completion of Option A and passing a qualification test with a grade of 80% or better, students will be eligible to take the FAA examination for the Power Plant License. After successful completion of Option B and passing a qualification test with a grade of 80% or better, students will be eligible to take the FAA examination for the Airframe License.

2. All students enrolled in the Aeronautics program must provide a basic set of hand tools.

Basic Helicopter Maintenance

To meet the ever increasing demand to fulfill the needs of the helicopter operators and manufacturers, qualified Helicopter Maintenance Technicians (HMT’s) are in great demand. HMT’s receiving the Helicopter Maintenance Technician Certificate will be familiar with a variety of helicopters to include: Bell, Hughes, Sikorsky, Messerschmitt-Boelkow, and Aerospatiale. The course of study includes: principles of flight; the inspection, maintenance, and repair of main and tail rotor assemblies; main and tail rotor transmissions; mast and flight control systems; reciprocating and turbine engine systems; and airframes and related systems. The Helicopter Maintenance Technician Certificate prepares students for employment in the industry.

Requirements for the Basic Helicopter Maintenance Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 460</td>
<td>Basic Helicopter Maintenance</td>
<td>9</td>
</tr>
</tbody>
</table>

Anthropology

Anthropology studies the entire range of human existence, from investigating the origin and biological evolution of our species to tracing the prehistory and history of cultures to defining group behavior in exotic and western cultures. This is why anthropology is considered to be the most holistic of the social sciences. The goal of anthropology is to interpret the human condition while answering the question, “What is humankind?” The integrative approach to the discipline links anthropology with the life sciences and the humanities, and has strong ties with disciplines ranging from biology and psychology to political science, history, and the arts, providing a humanistic perspective. Anthropology is particularly suited to persons with a wide range of interests yet, at the same time, offers specific insights to others in more specialized disciplines. The study of anthropology offers splendid preparation for careers in teaching, law enforcement, medicine and health care, and museums, to name just a few. Increasingly, business and industry leaders are employing anthropologists in key positions because their holistic perspective and broad cultural understanding prepare them to address modern-day challenges.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTHRO 1</td>
<td>Introduction to Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 2</td>
<td>Prehistory and Archaeological Methods</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO 3</td>
<td>Introduction to Social and Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANTHRO IL</td>
<td>Laboratory for Physical Anthropology</td>
<td>1</td>
</tr>
</tbody>
</table>

Plus 3 units from the following:

Broadcasting 10, 20, 30
Communication Studies 2,4,6,8,12,14,72,74,76,78,80
Fine Arts 50

Plus a minimum of 4 units from the following:

Biology 50
Geology 1, 2, 30
Physics 5 and 6, 44, 20
Plus 3 units from the following:
Anthropology 4, 2L, 21, 22
Economics 1, 2
History 5, 6
Philosophy 70, 73, 74, 76, 80, 81, 82
Political Science 7, 10
Psychology 1
Sociology 10, 70

Plus 1 course from the following:
Social Science 10
Statistics 10

Note: Foreign language is highly recommended for transfer students.

Art

The art program provides preparation for university and college transfer and/or careers in fine arts, visual communications and graphic communications with an emphasis on individual creativity and development.

To transfer, students should consult with the intended transfer institution to obtain a list of appropriate courses to complete at Chaffey College. For the Associate in Arts degree, students follow the program listed for one of the following areas of emphasis.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Major</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 10</td>
<td>Fundamentals of Design in Two Dimensions</td>
</tr>
<tr>
<td>ART 12</td>
<td>Fundamentals of Design in Three Dimensions</td>
</tr>
<tr>
<td>ART 14</td>
<td>Introduction to Drawing</td>
</tr>
<tr>
<td>ART 80</td>
<td>Portfolio and Presentation</td>
</tr>
<tr>
<td>ART 92</td>
<td>Special Topics: Art</td>
</tr>
</tbody>
</table>

Art or Drawing/Design Emphasis:

<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramics Studio Emphasis</td>
<td>ART 2 (or ART 20, Introduction to Ceramics)</td>
</tr>
<tr>
<td>ART 25A</td>
<td>Watercolor Painting</td>
</tr>
<tr>
<td></td>
<td>(or ART 44, Mixed Media Studio and Theory)</td>
</tr>
<tr>
<td></td>
<td>Recommended: ART 16, 35, 38, 40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing/Painting Studio Emphasis</td>
<td>ART 4</td>
</tr>
<tr>
<td></td>
<td>(or ART 6, Women Artists in History)</td>
</tr>
<tr>
<td></td>
<td>(ART 16, Introduction to Painting)</td>
</tr>
<tr>
<td></td>
<td>(ART 30, Figure Drawing)</td>
</tr>
<tr>
<td></td>
<td>(or ART 25A, Watercolor Painting)</td>
</tr>
<tr>
<td></td>
<td>Recommended: ART 16, 35, 38, 40, 44, 62A, 65, PHOTO 10, 456</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emphasis</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Media Emphasis</td>
<td>ART 4</td>
</tr>
<tr>
<td></td>
<td>(or ART 16, Introduction to Painting)</td>
</tr>
<tr>
<td></td>
<td>(or ART 30, Figure Drawing)</td>
</tr>
<tr>
<td></td>
<td>(ART 32, Directed Studio: Drawing)</td>
</tr>
<tr>
<td></td>
<td>(or ART 34, Directed Studio: Painting)</td>
</tr>
<tr>
<td></td>
<td>Recommended: ART 8, 32, 34, 38, 44, 62A, 65, PHOTO 10, 456</td>
</tr>
</tbody>
</table>

Anthropology

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 2</td>
<td>Art History: Ancient through 1400</td>
</tr>
<tr>
<td>ART 4</td>
<td>Art History: 1400 through Contemporary</td>
</tr>
<tr>
<td>ART 6</td>
<td>Women Artists in History</td>
</tr>
<tr>
<td>ART 8</td>
<td>Contemporary Media, Art, and Visual Language</td>
</tr>
<tr>
<td>ART 10</td>
<td>Fundamentals of Design in Two Dimensions</td>
</tr>
<tr>
<td>ART 12</td>
<td>Fundamentals of Design in Three Dimensions</td>
</tr>
<tr>
<td>ART 14</td>
<td>Introduction to Drawing</td>
</tr>
<tr>
<td>ART 80</td>
<td>Portfolio and Presentation</td>
</tr>
<tr>
<td>ART 92</td>
<td>Special Topics: Art</td>
</tr>
</tbody>
</table>

Recommended: Take both ART 2 and ART 4, and ART 44, PHOTO 456
Art

Art Explorations: Time, Space, Form, and Self 3

Mixed Media Studio and Theory 3

Computers and Photography 4

Recommended: ART 6, 67A, BRDCST 10, 20, CIS 1, COMSTD 12, MUSIC 4, PHOTO 1, 10, TARTS 1, 7

Art/Graphic Communication: Computer Graphics

The Computer Graphics program develops student abilities to express concepts and ideas using computer applications as design and production tools. Emphasis is placed on the development of visual and computer literacy. Students who complete the program will have developed a portfolio suitable for use in conjunction with employment interviews and/or transfer to degree programs. Exploration of the creative interrelationships of computer graphics, photography, telecommunications, and print technologies.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 8</td>
<td>Contemporary Media, Art and Visual Language</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Fundamentals of Design in Two-Dimensions</td>
<td>4</td>
</tr>
<tr>
<td>ART 14</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ART 67A</td>
<td>Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 67B</td>
<td>Computer Graphics II</td>
<td>3</td>
</tr>
<tr>
<td>ART 68ABC</td>
<td>Computer Graphics Laboratory</td>
<td>4</td>
</tr>
</tbody>
</table>

(Any combination to equal 4 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 71</td>
<td>Typography</td>
<td>3</td>
</tr>
<tr>
<td>ART 72</td>
<td>Graphics Production</td>
<td>4</td>
</tr>
<tr>
<td>ART 80</td>
<td>Portfolio and Presentation</td>
<td>2</td>
</tr>
</tbody>
</table>

Plus 1 course from the following:
Art 4, 6, 12, 16, 25A, 32, 34, 64, 65, 67B
Business 45
Drafting 21
Interior Design 18, 23
Photography 10, 11, 13, 50

Required General Education course:
ART 10 Fundamentals of Design in Two Dimensions 4

Requirements for the Illustration Certificate:
Same as for the major and general education requirement alone plus:
ART 12 and 16 and one of the additional courses above.

Autobody Repair Technology

Autobody repair technicians restore damaged motor vehicles by straightening bent frames, removing dents, welding torn metal, and replacing defective parts. Special equipment is used to align marred frames and body sections. Pneumatic panel cutters are utilized to remove ruined body panels and new sections are welded in place. Large dents are pushed out with hydraulic jacks, hand-prying bars, hand tools, or pneumatic hammers. Plastic or solder is used to fill small dents that cannot be worked out of metals. Following restoration, surfaces are sanded and painted.
The Associate in Science Degree in Autobody Repair includes all repair phases of damaged bodies and fenders, including painting. This course prepares students for employment in the industry.

Major requirements for the
Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATBR 405A</td>
<td>Basic Autobody Repair</td>
<td>5</td>
</tr>
<tr>
<td>ATBR 405B</td>
<td>Advanced Autobody Repair</td>
<td>5</td>
</tr>
<tr>
<td>ATBR 410A</td>
<td>Basic Autobody Refinishing</td>
<td>5</td>
</tr>
<tr>
<td>ATBR 410B</td>
<td>Advanced Autobody Repair</td>
<td>5</td>
</tr>
<tr>
<td>ATCH 425</td>
<td>Auto Air Conditioning, Heating, and Cooling Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Requirements for the Autobody Repair Technology Certificate:
Same as requirements for the major.

Automotive Technology

The Automotive Technology curriculum is designed to (1) prepare students as competent technicians for gainful employment in the automotive industry following completion of the program, and (2) to upgrade skills of technicians already employed in the field.

Major requirements for the
Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A TCH 20</td>
<td>Automotive Engine Rebuilding</td>
<td>11</td>
</tr>
<tr>
<td>(or A TCH 20A Automotive Engine Rebuilding: Upper Section, and A TCH 20B Automotive Engine Rebuilding: Lower Section)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A TCH 22</td>
<td>Automotive Brakes, Chassis, &amp; Steering</td>
<td>11</td>
</tr>
<tr>
<td>(or A TCH 22A Automotive Brakes, and A TCH 22B, Automotive Chassis and Steering)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A TCH 23</td>
<td>Automotive Tune-Up Electrical &amp; Fuel Systems</td>
<td>11</td>
</tr>
<tr>
<td>(or A TCH 23A Automotive Tune-Up Electrical, and A TCH 23B, Automotive Fuel Systems)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A TCH 24</td>
<td>Automotive Transmissions and Drive Trains</td>
<td>11</td>
</tr>
<tr>
<td>(or A TCH 24A, Automotive Drive Trains, and A TCH 24B, Automotive Transmission Repair)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Requirements for the Automotive Technology Certificate:
Same as requirements for the major plus:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A TCH 425</td>
<td>Automotive Air Conditioning, Heating, and Cooling Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Requirements for the High Performance (Race Car) Technology Certificate:
Earned Automotive Technology Certificate plus:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>A TCH 440*</td>
<td>Automotive Design and Performance I</td>
<td>6</td>
</tr>
</tbody>
</table>

*Bourses must be taken at Chaffey College.

Biology

The Biological Science major prepares students for a wide variety of professional and paraprofessional occupations in both the applied and academic fields.

Concepts and procedures of biology courses provide the knowledge and practices that are essential for those interested in agriculture, biology, botany, microbiology, zoology, entomology, fish and wildlife, ecology, plant breeding, animal and plant physiology, medical technology in public and private institutions and laboratories, bacteriological phases of industry, prerequisites for allied health programs, physical therapy, undergraduate preparation for medicine, dentistry, veterinarian medicine, landscape design, graduate programs leading to teaching and research, and natural resource management including game warden, Bureau of Land Management, wildfire control, wilderness rescue, fisheries, forestry, park ranger, wildlife and land management, and natural resources.

BIOL 50 is prerequisite to the biology major and may be used to satisfy the general education requirement in Life Science.

Major requirements for the
Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 52</td>
<td>General Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 55</td>
<td>Vertebrate Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 63</td>
<td>Population Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus 7 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4</td>
<td>Field Botany</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 15</td>
<td>Science, Nature, and Human Values</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 23, 23L</td>
<td>General Microbiology</td>
<td>3-2</td>
</tr>
<tr>
<td>BIOL 56</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 57</td>
<td>Entomology</td>
<td>4</td>
</tr>
</tbody>
</table>

Broadcasting

The Broadcasting program introduces students to the language and rhetoric of media. Initial classes provide theory and basic concepts via a series of hands-on assignments. Students may arrange their own program of courses in radio or television.

Major requirements for the
Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 52</td>
<td>General Botany</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 55</td>
<td>Vertebrate Zoology</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 63</td>
<td>Population Biology</td>
<td>4</td>
</tr>
</tbody>
</table>

CATALOG 1996–97
Major requirements for the Associate in Science Degree:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRDCST 10</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 20</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 90</td>
<td>3</td>
</tr>
<tr>
<td>FINART 50</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 85ac</td>
<td>2-3-4</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus 9 additional units in Broadcasting

Required General Education Course:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSTD 8</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements for the Broadcasting Certificate:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRDCST 10</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 70</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 71</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 80</td>
<td>3</td>
</tr>
<tr>
<td>BRDCST 81</td>
<td>3</td>
</tr>
</tbody>
</table>

Broadcasting

Business Administration

Requirements for the Business Administration Certificate:  
Same as requirements for the major.

Business and Office Technologies

The Business and Office Technologies Program (1) prepares students for employment as office support personnel, administrative assistants, and office managers; (2) develops computer competencies for the workplace, further education, and personal use; and (3) provides a foundation for developing workplace and lifelong learning, skills, and knowledge. The program offers Associate in Science Degrees, Program Certificates, and Proficiency Certificates.

Business Software Specialist

The Business Software Specialist Certificate offers in-depth competency for efficient, effective utilization of current business software applications as found in the electronic workplace. Emphasis on computer software (Microsoft Office Suite, Perfect Office Suite) integrating word processing, spreadsheets, database management, and desktop publishing. This program requires a minimum of 12 Units.

Requirements for the Business Software Specialist Certificate:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 45C</td>
<td>3</td>
</tr>
</tbody>
</table>

Business Administration

The Business Administration program at Chaffey College is designed to prepare students for employment following graduation. Students who intend to earn a Bachelor’s Degree (transfer program) should consult with a counselor to discuss transferability of courses.

Major requirements for the Associate in Science Degree:  
<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 465</td>
<td>3</td>
</tr>
</tbody>
</table>

Business and Office Technologies
BUSOT 51  Electronic Records Management  1½  BUSOT 46A  Windows Software Applications: Beginning Microsoft Word  3  (or BUSOT 45A, Beginning Word Processing: Microcomputer Software)
BUSOT 80  Microcomputer Business Applications: Electronic Office Management  3  BUSOT 50  Filing and Records Management  3  (or BUSOT 51, Electronic Records Management)

Additional units may be selected from the following recommended courses:
BUSOT 492  Special Topics  1½  BUSOT 455  Fundamentals of English for Business  3
CIS 404  Fundamentals of Microsoft Windows  1½

Plus a minimum keyboarding speed of 40 wpm for five minutes verified by the Business and Office Technologies Department Proficiency Certificate.

Data Entry

The Data Entry Certificate prepares students for positions using microcomputers. Students develop skills and knowledge in alphanumeric keyboarding and computer competencies.

Requirements for the Data Entry Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding: Speed and Accuracy Development  3</td>
</tr>
<tr>
<td>BUSOT 46A</td>
<td>Microcomputer Business Applications: Beginning Microsoft Word  3  (or BUSOT 45A, Beginning Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 80</td>
<td>Microcomputer Business Applications: Electronic Office Management  3  (or CIS 1, Introduction to Computer Information Systems, or CIS 2, Introduction to Business Application Software)</td>
</tr>
<tr>
<td>BUSOT 444</td>
<td>Concepts and Techniques of Data Entry  2</td>
</tr>
</tbody>
</table>

Plus a minimum keyboarding speed of 40 wpm for five minutes verified by the Business and Office Technologies Department Proficiency Certificate.

Business and Office Technologies

Medical Insurance Billing

The Medical Insurance Billing Certificate offers a study of the medical front office, including office procedures, medical law and ethics, scheduling appointments and surgeries, billing and collection, records management, and physician coding for insurance billing.

Requirements for the Medical Insurance Billing Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 30A</td>
<td>Beginning Medical Terminology  3</td>
</tr>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding: Speed and Accuracy Development  3</td>
</tr>
<tr>
<td>BUSOT 46A</td>
<td>Windows Software Applications: Beginning Microsoft Word  3  (or BUSOT 45A, Beginning Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 475</td>
<td>Medical Office Procedures  3</td>
</tr>
<tr>
<td>BUSOT 476</td>
<td>Medical Insurance Coding  3</td>
</tr>
<tr>
<td>BUSOT 477</td>
<td>Medical Insurance Billing  3</td>
</tr>
</tbody>
</table>

Plus 1 course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 30B</td>
<td>Advanced Medical Terminology  3</td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Anatomy and Physiology  3</td>
</tr>
<tr>
<td>BUSOT 50</td>
<td>Filing and Records Management  3</td>
</tr>
<tr>
<td>BUSOT 51</td>
<td>Electronic Records Management  1½</td>
</tr>
<tr>
<td>BUSOT 80</td>
<td>Microcomputer Business Applications: Electronic Office Management  3</td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>Bookkeeping Procedures  3</td>
</tr>
</tbody>
</table>

General Office Assistant

The General Office Assistant Certificate offers professional preparation for entry-level business and office positions. Emphasis on developing the essential skills for today's workplace: computer keyboarding and word processing, records management, language skills, and interpersonal skills. General Office Assistants may be employed as general clerks, receptionists, word processors, and in other entry-level positions. A one-semester certificate, this program requires a minimum of 12 units.

Requirements for the General Office Assistant Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding: Speed and Accuracy Development  3</td>
</tr>
</tbody>
</table>

Note: Continuing students should refer to the 1995-96 Chaffey College catalog regarding requirements for Business and Office Technology programs, if those students are presently enrolled within a former program.

New students should follow these guidelines for required completion and graduation within these new programs.
Business and Office Technologies

BUSOT 455  Fundamentals of English for Business  3
BUSOT 471  Administrative Office Management  3

Plus a minimum keyboarding speed of 35 wpm for five minutes verified by the Business and Office Technologies Department Proficiency Certificate.

Microsoft Word Specialist

The Microsoft Word Specialist Certificate offers in-depth competency in utilizing current business software. This program will prepare students for positions requiring expertise in the use of Microsoft Word.

Requirements for the Microsoft Word Specialist Certificate:

<table>
<thead>
<tr>
<th>Units</th>
<th>Major requirements for the Associate in Science Degree:</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B  Computer Keyboarding: Speed and Accuracy Development</td>
<td></td>
</tr>
<tr>
<td>BUSOT 46C  Windows Software Applications: Advanced Microsoft Word (or BUSOT 45C, Advanced Word Processing: Microcomputer Software) Filing and Records Management (or BUSOT 51, Electronic Records Management)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 50  3</td>
<td></td>
</tr>
<tr>
<td>BUSOT 88  Written Communication for Business</td>
<td></td>
</tr>
<tr>
<td>BUSOT 452  Bookkeeping Procedures (or ACCTG 1A, Principles of Accounting I) Advanced Machine Transcription</td>
<td></td>
</tr>
<tr>
<td>BUSOT 462B  3</td>
<td></td>
</tr>
<tr>
<td>BUSOT 470  Electronic Office Procedures (or BUSOT 80, Microcomputer Business Applications: Electronic Office Management) Administrative Office Management</td>
<td></td>
</tr>
<tr>
<td>BUSOT 471  3</td>
<td></td>
</tr>
<tr>
<td>BUSOT 460  3</td>
<td></td>
</tr>
<tr>
<td>BUSOT 465A  Beginning Speedwriting and Notetaking</td>
<td></td>
</tr>
<tr>
<td>BUSOT 465B  Advanced Speedwriting and Notetaking</td>
<td></td>
</tr>
<tr>
<td>BUSOT 467  Speedwriting and Shorthand Improvement</td>
<td></td>
</tr>
<tr>
<td>BUSOT 492  Special Topics</td>
<td></td>
</tr>
<tr>
<td>BUSOT 462B  3</td>
<td></td>
</tr>
</tbody>
</table>

Office Management

The Office Management Program is an Associate in Science degree, preparing students for business office careers including those in middle/administrative management. Students will develop abilities that create opportunities for promotions, job transitions, and positions of greater responsibility in the workplace. Emphasis on supervision, leadership, and interpersonal skills.

Plus a minimum keyboarding speed of 50 wpm for five minutes verified by the Business and Office Technologies Department Proficiency Certificate.
Requirements for the Office Management Certificate:
Same as requirements for the major.

**Professional Administrative Assistant**

The Professional Administrative Assistant Program is an Associate in Science degree which prepares students for careers in the executive, executive-bilingual, legal, and medical fields. Professional administrative assistants perform a full range of secretarial and administrative duties. Students may specialize within a field of interest: executive, executive-bilingual, legal, or medical. Administrative Assistants command higher salaries and have opportunities for rapid promotions to positions of greater responsibility and management. Emphasis on developing professional skills for today's workplace: computer competencies, records management, language skills, and interpersonal skills.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>3</td>
<td>Computer Keyboarding: Speed and Accuracy Development</td>
</tr>
<tr>
<td>BUSOT 46B</td>
<td>3</td>
<td>Windows Software Applications: Intermediate Microsoft Word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 45B, Intermediate Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 50</td>
<td>3</td>
<td>Filing and Records Management (or BUSOT 51, Electronic Records Management)</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>3</td>
<td>Written Communication for Business</td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>3</td>
<td>Bookkeeping Procedures</td>
</tr>
<tr>
<td>BUSOT 462A</td>
<td>3</td>
<td>Beginning Machine Transcription</td>
</tr>
<tr>
<td>BUSOT 470</td>
<td>3</td>
<td>Electronic Office Procedures (or BUSOT 80, Microcomputer Business Applications: Electronic Office Management)</td>
</tr>
</tbody>
</table>

**Specialization for completion in one of the following areas:**

**Executive**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 46C</td>
<td>3</td>
<td>Windows Software Applications: Advanced Microsoft Word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 45C, Advanced Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 465B</td>
<td>3</td>
<td>Advanced Speedwriting and Notetaking (with a minimum speed of 80 wpm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 467, Speedwriting/Shorthand Improvement)</td>
</tr>
</tbody>
</table>

**Executive - Bilingual**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 46C</td>
<td>3</td>
<td>Windows Software Applications: Advanced Microsoft Word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 45C, Advanced Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 465B</td>
<td>3</td>
<td>Advanced Speedwriting and Notetaking (with a minimum speed of 80 wpm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 467, Speedwriting/Shorthand Improvement)</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>4</td>
<td>Intermediate Spanish</td>
</tr>
<tr>
<td>SPAN 15</td>
<td>2</td>
<td>Spanish Conversation</td>
</tr>
</tbody>
</table>

**Legal**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 472</td>
<td>3</td>
<td>Legal Office Word Processing</td>
</tr>
<tr>
<td>BUSOT 473</td>
<td>3</td>
<td>Legal Office Procedures</td>
</tr>
</tbody>
</table>

**Medical**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 475</td>
<td>3</td>
<td>Medical Office Procedures</td>
</tr>
<tr>
<td>BUSOT 477</td>
<td>3</td>
<td>Medical Insurance Billing</td>
</tr>
</tbody>
</table>

**Requirements for the Professional Administrative Assistant Certificate:**
Same as requirements for the major.

**Transcriptionist**

The Transcriptionist Certificate provides computer competencies, language skills, interpersonal skills and knowledge to obtain positions using word processing systems, equipment, and current business software programs. Emphasizes developing workplace competencies in transcribing in general, legal, or medical offices.

**Requirements for the General Transcriptionist Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>3</td>
<td>Computer Keyboarding: Speed and Accuracy Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 45C, Advanced Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 46B</td>
<td>3</td>
<td>Windows Software Applications: Intermediate Microsoft Word</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(or BUSOT 45B, Intermediate Word Processing: Microcomputer Software)</td>
</tr>
<tr>
<td>BUSOT 465</td>
<td>3</td>
<td>Advanced Speedwriting and Shorthand Improvement</td>
</tr>
<tr>
<td>BUSOT 471</td>
<td>3</td>
<td>Administrative Office Management</td>
</tr>
<tr>
<td>BUSOT 492</td>
<td>3</td>
<td>Special Topics</td>
</tr>
<tr>
<td>BUSOT 488</td>
<td>3</td>
<td>Written Communication for Business</td>
</tr>
<tr>
<td>BUSOT 460</td>
<td>3</td>
<td>Proofreading: Text-Editing Skills</td>
</tr>
<tr>
<td>BUSOT 462</td>
<td>3</td>
<td>Advanced Machine Transcription</td>
</tr>
</tbody>
</table>

*Students must complete specialty courses below before enrolling in this course.*
Plus 1 course from the following:

- BIOL 424 Anatomy and Physiology 3
- BUS 28A Business Law I 3
- BUSOT 45C Advanced Word Processing: Microcomputer Software 3
- BUSOT 46C Windows Software Applications: Advanced Microsoft Word 3
- BUSOT 80 Microcomputer Business Applications: Electronic Office Management 3
- BUSOT 470 Electronic Office Procedures 3
- BUSOT 492 Special Topics 3

Plus a minimum keyboarding speed of 50 wpm for five minutes as verified by the Business and Office Technologies Department Certificate.

Specialization for the Legal Transcriptionist Certificate:
Same as requirements for General Transcriptionist plus:

- BUSOT 472 Legal Office Word Processing 3
- BUSOT 473 Legal Office Procedures 3

Specialization for the Medical Transcriptionist Certificate:
Same as requirements for General Transcriptionist plus:

- BIOL 30A Beginning Medical Terminology 3
- BUSOT 475 Medical Office Procedures 3

WordPerfect for Windows Specialist

The WordPerfect for Windows Specialist Certificate offers in-depth competency in utilizing current business software. This program will prepare students for positions requiring expertise in the use of WordPerfect.

Requirements for the WordPerfect for Windows Specialist Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding: Speed and Accuracy Development</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 45A</td>
<td>Beginning Word Processing: Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 45B</td>
<td>Intermediate Word Processing: Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 45C</td>
<td>Advanced Word Processing: Microcomputer Software</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Students who are presently taking courses within the following programs, should consult the 1995-96 Chaffey College catalog for information regarding the requirements for the following replaced programs:
- Entry-Level Administrative Assistant, Entry-Level Word Processor, File Clerk, Professional Word Processor, and Receptionist.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20B</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 70</td>
<td>Quantitative Analysis</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 75A</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 75B</td>
<td>Organic Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 66B</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 45</td>
<td>Physics for Scientists and Engineers I</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 46</td>
<td>Physics for Scientists and Engineers II</td>
<td>5</td>
</tr>
</tbody>
</table>

Required General Education courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20A</td>
<td>General Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>Calculus I</td>
<td>4</td>
</tr>
</tbody>
</table>

Note: Students should consult the transfer institution regarding the transferability of the Organic Chemistry sequence (CHEM 75A, 75B) as lower division.

Chemistry

Chemistry is the science of matter, its characterization, composition, and its transformations. It is a vital, growing enterprise as opposed to a mere accumulation of knowledge. An understanding of chemistry is basic to the physical and biological sciences and fundamental in a variety of occupations. Specialized fields of chemistry are inorganic, organic, physical, nuclear, biochemistry, and chemical engineering.

Chaffey College offers the first two years of the baccalaureate degree chemistry curriculum.
Child Development

The Child Development program provides students with competencies needed for employment as teacher assistants in public child development classrooms, as teachers or directors in government-funded or private child care centers. Courses are designed to acquaint students with basic issues in child development, curriculum design, parenting, and the impact of family, community, and schools on the growing child. Courses are useful for parents or any adults interested in children’s issues.

Major requirements for the
Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 1A</td>
<td>3</td>
</tr>
<tr>
<td>CD 1B</td>
<td>3</td>
</tr>
<tr>
<td>CD 2</td>
<td>3</td>
</tr>
<tr>
<td>CD 3</td>
<td>3</td>
</tr>
<tr>
<td>CD 4</td>
<td>3</td>
</tr>
<tr>
<td>CD 21</td>
<td>3</td>
</tr>
<tr>
<td>CD 26</td>
<td>3</td>
</tr>
<tr>
<td>CD 71A</td>
<td>2</td>
</tr>
<tr>
<td>CD 71B</td>
<td>2</td>
</tr>
<tr>
<td>CD 405</td>
<td>3</td>
</tr>
<tr>
<td>CD 472C</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 10</td>
<td>3</td>
</tr>
</tbody>
</table>

Child Development

Certificate Programs

The following certificates are designed to provide specialized skills necessary for employment in diverse settings with children of different age groups. These certificates meet state and professional guidelines in the following areas: infant pre-school and school-age child development programs, after-school care, and family day care. A minimum grade of C is required in courses which apply toward certificates.

Requirements for the Chaffey College
Beginning Child Development Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 2</td>
<td>3</td>
</tr>
<tr>
<td>CD 4</td>
<td>3</td>
</tr>
<tr>
<td>CD 21</td>
<td>3</td>
</tr>
<tr>
<td>CD 71B</td>
<td>2</td>
</tr>
<tr>
<td>CD 472C</td>
<td>3</td>
</tr>
</tbody>
</table>

This certificate corresponds with the course requirements to meet Title 22 licensing standards to work in a private or non-profit program. This certificate is issued upon successful completion of the above course requirements.

Chaffey College Intermediate Child Development Certificate:

Beginning certificate

Plus A.S. degree course requirements

Plus 16 units in general education requirements

(one course in each of the four general education areas: Language and Rationality, Natural Sciences, Humanities, Social and Behavioral Sciences.)

This certificate corresponds with the Title 5 requirement to meet the course work necessary to apply for the Children’s Center Permit to work in a government-funded program. This certificate corresponds to the proposed Child Development Teacher Permit.

Chaffey College Advanced Administration in Child Development Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 50</td>
<td>3</td>
</tr>
<tr>
<td>CD 451</td>
<td>3</td>
</tr>
<tr>
<td>CD 6</td>
<td>1</td>
</tr>
<tr>
<td>CD 7</td>
<td>1</td>
</tr>
<tr>
<td>CD 8</td>
<td>3</td>
</tr>
<tr>
<td>CD 10</td>
<td>1</td>
</tr>
<tr>
<td>CD 11</td>
<td>1</td>
</tr>
</tbody>
</table>

Plus 6 units from the following:

CD 15
CD 58
CD 416
CD 418
CD 428
CD 429
CD 457
CD 6
CD 7
CD 8
CD 10
CD 11

This certificate corresponds with the course requirements to meet Title 22 licensing standards to work in a private or non-profit program. This certificate is issued upon successful completion of the above course requirements.

Child Development
CD 12 Dance and Rhythm for Young Children 1
CD 14 Curriculum Development: The Arts and Humanities 3
CD 92 Special Topics 1-6
CD 92L Special Topics Laboratory 1-6

This certificate corresponds to the coursework required in the Child Development Permit Matrix to apply for a Master Teacher Permit and (after completing the requirements for an A.S. degree in Child Development) for a Site Supervisor Permit.

Communication Studies

An interdisciplinary area of inquiry with a foundation in Aristotle’s Rhetoric and contemporary social-scientific theories of human communication. The program is suited to the needs of both two-year students and students who wish to transfer with a major or minor in Communication Studies or related fields. The curriculum is intended for students who wish to develop a fundamental understanding and knowledge of the functions of communication in society.

A series of core courses is designed to provide students with the background needed to explore any of several fields in depth. Currently, these areas are public communication, leadership and group communication, and interpersonal/organizational communication.

Major Requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSTD 2</td>
<td>Fundamentals of Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 4</td>
<td>Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 6</td>
<td>Fundamentals of Small Group Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 72</td>
<td>Communication Studies: Logic and Argumentation</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus 3 courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSTD 12</td>
<td>Mass Communication and Society</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 14</td>
<td>Oral Interpretation of Literature</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 74</td>
<td>Intercultural Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 76</td>
<td>Gender and Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 78</td>
<td>Nonverbal Communication</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 80</td>
<td>Argumentation and Debate</td>
<td>3</td>
</tr>
</tbody>
</table>

Required General Education courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

Computer Information Systems

The Computer Information Systems program is designed to (1) prepare students for the employment market at the entry level in computer operations, computer programming, and computer systems design/analysis, (2) provide a foundation for those students who plan to complete a four-year program in computer information systems, and (3) provide computer literacy for non-computer information systems students.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 60A</td>
<td>Fundamentals of Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 63</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS 403</td>
<td>Fundamentals of Microcomputer Operating Systems</td>
<td>1 1/2</td>
</tr>
<tr>
<td>CIS 404</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1 1/2</td>
</tr>
<tr>
<td>CIS 412A</td>
<td>Fundamentals of Database Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft Excel 1.5</td>
<td>1 1/2</td>
</tr>
<tr>
<td>CIS 413B</td>
<td>Advanced Microsoft Excel 1.5</td>
<td>1 1/2</td>
</tr>
<tr>
<td>CIS 467A</td>
<td>Concepts of Data Communications</td>
<td>2</td>
</tr>
</tbody>
</table>

Plus 6 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 60B</td>
<td>Advanced Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 61</td>
<td>COBOL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 62</td>
<td>RPG Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 412B</td>
<td>Advanced Database Programming for Microcomputers</td>
<td>3</td>
</tr>
<tr>
<td>CIS 468I</td>
<td>Using the Internet</td>
<td>1 1/2</td>
</tr>
<tr>
<td>CIS 468W</td>
<td>Creating Internet World-Wide Web Pages</td>
<td>1 1/2</td>
</tr>
</tbody>
</table>

Requirements for the Computer Information Systems Certificate:

Same as requirements for the major.

Computer Information Systems Certificate Programs

Requirements for the Microcomputer Applications: Business Presentation Media Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Microcomputer Applications: Business Presentation Media</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Certificate prepares students for positions requiring expertise in the preparation of printed and visual media at all levels of an organization.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 404</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 410A</td>
<td>Fundamentals of Desktop Publishing</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 410B</td>
<td>Advanced Desktop Publishing</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft Excel</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 414A</td>
<td>Fundamentals of Presentation Graphics</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 468W</td>
<td>Creating Internet World-Wide Web Pages</td>
<td>1½</td>
</tr>
</tbody>
</table>

Requirements for the Microcomputer Applications: Microsoft Excel Certificate:
The Microcomputer Applications: Microsoft Excel Certificate prepares students for positions requiring expertise in the use of Microsoft Excel at all levels of an organization.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 404</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft Excel</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413B</td>
<td>Advanced Microsoft Excel</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413C</td>
<td>Microsoft Excel Macros and Visual Basic I</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413D</td>
<td>Microsoft Excel Macros and Visual Basic II</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 414A</td>
<td>Fundamentals of Presentation Graphics</td>
<td>1½</td>
</tr>
</tbody>
</table>

Requirements for the Microcomputer Business Applications Certificate:
The Microcomputer Business Applications Certificate program prepares students for positions utilizing the operation of microcomputers with “popular” operating systems and commercial business applications software.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 60A</td>
<td>Fundamentals of Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 403</td>
<td>Fundamentals of Microcomputer Operating Systems</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 404</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 412A</td>
<td>Fundamentals of Database Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 413A</td>
<td>Fundamentals of Microsoft Excel</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 413B</td>
<td>Advanced Microsoft Excel</td>
<td>1½</td>
</tr>
<tr>
<td>CIS 467A</td>
<td>Concepts of Data Communications</td>
<td>2</td>
</tr>
<tr>
<td>CIS 465</td>
<td>Microcomputer Hardware</td>
<td>4</td>
</tr>
<tr>
<td>CIS 466</td>
<td>Microcomputer Utility Software</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus 9 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 45A</td>
<td>Beginning Word Processing: Microcomputer Software</td>
<td>3</td>
</tr>
</tbody>
</table>
Consumer Studies

The Consumer Studies major prepares students for entry-level positions in the areas of consumer counseling, money management, and family living with emphasis on life-long planning and financial investments. Curriculum includes consumer decisions in the fields of housing, foods, nutrition and wellness, and textile/apparel selections.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD 4</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 10</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 11</td>
<td>Housing and Environment</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 30</td>
<td>Meal Management</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 40</td>
<td>Life Management</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 50</td>
<td>Consumer Education</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>GERO 10</td>
<td>Introduction to Work with Older Adults</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus 2 courses from the following:

- CONSUM 25 Healthy Cooking
- FASHD 40 Contemporary Clothing Construction
- FASHM 10 Introduction to Fashion Industry
- ID 10 Introduction to Interior Design

Required General Education course:

- ECON 4 Principles of Microeconomics

Requirements for the Consumer Studies Certificate:

Same as major and general education requirement above.

Aerobic Fitness and Nutrition

(Formerly Nutrition and Fitness)

The Aerobic Fitness and Nutrition major is designed for students training in the field of health and wellness; based on nutrition and fitness as a lifestyle. The certificate qualifies students for entry-level positions in health spas, retirement and convalescent homes, counseling centers, and youth daycare/camps.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 14</td>
<td>Health Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 10</td>
<td>Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 15</td>
<td>Diet and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 25</td>
<td>Healthy Cooking</td>
<td>2</td>
</tr>
<tr>
<td>PELEC 7B</td>
<td>Advanced First Aid and Emergency Care</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 10</td>
<td>Theory of Aerobic/Fitness Instruction</td>
<td>2</td>
</tr>
<tr>
<td>PELEC 31</td>
<td>Teaching Fitness and Wellness to Older Adults</td>
<td>3</td>
</tr>
<tr>
<td>(or GERO 31, Teaching Fitness and Wellness to Older Adults)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required General Education course:

- COMSTD 8 Fundamentals of Speech Communication

Requirements for the Aerobic Fitness and Nutrition Certificate:

Same as major and general education requirement above.

Correctional Science

This major offers the following: (1) pre-employment education for positions in the correctional sciences field; (2) upgrading for in-service personnel; (3) a certificate program; (4) an Associate in Science Degree; and (5) a transfer program for those who wish to obtain a four-year degree in the major, or allied fields, such as, criminology, corrections, social services, behavioral science, or criminal justice.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRSCI 1</td>
<td>Introduction to Correctional Science</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 2</td>
<td>Control and Supervision of Inmates</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 3</td>
<td>Correctional Law</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 5</td>
<td>Crime and Delinquency</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 6</td>
<td>Correctional Interviewing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 8</td>
<td>Ethnic Group Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus 3 courses from the following:

- CRSCI 4 Public Relations and Corrections | 3     |
- CRSCI 7 Probation and Parole | 3     |
- CRSCI 10 Violence in America | 3     |
- CRSCI 409 The Female Victim/Offender | 3     |
- CRSCI 411 Juvenile Corrections | 3     |
- CRSCI 392D Special Topics: Correctional Science | 3     |

Requirements for the Correctional Science Certificate:

Same as requirements for the major.
Culinary Arts
(See also Hotel and Food Service Management)

The Culinary Arts Certificate program will prepare students for food production job opportunities in the food service industry. The program emphasizes basic preparation, production, and sanitation standards.

Requirements for the Culinary Arts Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 11</td>
<td>Food Service Management Supervision</td>
<td>3</td>
</tr>
<tr>
<td>FSM 15</td>
<td>Nutrition in Health</td>
<td>3</td>
</tr>
<tr>
<td>(or FSM 25, Culture and Nutrition)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOTFS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>Principles of Food Preparation</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>Sanitation, Safety and Equipment Management</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>Food and Beverage Purchasing and Controls</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 417</td>
<td>Menu Planning, Purchasing and Controls</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>Dining Systems and Restaurant Operations</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 426</td>
<td>Hospitality Law</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>Catering and Banquet Organization</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 436A</td>
<td>Culinary Arts I</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436B</td>
<td>Culinary Arts II</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 496L</td>
<td>Work Experience</td>
<td>2</td>
</tr>
</tbody>
</table>

* A part-time program starting in the fall and spring semesters can be completed in two years.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 410</td>
<td>Dental Anatomy</td>
<td>3</td>
</tr>
<tr>
<td>DA 415</td>
<td>Applied Dental Science</td>
<td>2</td>
</tr>
<tr>
<td>DA 420</td>
<td>Microbiology for the Dental Assistant</td>
<td>1</td>
</tr>
<tr>
<td>DA 425</td>
<td>Preclinical Chairside Skills</td>
<td>6</td>
</tr>
<tr>
<td>DA 430</td>
<td>Biomedical Science</td>
<td>4</td>
</tr>
<tr>
<td>DA 435</td>
<td>Registered Dental Assistant (RDA) Functions</td>
<td>1</td>
</tr>
<tr>
<td>DA 440</td>
<td>Dental Office Procedures</td>
<td>2</td>
</tr>
<tr>
<td>DA 445</td>
<td>Dental Radiology</td>
<td>3</td>
</tr>
<tr>
<td>DA 450</td>
<td>Oral Pathology and Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>DA 465</td>
<td>Supervised Clinical I</td>
<td>1</td>
</tr>
<tr>
<td>DA 475</td>
<td>Supervised Clinical II</td>
<td>3</td>
</tr>
<tr>
<td>DA 485</td>
<td>Supervised Clinical III</td>
<td>2½</td>
</tr>
</tbody>
</table>

Required General Education course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1</td>
<td>Introduction to Psychology (or SOC 10, Introduction to Sociology)</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional recommended course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 487</td>
<td>Advanced Clinical Applied Technology</td>
<td>1</td>
</tr>
</tbody>
</table>

Requirements for the Dental Assisting Certificate:

Same as the major and PSYCH 1 (or SOC 10) and ENGL 350 (or ENGL 450 or 1A, or ESL 450, or BUSOT 88).

Note:

1. Students must earn a minimum grade of C in all Dental Assisting courses.
2. Before entering the clinical portion of the Dental Assisting Program, students must pass health and dental examinations as evidence of good mental, physical, and dental health and must have a current cardiopulmonary resuscitation (CPR) card.
3. The college does not provide transportation to clinical facilities.
Dietetic Service Supervisor
(See also Hotel and Food Service Management)

This program, approved by the California State Department of Health, prepares students for entry level management in a food service department in health care, community care, or school food service organizations. The responsibilities include entry levels of supervision. The program fulfills the federal and state training regulations for positions in the general acute-care hospitals, acute psychiatric hospitals, skilled nursing facilities, and intermediate-care facilities.

Major requirements for the Dietetic Service Supervisor Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 11</td>
<td>3</td>
</tr>
<tr>
<td>FSM 15</td>
<td>3</td>
</tr>
<tr>
<td>FSM 19</td>
<td>3</td>
</tr>
<tr>
<td>FSM 470</td>
<td>2</td>
</tr>
<tr>
<td>FSM 421</td>
<td>2</td>
</tr>
<tr>
<td>FSM 423</td>
<td>2</td>
</tr>
<tr>
<td>FSM 480</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>5-5</td>
</tr>
<tr>
<td>HOTFS 14</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 417</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436A</td>
<td>2</td>
</tr>
</tbody>
</table>

Dietetic Technician

Accredited by the American Dietetic Association (ADA), this program prepares students to take the ADA Registration Examination for Dietetic Technicians. Dietetic technicians are employed as managers in a designated unit or department in health care, community care, school food service, county health, institutional, and community directed programs of nutrition services for elderly, infants, or children. Dietetic technicians find themselves in the enviable position of high employment opportunities for individuals who meet position requirements. Job growth is projected well into the 21st century.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 424</td>
<td>3</td>
</tr>
</tbody>
</table>

Drafting

The drafting programs provide the basic knowledge and skills in drafting, mathematics, and related scientific and engineering areas to prepare students for employment in any of three drafting fields. Each option focuses on both drafting-table methods and computer-aided drafting (CAD), as used in manufacturing, architectural, and electronics industries.

Courses designed to fulfill major requirements for an Associate in Science Degree from Chaffey College are not the same as those required for completing the major at a transfer institution offering a baccalaureate degree. Students who intend to transfer to a four-year college or university in any major should consult the catalog of the appropriate transfer institution and a Chaffey College counselor to develop a preferred plan of study.

Drafting Technician: Architectural

The architectural drafting technician students enroll in math, physics, physical science, art and technical drafting, of which two semesters are devoted to residential planning, perspective, and 3-D model construction.

The skills and knowledge gained in this program prepare qualified students for work in offices of architects, structural and mechanical engineers, and related industries, as engineering aides or technicians.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAFT22</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT30</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 40</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 50</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 51</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 53</td>
<td>4</td>
</tr>
</tbody>
</table>
DRAFT 452 Light Commercial Construction Design  3
ENGIN 25 Engineering Graphics and CAD  4
ENGIN 34 Elementary Surveying  3

**Required General Education courses:**

**ART 12** Fundamentals of Design in Three Dimensions  4
**PHYS 5** The Ideas of Physics  3
**PHYS 6** The Ideas of Physics Laboratory (or any advanced course in physics with a laboratory)  1

**Requirements for Drafting Technician: Architectural Certificate:**
Same as major and general education requirements plus:
DRAFT 96 Cooperative Education: Drafting  3

**Drafting Technician: Electrical**

The electrical-electronic drafting technician students study physical science, electronics, and technical drafting, including the specific focus on electronic drafting.

The skills and knowledge gained in this program prepare qualified students for work as electronic drafting technicians in one of today's numerous electronic industries.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics through Trigonometry</td>
<td>Units</td>
</tr>
<tr>
<td>CIS 403 Fundamentals of Microcomputer Operating Systems</td>
<td>1½</td>
</tr>
<tr>
<td>DRAFT 22 Mechanical Design II</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 30 Technical Illustration and Architectural Rendering</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 40 Introduction to Computer-Aided Drafting and Design</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 41 Computer-Aided Drafting and Design: Mechanical</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 45 Electronic Applications</td>
<td>3</td>
</tr>
<tr>
<td>ELECT 1 Fundamentals of Electronics</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required General Education courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 5 The Ideas of Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 6 The Ideas of Physics Laboratory (or any advanced course in physics with a laboratory)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Requirements for Drafting Technician: Electrical Certificate:**
Same as major and general education requirements plus:
DRAFT 96 Cooperative Education: Drafting  3

**Drafting Technician: Mechanical**

The program provides fundamental knowledge and skills of drafting. Recommended courses include physical science and drafting through industrial and advanced applications. With the inclusion of Cooperative Education, students may qualify for work as engineering aides or drafting technicians in one of the many engineering or industrial firms in this area.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics through Trigonometry</td>
<td>Units</td>
</tr>
<tr>
<td>DRAFT 21 Mechanical Design I</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 22 Mechanical Design II</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 30 Technical Illustration and Architectural Rendering</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 40 Introduction to Computer-Aided Drafting and Design</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 41 Computer-Aided Drafting and Design: Mechanical</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 77 Industrial Design Applications</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 78 Advanced Design Applications</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 25 Engineering Graphics and CAD</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required General Education courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 5 The Ideas of Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 6 The Ideas of Physics Laboratory (or any advanced course in physics with a laboratory)</td>
<td>1</td>
</tr>
</tbody>
</table>

**Requirements for Drafting Technician: Mechanical Certificate:**
Same as major and general education requirements plus:
DRAFT 96 Cooperative Education: Drafting  3

**Earth Science**

*See also Geology*

Earth Science is the application of many sciences to the understanding of the Earth. While it is often used as a synonym for geology, traditionally Earth Science encompasses a wider range of scientific inquiry including oceanography, meteorology, paleontology, and soil sciences. Today's earth science has expanded to include environmental studies as applied to the physical world.
The curriculum is designed to provide the fundamental knowledge and skills to prepare students for transfer to a university as a junior. This is a two-year program leading to an Associate in Science Degree. Students following this program will be well suited to pursue an advance degree in Earth Science, Environmental Science, or any related science. This program is equally intended to assist those who wish to teach Earth Science in elementary or secondary schools, those interested in understanding environment issues, or those who desire an understanding of the earth.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTRON 20 General Astronomy</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 9 Health Science Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>ESC 5 Oceanography</td>
<td>3</td>
</tr>
<tr>
<td>ESC 5L Oceanography Lab 1</td>
<td>4</td>
</tr>
<tr>
<td>ESC 8 Meteorology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 1 Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2 Historical Geology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Earth Science**

**Economics**

**Electronics**

**Electricity**

This discipline enables students to understand the world in a much better way, particularly clarifying the process of decision making. Whenever people, business, or their representatives make a choice between alternative activities — for example, a business decision to hire more workers or, instead, buy a new machine — there will be an impact. Each alternative has associated costs and benefits. Economics teaches us how to analyze the costs and benefits so that we can make more intelligent choices.

Studying economics is an excellent preparation for a career in law, industry, banking, accounting, private consulting, teaching, and government service. Because we encounter economic problems in all areas of our lives and throughout society, economics provides useful intellectual training for individuals who simply wish to become better educated prior to making a lifelong career decision.

**Major requirements for the Associate in Art Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 2 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4 Principles of Microeconomics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus two courses from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 6 Principles of Financial Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electronics**

The Electronics program is designed to provide basic knowledge and skills required for employment in the electronics service and telecommunications industry. The lecture and laboratory cours-
Electronics can be completed in two years. No special physical requirements exist except that color-blindness is a disadvantage.

Enrollment and continuance in the Electronics program is subject to the following requirements:
1. Satisfactory attendance in the lectures and laboratories.
2. The ability to communicate effectively using the English language, both orally and in writing.

Major requirements for the
Associate in Science Degree: Units
ELECT 2 L. Fundamentals of Electronics 3-1
ELECT 5 Mathematics for Electronics 3
ELECT 11 L. Intermediate Electronics 3-1
ELECT 21 L. Digital Electronics 3-1

Plus four lecture/lab combined courses from the following:
ELECT 423,423L Microprocessor Interfacing 3-1
ELECT 425,425L Microprocessor Troubleshooting 3-1
ELECT 431,431L Electronic Communications 3-1
ELECT 433,433L Data Communications and Networks 3-1
ELECT 441,441L Electronics Servicing I 3-1
ELECT 443,443L Electronics Servicing II 3-1

Required General Education course:
GIS 1 Introduction to Computer Information Systems 3

Requirements for the Basic Electronics Technician Certificate:
GIS 1 Introduction to Computer Information Systems 3
ELECT 2 L. Fundamentals of Electronics 3-1
ELECT 5 Mathematics for Electronics 3
ELECT 11 L. Intermediate Electronics 3-1
ELECT 21 L. Digital Electronics 3-1

Requirements for the Electronics Service Technician Certificate:
GIS 1 Introduction to Computer Information Systems 3
ELECT 2 L. Fundamentals of Electronics 3-1
ELECT 5 Mathematics for Electronics 3
ELECT 11 L. Intermediate Electronics 3-1
ELECT 21 L. Digital Electronics 3-1
ELECT 423,423L Microprocessor Interfacing 3-1
ELECT 425,425L Microprocessor Troubleshooting 3-1
ELECT 441,441L Electronics Servicing I 3-1
ELECT 443,443L Electronics Servicing II 3-1

Requirements for the Telecommunications Technician Certificate:
GIS 1 Introduction to Computer Information Systems 3
ELECT 2 L. Fundamentals of Electronics 3-1
ELECT 5 Mathematics for Electronics 3
ELECT 11 L. Intermediate Electronics 3-1
ELECT 21 L. Digital Electronics 3-1
ELECT 423,423L Microprocessor Interfacing 3-1
ELECT 425,425L Microprocessor Troubleshooting 3-1
ELECT 431,431L Electronic Communications 3-1

Major requirements for the
Associate in Science Degree: Units
MATH 65A Calculus I 4
MATH 65B Calculus II 4
CS 20 PASCAL Programming with Scientific Applications 3
CHEM 20A General Chemistry 5
CHEM 20B General Chemistry 5
ENGIN 10 Introduction to Engineering 1
ENGIN 50 Engineering Vectors 3
PHYS 46 Physics for Scientists & Engineers II 5
PHYS 47 Physics for Scientists & Engineers III 5

Required General Education course:
PHYS 45 Physics for Scientists & Engineers I 5

English

The English major gives students an appreciation of literature and increased skills in communication. It will help in school, politics, business, the arts, law, and personal relations. Through the study of language and literature, students are better able to communicate, to persuade, and to understand human nature. More specifically, superior ability to understand and use English is nec-

Engineering

This curriculum provides students with sufficient understanding of engineering concepts and skills for attainment of upper-division status in engineering in a four-year college or university. For the non-transfer student, this curriculum should be of value in attaining employment at the level of technician.

The California Engineering Liaison Committee urges transfer students to remain in the community college until completion of lower-division requirements in mathematics, chemistry, physics, and engineering, insofar as those courses are offered.

Major requirements for the
Associate in Science Degree: Units
MA TH 65A Calculus I 4
MA TH 65B Calculus II 4
CS 20 PASCAL Programming with Scientific Applications 3
CHEM 20A General Chemistry 5
CHEM 20B General Chemistry 5
ENGIN 10 Introduction to Engineering 1
ENGIN 50 Engineering Vectors 3
PHYS 46 Physics for Scientists & Engineers II 5
PHYS 47 Physics for Scientists & Engineers III 5

Required General Education course:
PHYS 45 Physics for Scientists & Engineers I 5

Electronics

Engineering
essay for success in most careers, particularly those in education, writing, business, journalism, and law.

**Major requirements for the Associate in Arts Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1B</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1C</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 80A</td>
<td>Survey of British Literature</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 80B</td>
<td>Survey of British Literature</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus three units from the following:**

- ENGL 30, 31, 32, 33

**Plus nine units from the following:**

- ENGL 7A, 7B, 7D, 30, 31, 32, 33, 68, 70A, 70B, 71, 75A, 75B, 76, 81, 92

**Required General Education course:**

- ENGL 1A Composition 3

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**Environmental Technology**

(Formerly Environmentally Hazardous Materials Technology)

Environmental Technology (ET) is a program designed to provide training for entry-level technicians who will be involved with environmental protection, regulatory compliance, and workplace safety and health applications.

Graduates may be employed by businesses and governmental agencies which require a knowledge of hazardous materials' handling practices, techniques for storage, treatment, transport, and disposal, and a basic understanding of the chemical and biological phenomena which underlie the regulation of hazardous material operations.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 10</td>
<td>Concepts in Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 15</td>
<td>Science, Nature, and Human Values</td>
<td>3</td>
</tr>
<tr>
<td>COOPED 96A</td>
<td>Career Field Studies (or COOPED 496A Occupational Work Experience)</td>
<td>1</td>
</tr>
<tr>
<td>ET 10</td>
<td>Introduction to Environmental Technology</td>
<td>3</td>
</tr>
<tr>
<td>ET 11</td>
<td>Hazardous Waste Generation/Reduction/Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ET 13</td>
<td>Health Effects of Environmentally Hazardous Materials</td>
<td>3</td>
</tr>
<tr>
<td>ET 15</td>
<td>Hazardous Waste Management Applications</td>
<td>4</td>
</tr>
<tr>
<td>ET 20</td>
<td>Hazardous Material Management Applications</td>
<td>4</td>
</tr>
<tr>
<td>ET 23</td>
<td>Safety and Emergency Response</td>
<td>4</td>
</tr>
</tbody>
</table>

**Required General Education courses:**

- BUSOT 88 Written Communication for Business (or ENGL 1A Composition) 3
- CHEM 9 Health Science Chemistry 5
- COMSTD 8 Fundamentals of Speech Communication (or CIS 1 Introduction to Computer Information Systems) 3

**Requirements for the Environmental Technology Certificate:**

- Same as major and required general education above.

Environmental Technology refers to the knowledge and skills required to work with hazardous materials in compliance with government regulations while at the same time protecting human health and the environment.

The ET Certificate is designed to prepare students or upgrade skills of working individuals. A minimum grade of C is required for all courses required for the certificate.

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**Fashion Design**

Fashion Design prepares students for entry-level positions in design, pattern making, couture studio work, production management, and other related positions.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASHD 20</td>
<td>History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 40</td>
<td>Contemporary Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 60</td>
<td>Basic Pattern Making</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 70</td>
<td>Advanced Pattern Making</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 72</td>
<td>Fashion Draping</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 410</td>
<td>Basic Design and Creativity</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 430</td>
<td>Fashion Design</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 441</td>
<td>Intermediate Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 480</td>
<td>Design Collection</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 482</td>
<td>Industry Internship: Fashion Design</td>
<td>1</td>
</tr>
<tr>
<td>FASHM 10</td>
<td>Introduction to the Fashion Industry</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus two courses from the following (minimum of three units):**

- ART 65 Fashion Illustration 3
- BUS 45 Small Business Ownership and Management 3
- FASHD 42 Advanced Clothing Construction 2
- FASHD 421 Study of Ethnic Costume 3
- FASHD 444 Fitting and Alterations 1
- FASHD 492 Special Topics: Fashion Design 1-3
- FASHD 498L Independent Study: Fashion Design 1-3

**Requirements for the Fashion Design Certificate:**

- Same as requirements for the major.
Costume Design

A degree or certificate in Costume Design prepares the student to seek professional work as a costumer or assistant designer within the motion picture and television industries and live theatre. Freelance design and construction at the local level for children’s performing arts, community theatre, and costuming in general, are alternative career options.

Requirements for the Costume Design Certificate:

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ART 65 Fashion Illustration</td>
</tr>
<tr>
<td>3</td>
<td>FASHD 20 History of Fashion</td>
</tr>
<tr>
<td>2</td>
<td>FASHD 40 Contemporary Clothing Construction</td>
</tr>
<tr>
<td>2</td>
<td>FASHD 60 Basic Pattern Making</td>
</tr>
<tr>
<td>2</td>
<td>FASHD 72 Fashion Draping</td>
</tr>
<tr>
<td>2</td>
<td>FASHD 410 Basic Design and Creativity</td>
</tr>
<tr>
<td>3</td>
<td>FASHM 60 Textiles</td>
</tr>
<tr>
<td>3</td>
<td>TARTS 1 Introduction to Theatre</td>
</tr>
<tr>
<td>3</td>
<td>TARTS 10 Technical Theatre</td>
</tr>
<tr>
<td>3</td>
<td>TARTS 11 Stage Costuming</td>
</tr>
<tr>
<td>3</td>
<td>TARTS 75 Makeup</td>
</tr>
</tbody>
</table>

Fashion Merchandising

Fashion Merchandising prepares a student for employment in the areas of fashion buying, retail management, visual display, distribution, import/exporting, and fashion promotion.

Requirements for the Fashion Merchandising Certificate:

Same as requirements for the major.

Fine Arts

The Fine Arts major provides fundamental training in the arts: music, art, photography, and theatre arts.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>FINART 50 Introduction to Fine Arts</td>
</tr>
</tbody>
</table>

Plus one of the following emphases:

Art Emphasis

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>ART 2 Art History: Ancient through 1400</td>
</tr>
<tr>
<td>4</td>
<td>ART 4 Art History: 1400 through Contemporary</td>
</tr>
</tbody>
</table>

Plus ten additional units of art courses

Music Emphasis

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>MUSIC 2A Music History and Literature</td>
</tr>
<tr>
<td>3</td>
<td>MUSIC 2B Music History and Literature</td>
</tr>
<tr>
<td>4</td>
<td>MUSIC 3A Musicianship</td>
</tr>
</tbody>
</table>

Plus nine additional units of music courses

Photography Emphasis

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>PHOTO I History of Photography</td>
</tr>
</tbody>
</table>

Plus five additional units of photography courses

Fashion Design

Fine Arts

Foreign Languages

Foreign language majors may lead to positions in teaching, research, journalism, government, or business. Languages are a valuable asset to scientists, historians, lawyers, sales persons, musicians, travelers — in fact, to almost anyone. Language study affords new perspectives on the world and on one’s mother tongue. It is intriguing to read newspapers, magazines, poems, and stories in French, German, or Spanish, and even more fascinating to talk with people from, or in, those speech regions.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>FR 1 Elementary French</td>
</tr>
<tr>
<td>4</td>
<td>FR 2 Elementary French</td>
</tr>
<tr>
<td>4</td>
<td>FR 3 Intermediate French</td>
</tr>
<tr>
<td>4</td>
<td>FR 4 Intermediate French</td>
</tr>
</tbody>
</table>

Plus two courses from the following (minimum of four units):

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>BUS 13 Professional Selling</td>
</tr>
<tr>
<td>3</td>
<td>FASHD 20 History of Fashion</td>
</tr>
<tr>
<td>2</td>
<td>FASHD 410 Basic Design and Creativity</td>
</tr>
<tr>
<td>3</td>
<td>FASHM 492 Special Topics: Fashion Merchandising</td>
</tr>
<tr>
<td>3</td>
<td>FASHM 498L Independent Study: Fashion Merchandising</td>
</tr>
<tr>
<td>1½</td>
<td>CIS 413A Fundamentals of Microsoft Excel</td>
</tr>
</tbody>
</table>

Fine Arts

Fashion Merchandising

Foreign Languages
Foreign Languages

General Education

Geography

French

FR 15 French Conversation 2
(or French 92)

Plus six units from the following: 6
A second foreign language
Art 2, 4
Communication Studies 8
English 1B, 30, 31, 32, 70A, 70B, 75A, 75B, 80A, 80B
Fine Arts 50
French 16
History 5, 6
MUSIC 4
Philosophy 81
Theatre Arts 20

Students who enter with advanced standing in French are required to complete a minimum 24 units in above courses.

Spanish

SPAN 1 Elementary Spanish 4
SPAN 2 Elementary Spanish 4
SPAN 3 Intermediate Spanish 4
SPAN 4 Intermediate Spanish:
Spanish Literature 4
(or SPAN 5 Intermediate Spanish:
Hispanic-American Literature)
SPAN 15 Spanish Conversation 2
(May be waived)

Plus six units from the following: 6
A second foreign language
Art 2, 4
English 70A, 70B
History 5, 6, 70, 71
Spanish 11, 12 may substitute for 1, 2

Students who enter with advanced standing in Spanish are required to complete a minimum 24 units in above courses.

General Education

Students transferring to the California State University system may choose the General Education major as an alternative to a specific major in an academic discipline toward meeting the requirements for the Associate in Arts Degree.

Major requirements for the Associate in Arts Degree:
Complete a minimum of 39 semester units of the California State University General Education Certification Course Pattern. (See “Preparation for Advanced Standing.”)

Geography

Geography is an interdisciplinary area of study which interfaces with earth sciences, life sciences, social sciences, business, and teaching. Its holistic character requires students to be broadly based and at the same time amenable to choosing specific avenues of concentration. Geographers integrate time, demographics, and space into maps which have both academic and applied values. Geographers work in military, municipal, industrial, and teaching careers.

The field of geography requires that students be broadly based in three major facets: mapping, cultural geography, and physical geography. These areas form the core of the curriculum. Students may then pursue other areas of concentration such as teaching, social studies, cartography, or the sciences. Geography specialists may focus on general studies for teaching in public schools or colleges, cartography, meteorology, economic geography, urban geography, political geography, historical geography, geomorphology, or biogeography. Geographical knowledge has specific application to urban planning, environmental studies, aerial survey, military, satellite mapping, demographics, history, and economics.

Geography is a core area of study for elementary or high school teachers. Preparation includes meeting the General Studies requirements for the target school plus physical geography with lab and cultural geography.
Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOG 1</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 4</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 5</td>
<td>1</td>
</tr>
<tr>
<td>GEOG 6</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 10</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>4</td>
</tr>
</tbody>
</table>

Mathematics through trigonometry

**Note:** Any advanced course in physics with a laboratory may be substituted for PHYS 5 and 6. Any advanced chemistry course with a laboratory may be substituted for CHEM 10. BIOL 50 may be substituted for BIOL 1.

Geology

*(See also Earth Science)*

Unique among the sciences, geology embraces a broad spectrum of scientific inquiry. Geologists systematically amass observation data and measurements to compile and organize the body of knowledge about earth.

Specialized geological studies apply information and techniques from other sciences and engineering to solve problems of the physical environment. Examples of geological specialties include the following: paleontology, the study of prehistoric biology; mineralogy, the application of chemistry and physics to the mineral kingdom; petrology, the application of chemistry and physics to understanding the origin and history of rocks; engineering geology, the application of geological and engineering information to construction of roads, dams, tunnels, landslide stabilization, etc.; and hydrology, the study of surface and underground water supplies.

Basic Geology

Basic Geology is designed to provide fundamental knowledge and skills known to be useful for paraprofessional employment in the fields of geology and soils technology. This curriculum incorporates methods for recording field notes, sampling, gathering and organizing geologic information, geologic mapping and drafting geologic maps, locating and plotting information on topographic maps, constructing topographic profiles and geologic cross-sections, conducting basic tests in the field and laboratory, and geological problem solving.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 30</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 30T</td>
<td>1½</td>
</tr>
<tr>
<td>GEOL 80</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 85</td>
<td>5</td>
</tr>
</tbody>
</table>

Preprofessional Geology

Preprofessional geology is designed to provide students with the basic knowledge and skills necessary for transfer as a geology major in junior standing. This is a two-year program leading to an Associate in Science Degree. A career in professional geology normally requires a master of science degree. This program provides the required background for upper division studies in geology. There is an increasing need for career geologists in the following areas: environmental and engineering geology; application of geology to surface and subsurface water resources including protection of water quality and purity; and public sector, governmental agencies responsible for the geologic and natural resources of the United States and foreign countries, and public academic and research institutions.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20AB</td>
<td>5-5</td>
</tr>
<tr>
<td>CS 1</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2</td>
<td>4</td>
</tr>
</tbody>
</table>
**Geology**

GEOL 30  Geology of California  3
GEOL 30T  Geology of California Field Trip  1/2
(or GEOL 70, California Field Trip, or GEOL 75A, B, or C, Out of State Field Trip)
GEOL 80  Mineralogy  4

**Required general education courses:**

ART 14  Introduction to Drawing  3
BIOL 50  Core Biology  4
ENGL 1A  Composition  3
ENGL 1B  Advanced Composition and Critical Thinking  3

**Gerontology**

Gerontology, the interdisciplinary study of aging, offers students an understanding of their own aging and of society’s response to the increasing population of older people. Psychological, physiological and sociological aspects of aging are explored. Gerontology courses provide information about the aging process and training to work in agencies that provide services to older people.

Gerontology courses offer work experience opportunities in several Southern California universities. Nurses and nursing home administrators may earn continuing education credit for many of the gerontology courses offered at Chaffey. Additionally, a Gerontology Certificate is available.

This concentration of courses will be beneficial to people currently working in or planning a career in health, mental health and human service professions, which will increasingly provide more services to older people. Other paraprofessional employment opportunities are in residential communities, recreation, nutrition, counseling and referral, paralegal services, and business and industries serving older adults.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GERO 10</td>
<td>Introduction to Work with Older Adults</td>
<td>4</td>
</tr>
<tr>
<td>GERO 18</td>
<td>Sociology of Aging</td>
<td>3</td>
</tr>
<tr>
<td>SOC 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GERO 21</td>
<td>Developmental Psychology:</td>
<td></td>
</tr>
<tr>
<td>PSYCH 21</td>
<td>Adulthood and Aging</td>
<td>3</td>
</tr>
<tr>
<td>GERO 25</td>
<td>Counseling the Older Adult</td>
<td>3</td>
</tr>
<tr>
<td>GERO 412</td>
<td>Physiology of Aging</td>
<td>2</td>
</tr>
</tbody>
</table>

**Plus three courses from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMSTD 4</td>
<td>Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 50</td>
<td>Consumer Education</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 15</td>
<td>Diet and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GERO 22</td>
<td>Dying and Death</td>
<td>3</td>
</tr>
<tr>
<td>SCS/22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GERO 31</td>
<td>Teaching Fitness and Wellness</td>
<td>4</td>
</tr>
<tr>
<td>PELEC 31</td>
<td>for Older Adults</td>
<td>3</td>
</tr>
<tr>
<td>GERO 462</td>
<td>Activity Coordinator Training</td>
<td>4</td>
</tr>
<tr>
<td>GERO 463</td>
<td>Social Work Designee Training</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Principles of Organization and Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Requirements for the Gerontology Certificate:**

Same as the major, plus current Cardiopulmonary Resuscitation Certificate.

**History**

Students find that history deepens awareness of the world, past and present, and cultivates appreciation for beneficial community participation. A foundation in this subject is excellent for many fields of endeavor, including law, public administration, foreign service, journalism, business, and teaching.

**Major requirements for the Associate in Arts Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 5</td>
<td>Early Western Civilizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or HIST 1, World History: Pre-Civilization to 1500)</td>
<td></td>
</tr>
<tr>
<td>HIST 6</td>
<td>Modern Western Civilizations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or HIST 2, World History: 1500 to Present)</td>
<td></td>
</tr>
<tr>
<td>HIST 17</td>
<td>History of the United States</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18</td>
<td>History of the United States</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus six units from the following:**

Art 2, 4
English 1C
History 9, 10, 20, 21, 25, 37, 40, 50, 51, 70, 71, 92

**Hotel and Food Service Management: Food Service**

Job opportunities are excellent for students who receive the Associate in Science Degree or the certificate in this program. Graduates of this course are prepared to work in management positions of the food industry, i.e., restaurants, food processing, commercial food services, sales, food production, resorts, and institutional and owner-operated businesses.
Major requirements for the
Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>Hotel and Food Service Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 14</td>
<td>Quantity Food Production Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>Principles of Food Preparation Management</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>Sanitation, Safety, and Equipment Management</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>Food and Beverage Purchasing and Cost Controls</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 21</td>
<td>Menu Planning, Purchasing and Cost Controls</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 23</td>
<td>Dining Systems and Restaurant Operations</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 25</td>
<td>Hospitality Law</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 26</td>
<td>Hotel and Food Service Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HOTFS 30</td>
<td>Hospitality Marketing Management</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 34</td>
<td>Catering and Banquet Organization</td>
<td>3</td>
</tr>
</tbody>
</table>

Strongly Recommended:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 15</td>
<td>Nutrition in Health (or FSM 25 Culture and Nutrition)</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 436A</td>
<td>Culinary Arts I</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436B</td>
<td>Culinary Arts II</td>
<td>2</td>
</tr>
</tbody>
</table>

Requirements for the Hotel and Food Service Management: Food Service Certificate:

Same as requirements for the major plus:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 2</td>
<td>Introduction to Business Application Software</td>
<td>1½</td>
</tr>
<tr>
<td>HOTFS 496</td>
<td>Work Experience</td>
<td>2-4</td>
</tr>
</tbody>
</table>

Humanities

The Humanities major offers students a sound liberal arts background in literature, philosophy, art, music, and theatre for students going on into business, politics, law, personnel relations, and education.

Major requirements for the
Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 15</td>
<td>Nutrition in Health (or FSM 25 Culture and Nutrition)</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>Hotel and Food Service Accounting</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>Food and Beverage Purchasing and Cost Controls</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 22</td>
<td>Dining Systems and Restaurant Operations</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 24</td>
<td>Hospitality Law</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 26</td>
<td>Hotel and Food Service Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>HOTFS 28</td>
<td>Catering and Banquet Organization</td>
<td>3</td>
</tr>
</tbody>
</table>

Hotel and Food Service Management:

Hotel Management

Job opportunities are excellent for students who receive the Associate in Science Degree or the certificate in this program. Graduates of this course will be prepared to work in entry-level management positions of the hospitality industry. Areas of employment include restaurants, hotels, institutions, catering, bed and breakfast operations, and owner-operated businesses.

Major requirements for the
Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 15</td>
<td>Nutrition in Health (or FSM 25 Culture and Nutrition)</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>Hotel and Food Service Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities

Major requirements for the
Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSM 15</td>
<td>Nutrition in Health (or FSM 25 Culture and Nutrition)</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>Hotel and Food Service Accounting</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus six units from the following:

- History 1, 2, 5, 6, 9, 10, 17, 18

Plus six units from the following:

- English 30, 31, 32, 33, 70A, 70B, 75A, 75B, 80A, 80B, 81
- Humanities 1A

Plus six units from the following:

- Art 2, 4
- Broadcasting 10, 20, 30
- Fine Arts 50
- Music 4, 2A, 2B
- Photography 1
- Theatre Arts 1, 20, 21, 23
Plus six units from the following:
Economics 1, 6, 8, 10
Philosophy 70, 72, 73, 74, 76, 80, 81, 82

Note: Courses included in major cannot be used to fulfill General Education requirements.

Interior Design

The Interior Design curriculum is planned both as professional preparation for those entering the interior design field and as a transfer program for students planning to transfer to a four-year college. Students receive a strong background in color, design principles, furniture construction and design, furniture layout, space planning, business principles, three-dimensional drawing, and the historical development of furniture, architecture, art, and decorative arts.

Major requirements for the Associate in Science Degree

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID 13</td>
<td>Architecture and Design of the Non-European World (or ART 2, Art History: Ancient Through 1400)</td>
<td>3</td>
</tr>
<tr>
<td>ART 10</td>
<td>Fundamentals of Design in Two Dimensions</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 410</td>
<td>Building Trades Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>4</td>
</tr>
<tr>
<td>ID 10</td>
<td>Introduction to Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>ID 11</td>
<td>History of Western Architecture and Interiors</td>
<td>3</td>
</tr>
<tr>
<td>ID 12</td>
<td>History of Western Architecture and Interiors II</td>
<td>3</td>
</tr>
<tr>
<td>ID 18</td>
<td>Perspective Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ID 21</td>
<td>Furniture Layout and Space Planning</td>
<td>3</td>
</tr>
<tr>
<td>ID 22</td>
<td>Interior Design Materials</td>
<td>3</td>
</tr>
<tr>
<td>ID 23</td>
<td>Interior Rendering</td>
<td>3</td>
</tr>
<tr>
<td>ID 25</td>
<td>Interior Design Management</td>
<td>2</td>
</tr>
<tr>
<td>ID 30</td>
<td>Advanced Design Studio</td>
<td>3</td>
</tr>
</tbody>
</table>

Required General Education course:
ART 2  Art History: Ancient through 1400 (or ID 13 Architecture and Design of the Non-European World)  4

Recommended:
FASHM 12  Visual Merchandising  3
ID 13  Architecture and Design of the Non-European World  3
ID 15  Drafting for Interior Designers  3
ID 16  Quick Sketching for Interior Designers  2
ID 17  Introduction to Lighting  3

Requirements for the Interior Design Certificate:
Same as requirements for the major.

Liberal Arts and Sciences

The Liberal Arts and Sciences major is designed to enable students to explore various academic disciplines within the college.

Major requirements for the Associate in Arts Degree:
A minimum of 20 semester units must be taken within three of the four categories listed below. At least two courses must be completed in each of the three selected areas. Courses included in the major must be numbered 1–99 and/or 400-499 and cannot be used to fulfill General Education requirements.

Arts and Humanities:
Art, Creative Arts, English, Fine Arts, French, German, History, Humanities, Journalism, Interior Design, Music, Philosophy, Photography, Physical Education Lecture, Spanish, Theatre Arts.

Business and Applied Technology:

Physical, Life, and Health Sciences:

Social and Behavior Science:

Management

The science of managing is the process of visualizing the future as it applies to the individual organization’s current and proposed resources (i.e., money, machines, manpower, materials, and the methods of management use). This curriculum introduces basic elements of management practiced in today’s organizations.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 465</td>
<td>Financial Accounting for the Non-Accounting Major or ACCTG 1A, Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communications for Business (or ENGL 1A, Composition)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 482</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>
### Mathematics

The Mathematics major provides students with sufficient understanding of mathematical concepts, skills, and applications to attain upper-division status in mathematics at a four-year college or university.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 65B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 75</td>
<td>5</td>
</tr>
<tr>
<td>MATH 85</td>
<td>4</td>
</tr>
</tbody>
</table>

**Plus one of the following two groups:**

<table>
<thead>
<tr>
<th>Group I:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 20B</td>
<td>5</td>
</tr>
</tbody>
</table>

**Group II:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 45</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 46</td>
<td>5</td>
</tr>
<tr>
<td>PHYS 47</td>
<td>5</td>
</tr>
</tbody>
</table>

**Required General Education course:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>3</td>
</tr>
</tbody>
</table>

### Management

The curriculum in retailing management is designed to give students a foundation for careers in the retail management field, professional selling, or for starting their own businesses. Retailing aspects may include selection and buying of merchandise, advertising, selling, inventory control, customer relations, and pricing. Students usually enter the retailing field as salespersons and advance in the following manner: assistant manager/assistant buyer, buyer/manager, and upper management.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 13</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>3</td>
</tr>
<tr>
<td>BUS 55</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 482</td>
<td>3</td>
</tr>
</tbody>
</table>

**Requirements for the Merchandising Certificate:**

Same as requirements for the major plus two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 1B</td>
<td>4</td>
</tr>
<tr>
<td>BUS 10</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 8</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>3</td>
</tr>
</tbody>
</table>

### Merchandising

The curriculum in retailing management is designed to give students a foundation for careers in the retail management field, professional selling, or for starting their own businesses. Retailing aspects may include selection and buying of merchandise, advertising, selling, inventory control, customer relations, and pricing. Students usually enter the retailing field as salespersons and advance in the following manner: assistant manager/assistant buyer, buyer/manager, and upper management.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 13</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>3</td>
</tr>
<tr>
<td>BUS 55</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>3</td>
</tr>
</tbody>
</table>

**Requirements for the Merchandising Certificate:**

Same as requirements for the major plus two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>4</td>
</tr>
<tr>
<td>ACCTG 1B</td>
<td>4</td>
</tr>
<tr>
<td>BUS 10</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 8</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>3</td>
</tr>
</tbody>
</table>

### Music

The Music curriculum provides participation in musical performance activities as well as courses of interest to the general college student who seeks music as a personal satisfaction or who wishes to expand knowledge and appreciation of the arts. A full program of courses is available to the prospective major who wishes to make music the subject of concentration leading to a degree and transfer to a university.

**Major requirements for the Associate in Arts Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2A</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 2B</td>
<td>3</td>
</tr>
</tbody>
</table>
### Music

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3A</td>
<td>Musicianship</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 3B</td>
<td>Musicianship</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 51A</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 51B</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(Student may be exempt from MUSIC 51AB upon passing proficiency examination.)</td>
<td></td>
</tr>
<tr>
<td>MUSIC 52</td>
<td>Intermediate Piano (two times)</td>
<td>1-1</td>
</tr>
<tr>
<td>MUSIC 70A</td>
<td>Harmony and Intermediate Musicianship</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 70B</td>
<td>Harmony and Intermediate Musicianship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus six units from the following:**
(courses may be repeated)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 31</td>
<td>Concert Choir</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 32</td>
<td>Concert Choir</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 33</td>
<td>Concert Ensemble Singers</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 42</td>
<td>Guitar Ensemble</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 60</td>
<td>Jazz Band</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 62</td>
<td>College Community Band</td>
<td>1½</td>
</tr>
</tbody>
</table>

**Note:**
1. All students wishing to major in music are advised to begin the major in the first semester of enrollment. It is otherwise impossible to complete the program in two years. Enrollment in MUSIC 3A, 51A and a performance class should commence the first semester.

2. All music majors are expected to be enrolled in a public performance course each semester (MUSIC 31, 32, 33, 42, 60, 62). Part-time students must enroll in a performance class four semesters (not necessarily consecutive) for a minimum of six units.

### Music, Commercial

The commercial music major is designed to give students a two-year background in professional and commercial music concepts and practices with an emphasis on theory and vocational performance potential. Successful completion of the program as shown, along with the General Education requirements, may also enable students to transfer as music majors to a California State University.

**Major requirements for the Associate in Science Degree:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3B</td>
<td>Musicianship</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 10</td>
<td>Songwriting and Commercial Harmony</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Electronic Music</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(may be repeated; see below)</td>
<td></td>
</tr>
<tr>
<td>MUSIC 14</td>
<td>Introduction to the Music Business</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 51A</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 51B</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(Students may be exempt from the MUSIC 51 series upon passing a proficiency examination)</td>
<td></td>
</tr>
<tr>
<td>MUSIC 70A</td>
<td>Harmony and Intermediate Musicianship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus five units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2A</td>
<td>Music History and Literature</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 2B</td>
<td>Music History and Literature</td>
<td>3</td>
</tr>
</tbody>
</table>
**Music**

+ **MUSIC 4**  Music Appreciation  3  
MUSIC 11  Record Production  1½  
MUSIC 12  Electronic Music  3  
MUSIC 20  History and Survey of Rock Music  2  
MUSIC 21  History of Jazz  3  

**Plus two units from the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 30</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 40</td>
<td>1 (may be repeated)</td>
</tr>
<tr>
<td>MUSIC 41</td>
<td>1 (may be repeated)</td>
</tr>
<tr>
<td>MUSIC 43</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 44</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 52</td>
<td>1-1</td>
</tr>
<tr>
<td>MUSIC 53</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 56ABCD</td>
<td>1-1-1-1</td>
</tr>
<tr>
<td>MUSIC 57ABCD</td>
<td>1-1-1</td>
</tr>
</tbody>
</table>

**Plus six units from the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 54</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 55</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 57ABCD</td>
<td>1-1-1-1</td>
</tr>
<tr>
<td>MUSIC 60</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 62</td>
<td>1</td>
</tr>
</tbody>
</table>

**Plus 5 ½ units from the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 31</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 32</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 33</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 42</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 50</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 61</td>
<td>1½</td>
</tr>
</tbody>
</table>

**Required General Education course:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3A</td>
<td>4</td>
</tr>
</tbody>
</table>

**Requirements for the Commercial Music Certificate:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 3A</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 3B</td>
<td>4</td>
</tr>
<tr>
<td>MUSIC 10</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 11</td>
<td>1½</td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 51A</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 51B</td>
<td>1</td>
</tr>
</tbody>
</table>

**Plus seven units from the following:**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSIC 2A</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 2B</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 4</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 14</td>
<td>2</td>
</tr>
<tr>
<td>MUSIC 22</td>
<td>3</td>
</tr>
<tr>
<td>MUSIC 30</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 40</td>
<td>1 (may be repeated)</td>
</tr>
<tr>
<td>MUSIC 41</td>
<td>1 (may be repeated)</td>
</tr>
<tr>
<td>MUSIC 43</td>
<td>1</td>
</tr>
</tbody>
</table>

---

**Nursing:**

**Associate Degree in Nursing**

This program, leading to an Associate in Science Degree with a major in Nursing, is approved by the California Board of Registered Nursing and accredited by the National League for Nursing. The graduate is eligible to take the BRN examination for licensure as a registered nurse. The State Board of Registered Nursing requires a high school diploma or equivalent and successful completion of an accredited nursing program. There are fees for obtaining licensure by examination or endorsement, interim permit, and biennial renewal. Any student having a felony conviction should contact the Board of Registered Nursing regarding legal limitations for licensure.

**Music**

The curriculum is based upon the humanistic philosophy of Abraham Maslow. Nursing is viewed as the establishment of a therapeutic interpersonal process which assists the individual, his/her family, and community to prevent or to cope with threats to the individual's basic needs in health and illness throughout the life cycle. Faculty believes learning is facilitated when students are actively involved in the learning process and assume responsibility for their own learning.

The application process for the ADN program is initiated by making an appointment with a counselor in the Counseling Center. The selection process for the generic student is based on a
Note: 1. Prior to admission to the ADN program, students must demonstrate physical and emotional health as determined by health examination.
2. In order to continue in the ADN program, students must earn a minimum grade of C in all nursing and other required courses.
3. The college does not provide transportation to clinical facilities.
4. Students with prior nursing education should refer to the Advanced Placement Program.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURADN 10*</td>
<td>Nursing Process I</td>
<td>10</td>
</tr>
<tr>
<td>NURADN 20*</td>
<td>Nursing Process II</td>
<td>10</td>
</tr>
<tr>
<td>NURADN 31*</td>
<td>Nursing Process III</td>
<td>6</td>
</tr>
<tr>
<td>NURADN 35*</td>
<td>Mental Health and Psychiatric Nursing</td>
<td>3.5</td>
</tr>
<tr>
<td>NURADN 40*</td>
<td>Nursing Process IV</td>
<td>10</td>
</tr>
<tr>
<td>NURADN 50*</td>
<td>Professional Issues in Nursing Practice</td>
<td>1</td>
</tr>
</tbody>
</table>

*Must be admitted to the ADN program before taking course.

Required General Education and additional courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20**</td>
<td>Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 23</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 23L</td>
<td>General Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>COMSTD 8</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or COMSTD 2, Fundamentals of Effective Speaking, or COMSTD 4, Fundamentals of Interpersonal Communication, or COMSTD 6, Fundamentals of Small-Group Discussion)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1A**</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 401**</td>
<td>Mathematics for Health Science</td>
<td>1</td>
</tr>
<tr>
<td>PSYCH 25</td>
<td>Developmental Psychology: Lifespan Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 10</td>
<td>Introduction to General Sociology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or COMSTD 74, Intercultural Communication, or ANTHRO 3, Introduction to Social and Cultural Anthropology)</td>
<td></td>
</tr>
<tr>
<td>Humanities General Education</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

**Must be completed prior to NURADN 10.

Nursing

ADN Advanced Placement

Prospective students who have prior nursing education or experience in health care may request advanced placement, which will be honored depending on available space in the nursing program. Students in this category include Licensed Vocational Nurses or those transferring from another nursing program. In order to continue in the ADN program, advanced placement students must earn a minimum grade of C in all nursing and other required courses.

VN to RN: Degree Option

Acceptance into this program is based on the following criteria:

1. Graduation from a Vocational Nursing Program.
2. Completion of NURADN 2 with a minimum grade of C.
3. Fulfillment of application requirements under Nursing: ADN in this section of the catalog.

Major requirements for the VN to RN Associate in Science Degree option:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURADN 2</td>
<td>Transition in Nursing</td>
<td>2</td>
</tr>
<tr>
<td>NURADN 31</td>
<td>Nursing Process III</td>
<td>6</td>
</tr>
<tr>
<td>NURADN 35</td>
<td>Mental Health and Psychiatric Nursing</td>
<td>3.5</td>
</tr>
</tbody>
</table>
2. Making an appointment with a college counselor to review and receive the Associate in Science Degree in Nursing by:

1. Completion of NURADN 2 with a minimum grade of C.
2. Fulfillment of application requirements under Nursing: ADN
   criteria:

Acceptance into this program is based on the following requirements:
1. Graduation from a Vocational Nursing Program.
2. Completion of NURADN 2 with a minimum grade of C.
3. Fulfillment of application requirements 1, 2, and 4 under Nursing: ADN in this section of the catalog.

Requirements for LVN to RN: Non-Degree Option:

BIOL 22*** Human Physiology 4
BIOL 23*** General Microbiology 3
NURADN 2 Transition in Nursing 2
NURADN 31 Nursing Process III 6½
NURADN 35 Mental Health and Psychiatric Nursing 3½
NURADN 40 Nursing Process IV 10
NURADN 50 Professional Issues in Nursing Practice 1

Total Units: 30

***Biology 22 and 23 must be completed prior to entering NURADN 31.

Transfer Student: Degree Program

Acceptance into this program is based on the following requirements:
1. Completion of NURADN 2 with a minimum grade of C.
2. Fulfillment of application requirements under Nursing: ADN in this section of the catalog.
3. Evaluation of previous course work in nursing will be determined by the ADN Program Director.

Registered Nurse Ladder Program

The holder of a current California Registered Nurse License may receive the Associate in Science Degree in Nursing by:

1. Submitting official copies of transcripts from the diploma school and all other colleges attended to the Office of Admissions and Records, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737–3002.
2. Making an appointment with a college counselor to review transcripts and to plan a program of study. Appointments may be made by calling 909/941-2116.
3. Satisfying the following Chaffey College general education and graduation requirements for the Associate in Science Degree in Nursing, and in which a minimum grade of C in each is required:

   - BIOL 20 Human Anatomy 4
   - BIOL 22 Human Physiology 4
   - BIOL 23 General Microbiology 3
   - BIOL 23L General Microbiology Laboratory (Humanities General Education requirement) 2
   - COMSTD 8 Fundamentals of Speech Communication (or COMSTD 2, Fundamentals of Effective Speaking, or COMSTD 4, Fundamentals of Interpersonal Communication, or COMSTD 6, Fundamentals of Small Group Discussion) 3
   - ENGL 1A Composition 3
   - PSYCH 25 Developmental Psychology: Lifespan Development 3
   - SOC 10 Introduction to General Sociology (or COMSTD 74, Intercultural Communication, or ANTHRO 3, Introduction to Social and Cultural Anthropology) 3

Note: Some CSU-articulated B.S. Degrees in Nursing require college courses in chemistry, and in algebra or statistics.

Nursing: Vocational (VN)

The Vocational Nurse is a care giver in acute and extended care facilities. In addition, VNs are employed in home health care, emergency clinics and as reviewers of health care utilization.

The Vocational Nursing (VN) program is accredited by the State of California Board of Vocational Nurse and Psychiatric Technician Examiners. On completion of the program students are eligible to apply to take the Board of Vocational Nurse and Psychiatric Technician licensing examination to practice as a Vocational Nurse.

The VN program is a three–semester sequence and, as such, begins in a different semester each program year. The program consists of lecture and laboratory instruction in actual nursing situations.

Enrollment in the VN program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. High school graduation, pass the GED test or pass the High School Proficiency Examination.
3. Evidence of satisfactory physical and emotional health as determined by health examination; proof of immunizations.
4. Completion of MATH 401 and English 350 or BUSOT 455 or equivalent with a minimum grade of C.
5. Current cardiopulmonary resuscitation certificate required each semester prior to entering any course with a clinical laboratory component.
6. PSYCH 1 or PSYCH 25 (effective 1995, PSYCH 25 only) and...
Nursing

BIOL 424 must be completed prior to the second semester of the program. (Biology course may not be over five years old at the time of application to the VN program.)

7. Completion of BIOL 30A is recommended but not required.

The application process for the VN program is as follows:

1. Make an appointment with a counselor in the Counseling Center.
2. Provide proof of high school graduation (original diploma or official transcript), passing the GED test, or passing the High School Proficiency Examination.
3. Provide official copies of all previous college transcripts (must be on file).
4. Obtain an application from the Admissions Office during the dates posted for applications, after having seen a counselor. Applications for the VN program beginning Spring, 1997, will be available October 1-31, 1996. Late applications may be accepted.
5. All applicants must attend an orientation session for the application to be reviewed for admission to the VN program.

Note:

1. The selection process is based on a point system, copies of which are available in the Counseling Center.
2. In order to continue in the program students must earn a minimum grade of C in all courses relating to the program, including BIOL 424, PSYCH 1 or 25, ENGL 350 or BUSOT 455, and MATH 401.
3. All required VN courses must be completed within five years. For transfer students to the VN program: Nursing courses may not be over five years old. (Subject competency may be demonstrated by an examination.)

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURVN 410</td>
<td>Trends and concepts of Vocational Nursing</td>
<td>1</td>
</tr>
<tr>
<td>NURVN 414</td>
<td>Fundamentals of Nursing Practice</td>
<td>6</td>
</tr>
<tr>
<td>NURVN 418</td>
<td>Introduction to Medical—Surgical Nursing</td>
<td>6½</td>
</tr>
<tr>
<td>NURVN 420A</td>
<td>Basic Pharmacology</td>
<td>1½</td>
</tr>
<tr>
<td>NURVN 420B</td>
<td>Basic Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>NURVN 420C</td>
<td>Basic Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>NURVN 425A</td>
<td>Nutrition in Health and Disease</td>
<td>1</td>
</tr>
<tr>
<td>NURVN 425B</td>
<td>Nutrition in Health and Disease</td>
<td>1</td>
</tr>
<tr>
<td>NURVN 430</td>
<td>Intermediate Medical—Surgical Nursing</td>
<td>15</td>
</tr>
<tr>
<td>NURVN 440</td>
<td>Growth and Development: Maternity/Pediatric Nursing</td>
<td>7</td>
</tr>
<tr>
<td>NURVN 450</td>
<td>Advanced Medical-Surgical Nursing</td>
<td>9</td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Anatomy and Physiology</td>
<td>3</td>
</tr>
</tbody>
</table>

Required General Education course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 25</td>
<td>Developmental Psychology: Lifespan Development (or PSYCH 1, General Psychology)</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements for the Nursing:

Vocational (VN) Certificate:
Same as major and general education requirement above.

Advanced Placement
Certified Nurse Assistants who are interested in challenging NURVN 414, Fundamentals of Nursing Practice, must take the challenge examination on the assigned test date three months prior to the initial date of the application period. Advance place-
ment students must meet all requirements for the VN program. Prospective students (i.e., corps persons, RNs, VNs, psychiatric technicians) desiring to transfer course work will be accommodated depending on space available in the VN class. Contact the VN program coordinator for evaluation of nursing course work. Transfer students must meet all prerequisites for the VN program. Applicants with a record of any felony are subject to review by the Board of Vocational Nurse and Psychiatric Technician Examiners (BVNPTE) before a license can be granted. Contact the BVNPTE prior to submitting an application to the VN program to clarify eligibility for licensure upon completing the program.

Philosophy

Philosophy is thinking critically and rationally about human problems of knowledge, existence, conduct, art, and religion. Students explore the great ideas of Western and Eastern heritage and encounter fundamentals of almost all other disciplines. The philosophy curriculum contributes toward a broad, general education in the liberal arts, the goal of which means a liberating of one’s mind, and thus freeing oneself from conventional opinions of one’s time and place.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Units</th>
<th>PHIL 70</th>
<th>Introduction to Philosophy 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHIL 72</td>
<td>Seminar in Ethics 3</td>
<td></td>
</tr>
<tr>
<td>PHIL 76</td>
<td>Critical Thinking 3</td>
<td></td>
</tr>
</tbody>
</table>

Plus one course from the following:

- PHIL 73 Seminar in Contemporary American Philosophy
- PHIL 74 Seminar in Western Political Philosophy

Plus one course from the following:

- PHIL 80 Introduction to Religion
- PHIL 81 Introduction to Eastern Philosophy
- PHIL 82 Introduction to Monotheistic Religions: Judaism/Christianity/Islam

Plus nine units from the following:

- Anthropology 3
- Biology 1, 2, 10, 15
- English 32, 70A, 70B, 75A, 81
- Fine Arts 50
- History 5, 6, 9
- Political Science 2
- Psychology 1
- Philosophy

Photography

This program emphasizes using photography as a creative medium for communicating through visual images. Students may take photography courses as electives, as part of an occupational certificate, or for an A.A. degree in photography.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Units</th>
<th>PHOTO 1</th>
<th>History of Photography 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 10</td>
<td>Beginning Photography 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 11</td>
<td>Intermediate Photography 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 12</td>
<td>Studio Lighting 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 13</td>
<td>Fine Art Photography 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 20</td>
<td>Photography for Publications 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 50</td>
<td>Introduction to Color Photography 4</td>
<td></td>
</tr>
<tr>
<td>PHOTO 456</td>
<td>Computers and Photography 4</td>
<td></td>
</tr>
</tbody>
</table>
Required General Education courses:

ART 10  Fundamentals of Design in Two Dimensions 4
FINART 50  Introduction to Fine Arts (or ART 4, Art History: 1400 Through Contemporary, or ART 8, Contemporary and Future Media) 3

Requirements for the Still Photography Certificate:

ART 10  Fundamentals of Design in Two Dimensions 4
BUS 45  Small Business Ownership and Management 3
COMSTD 8  Fundamentals of Speech Communication 4
PHOTO 1  History of Photography 3
PHOTO 10  Beginning Photography 4
PHOTO 11  Intermediate Photography 4
PHOTO 12  Studio Lighting 4
PHOTO 13  Fine Art Photography 4
PHOTO 20  Photography for Publications 4
PHOTO 21  Public Relations and Communications Photography 2
PHOTO 24  Applied Photography 4
PHOTO 50  Introduction to Color Photography 4
PHOTO 422  Wedding Photography 2
PHOTO 456  Computers and Photography 4

Recommended:

ART 4  Art History: 1400 Through Present 4
ART 8  Contemporary and Future Media 3
ART 44  Mixed Media Studio and Theory 3
ART 67A  Computer Graphics I 3
ART 80  Portfolio and Presentation 2
FINART 50  Introduction to Fine Arts 3
JOUR 10  Newswriting 3

Physical Education

Physical Education provides basic courses to prepare students for continued study; consideration has been given to transfer requirements of local colleges and universities.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 20</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 22</td>
<td>4</td>
</tr>
</tbody>
</table>

PELEC 1  Introduction to Physical Education 2
PELEC 4  Introduction to Physical Fitness and Wellness 2
PELEC 7A  First Aid (or PELEC 7B, Advanced First Aid and Emergency Care) 2
PELEC 15  Diet and Fitness 3

Plus six units from the following:

PELEC 2, 6, 8, 9, 10, 11, 12, 13, 20, 23, 31, 400, 421

Aquatics

The Aquatics Certificate prepares students for job opportunities as lifeguards, aquatic instructors, and pool management positions.

Requirements for the Aquatics Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 7</td>
<td>1</td>
</tr>
<tr>
<td>PELEC 9</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus one course from the following:

PE 6  Swimming 1
PETEAM 11  Competitive Stroke, Swimming Team Activity, Men and Women 1
PETEAM 31  Swimming Team Class, Men and Women 2
PETEAM 51  Intercollegiate Swim Team, Men and Women 2

Plus one course from the following:

PELEC 7A  First Aid 2
PELEC 7B  Advanced First Aid and Emergency Care 3
PELEC 14  Lifeguard Training 3

Note: First Aid courses also include CPR certification. Lifeguarding classes include basic First Aid and CPR certification.

Wellness

The Wellness Certificate Program is designed to provide skills necessary for the development of wellness programs. These programs will express concerns of the health and well-being of the whole person, mind, body, spirit and environment. Employment opportunities exist in wellness as: wellness practitioners, educators, wellness consultants for: industry, business, corporations, insurance companies, medical clinics and other institutions.

Requirements for the Wellness Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 14</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 10</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 40</td>
<td>3</td>
</tr>
<tr>
<td>PE Activities</td>
<td>Select two, one-unit activity courses 2</td>
</tr>
</tbody>
</table>
PELEC 4  Introduction to Physical Fitness and Wellness
PELEC 7A  First Aid
(or PELEC 7B, Advanced First Aid and Emergency Care)
PELEC 20  Introduction to Holistic Health of Various Cultures
PSYCH 5  Personal and Social Awareness
SOC 16  Marriage, Family, and Intimate Relationships

Plus five units from the following:
(Maximum of two activity courses)
Biology 12, 13
Child Development 21
Consumer Studies 15, 25
Food Service Management 15
Gerontology 22, 31, 412
Health Science 412, 430
Physical Education Lecture 4, 6, 10, 15, 23, 31
Physical Education Activity
(All one-half and one-unit activity classes)
Physical Education Team
(All two-unit team sports)
Physical Education Adaptive
(All adaptive classes)
Social science 17, 22
Theater Arts, Dance
(All activity classes under wellness)

Physical Science

2  The Physical Science curriculum provides transfer students a sampling of courses fundamental to subsequent upper division specialization in astronomy, chemistry, engineering, geology, mathematics, physics, or statistics. For non-transfer students, this curriculum in valuable preparation for obtaining employment at the level of technician.

3  Major requirements for the Associate in Science Degree:
5  Any 20 units selected from courses numbered 1 through 99 in astronomy, chemistry, engineering, geology, physics, statistics, and mathematics; and Environmental Technology 10, with no more than eight units from any one of these subject areas.

Note: Courses included in the major cannot be used to fulfill General Education requirements.

Physics

The Physics curriculum provides students a basis for understanding the physical concepts and skills required for attainment of upper division status in a four year college or university. For non-transfer students, this curriculum, augmented by a sampling of engineering courses, offers valuable preparation in obtaining employment at the level of technician.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 20A</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 20B</td>
<td>5</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>4</td>
</tr>
<tr>
<td>MATH 65B</td>
<td>4</td>
</tr>
<tr>
<td>MATH 75</td>
<td>5</td>
</tr>
</tbody>
</table>
Psychology

The Psychology program is for two-year students and transfer students who wish to major or minor in psychology or related fields. Courses are designed to provide students with greater understanding of the behavior of living organisms as individuals and groups.

Major requirements for the
Associate in Arts Degree: Units
PSYCH 1 Introduction to Psychology 3
PSYCH 5 Personal Social Awareness 3
PSYCH 80 Introduction to Research Methods in Psychology 4
SCSCI 10 Statistics Social Science 4

Plus nine units from the following:
PSYCH 20 Developmental Psychology: Childhood Adolescence* 3
PSYCH 21 Developmental Psychology: Adulthood Aging* 3
PSYCH 25 Developmental Psychology: Lifespan Development* 3
PSYCH 40 Elementary Physiological Psychology 3
PSYCH 45 Psychoactive Drugs: The Chemistry of Consciousness 3
PSYCH 55 Abnormal Psychology 3
PSYCH 65 Social Psychology 3
PSYCH 92C Special Topics: Psychology* 3
SCSCI 17 Human Sexuality 3

Required General Education courses:
ENGL 1A Composition 3
ENGL 1B Critical Thinking (or PHIL 76, Critical Thinking)

*Note: 1. A maximum of two of the Developmental Psychology Series may be taken to fulfill this requirement.
2. Psychology 92C may be taken two times to fulfill this requirement, given two different special topics are completed.

Radiologic Technology

The Radiologic Technology program leads to an Associate in Science Degree. Training includes operation of X-ray equipment, exposing and processing film, utilizing radiation protection devices, positioning patients, and patient care. Concurrent clinical training is held in hospitals affiliated with Chaffey College.

The Radiologic Technology program is accredited by the State of California and the Joint Review Committee on Education in Radiologic Technology (JRCERT). Graduates are eligible to apply for admission to the certification examination administered by the American Registry of Radiologic Technologists (ARRT) and the State of California (CRT). The program articulates with the California State University Northridge Radiologic Technology Program for the bachelor’s degree.

The application process is initiated by making an appointment with a counselor in the Counseling Center. A special application for admission to the Radiologic Technology program must
be submitted February 1-28, 1997 (This deadline may be extend-
ed at the coordinator’s discretion.), for the class starting the fol-
lowing August. To apply for admission to the program, the
applicant must meet the following:

1. Eligibility for admission to Chaffey College.
2. Completion of the following courses with a minimum
   grade of C:
   a. MATH 410, 411, STAT 10, or SCSCI 10, or pass Algebra
      Skills Test or equivalent.
   b. CHEM 9, 10, or 20A, or PHYS 5 or higher, or one year
      of high school chemistry or physics, or equivalent.
   c. BIOL 20, or equivalent. (BIOL 424 and 424L or equivalent
      may be substituted for BIOL 20 if completed by the end
      of Fall 1994).*
   d. BIOL 30A or 30B, or equivalent.*
   e. MATH 305 or 307, pass Arithmetic Skills Test, or
      equivalent.

* Biology courses must be taken within the last five years from
the date of application to the Radiologic Technology Program.

Students are admitted to the Radiologic Technology program
on a point-system basis. Because the program is impacted, it is
imperative that applicants talk with a counselor regarding the point
system prior to beginning the prerequisite and general educa-
tion courses. Required courses listed under #2 above and gen-
eral education courses are assigned points. Only courses
completed prior to the application period will be included in the
point calculation. Students must earn a minimum grade of C in
all required and general education courses. Applicants will be
notified if they are accepted into the program by the end of June.

Note: Radiologic Technology students must earn a minimum
grade of C (80%) in all Radiologic Technology courses
in order to continue in the program.

Major requirements for the
Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>RADTEC 10</td>
<td>Anatomy and Radiographic Positioning I</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 10L</td>
<td>Laboratory for Anatomy &amp; Radiographic Positioning I</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 15</td>
<td>Medical Procedures for Radiologic Technologists</td>
<td>2</td>
</tr>
<tr>
<td>RADTEC 15L</td>
<td>Laboratory for Medical Procedures for Radiologic Technologists</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 20</td>
<td>Radiation Science and Protection</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 20L</td>
<td>Laboratory for Radiation Science &amp; Protection</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 25</td>
<td>Anatomy and Radiographic Positioning II</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 30</td>
<td>Radiographic Clinical Education I</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 35</td>
<td>Radiographic Imaging</td>
<td>4</td>
</tr>
<tr>
<td>RADTEC 36</td>
<td>General Radiographic Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 40</td>
<td>Radiographic Clinical Education II</td>
<td>8</td>
</tr>
<tr>
<td>RADTEC 65</td>
<td>Anatomy and Radiographic Positioning III</td>
<td>5</td>
</tr>
<tr>
<td>RADTEC 70</td>
<td>Radiographic Clinical Education V</td>
<td>11</td>
</tr>
<tr>
<td>RADTEC 75</td>
<td>Pathology &amp; Special Radiographic Procedures</td>
<td>5</td>
</tr>
</tbody>
</table>

Radiologic Technology

Requirements for the Radiologic Technology Certificate:
Same as requirements for the major.
Note: The following classes are required in addition to the major requirements for the degree to attain eligibility to apply for examinations given by the State of California and the American Registry of Radiologic Technologists:

RADTEC 50 Radiographic Clinical Education III (first summer) 6
RADTEC 55 Radiographic Equipment and Clinical Application (first summer) 2
RADTEC 80 Radiographic Clinical Education VI (second summer) 4
RADTEC 85 Development of Advanced Radiographic Skills (second summer) 2

MGMT 40 Introduction to Management 3
MGMT 482 Introduction to Human Relations 3

Plus three courses from the following:
ACCTG 435 Payroll Accounting 3
ACCTG 450 Federal Tax Principles 3
BUS 13 Professional Selling 3
BUS 55 Advertising 3
BUSOT 88 Written Communications for Business 3
CIS 2 Introduction to Business Application Software 1½

Requirements for the Small Business Entrepreneur Certificate:
Same as major and general education requirement above.

Social Science

The Social Science major is designed with two major objectives:
(1) to provide a broadly based background in several disciplines, and
(2) to permit specialization in a specific field of study. Students who intend to complete studies in another institution are advised to plan their college programs carefully in conjunction with the transfer institution's requirements. This could necessitate adding courses to any of the academic majors offered by Chaffey College.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 420</td>
<td>Accounting for Small Business Entrepreneurs</td>
<td>3</td>
</tr>
<tr>
<td>OR ACCTG 465, Financial Accounting for the Non-Accounting Major</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>TQM 460</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Major requirements for the Associate in Arts Degree:

Twenty-one units from four of the following disciplines:
21
Anthropology 2, 3
Broadcasting 10, 20, 30
Child Development
Sociology

Sociology is the study of social interactions. Sociology students will come to understand the individual as a social actor and the social forces which affect individuality: how age, gender, ethnicity, social class and other social factors affect a person's opportunities, attitudes, and behaviors. How do people create their society? Small groups, crowd behavior, organizations, institutions, protest groups, communities and societies are studied in terms of stable patterns of social behavior, as well as conflict and change.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 10 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 70 Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SCSCI 10 Statistics for Social Science</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus two of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 11 Popular Culture</td>
<td>3</td>
</tr>
<tr>
<td>SOC 14 Sociology of Gender</td>
<td>3</td>
</tr>
<tr>
<td>SOC 16 Marriage, Family, and Intimate Relationships</td>
<td>3</td>
</tr>
<tr>
<td>SOC 18/ GERO 18 Sociology of Aging</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

Anthropology 3
Economics 1
History 5, 6, 17, 18
Philosophy 70
Political Science 1
Psychology 1 or 80

Required General Education Course:

ENGL 1A Composition 3

Supervision

The Supervision Program is designed for aspiring, newly appointed, or practicing first-line supervisors who serve as links between middle management and operative employees. The program integrates new theories with current practices to facilitate practical as well as theoretical application of techniques necessary to the development of today's supervisor.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 88 Written Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1 Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 8 Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 480 Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 482 Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 10 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 401 Introduction to International Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 460 Total Quality Management Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Theatre Arts

The Theatre Arts program provides students with both the theory and practical experience necessary for either employment in beginning levels of professional theatre or transfer to a theatre arts major in a four-year institution. Various productions are offered to provide students with a broad range of practical training.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>T ARTS 2 Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 20 Development of the Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 21 Development of the Theatre II</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 23/ ART 64 History of Costume</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 70 Directing I</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 71 Directing II</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 90 Seminar: Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>T ARTS 10 Technical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>T ARTS 11 Stage Costuming</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>T ARTS 9 Children's Theatre</td>
<td>4</td>
</tr>
<tr>
<td>T ARTS 75 Stage Makeup</td>
<td>3</td>
</tr>
</tbody>
</table>
Theatre Arts: Dance

The Dance program focuses on technique and performance and prepares students for university transfer and careers in dance and related fields. Various technique and production classes are offered to provide students with a broad background of training.

Major requirements for the Associate in Arts Degree:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARTS 35AB</td>
<td>Ballet I</td>
<td>3-3</td>
</tr>
<tr>
<td>TARTS 37AB</td>
<td>Jazz Dance I</td>
<td>1-1</td>
</tr>
<tr>
<td>TARTS 39AB</td>
<td>Modern Dance</td>
<td></td>
</tr>
<tr>
<td>TARTS 41A</td>
<td>Tap Dance I</td>
<td>1</td>
</tr>
<tr>
<td>TARTS 49</td>
<td>Survey of Dance</td>
<td>3</td>
</tr>
<tr>
<td>TARTS 85AB</td>
<td>Ballet II</td>
<td>3-3</td>
</tr>
<tr>
<td>TARTS 87AB</td>
<td>Jazz Dance II</td>
<td>1-1</td>
</tr>
</tbody>
</table>

Plus one course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARTS 6</td>
<td>Production Workshop</td>
<td>3</td>
</tr>
<tr>
<td>TARTSD 43</td>
<td>Dance Production</td>
<td>2</td>
</tr>
<tr>
<td>TARTSD 45</td>
<td>Dance Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TARTS 2</td>
<td>Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>TARTS 8</td>
<td>Advanced Acting</td>
<td>3</td>
</tr>
<tr>
<td>TARTS 41B</td>
<td>Tap Dance II</td>
<td>1</td>
</tr>
<tr>
<td>TARTSD 80</td>
<td>Dance Composition</td>
<td>3</td>
</tr>
</tbody>
</table>

University Studies

Students transferring to the University of California, the California State University, or other universities may choose the University Studies major. The curriculum exposes students to a broad spectrum of fundamental areas of intellectual experience. At the same time, the degree program allows students to pursue a field of interest by meeting the lower division major requirements toward a baccalaureate degree.

Major requirements for the Associate in Arts Degree:

Completion of all the requirements in the Intersegmental General Education Transfer Curriculum (IGETC). Students have the option of completing the UC or the CSU pattern of requirements. (See “Preparation for Advanced Standing.”)
Preparation for Advanced Standing at Four-year Universities and Colleges

Chaffey College offers programs of courses which parallel the first two years (lower division) in four-year colleges and universities. Because requirements vary among collegiate institutions, it is advantageous for students to choose the college or university to which they plan to transfer as early in their educational career as possible. The students should concentrate on meeting general education requirements and lower-division major requirements while attending the community college. Such information for the various institutions is available in the Chaffey College Counseling Center. In addition, the student is advised to refer to the catalog of the chosen transfer college. Each student who is interested in transferring to a four-year college or university is urged to become alert to dates and procedures in filing the application for admission. The application form for the state colleges and universities can be obtained in the Counseling Center or by personal contact with the appropriate campus.

California State University

Subject Requirements—The California State University requires that first-time freshman applicants complete, with grades of C or better, a comprehensive pattern of college preparatory study totaling 15 units. A “unit” is one year of study in high school.

English, 4 years.

Mathematics, 3 years: algebra, geometry, and intermediate algebra.

U.S. history or U.S. history and government, 1 year.

Science, 1 year with laboratory: biology, chemistry, physics, or other acceptable laboratory science.

Foreign language, 2 years in the same language (subject to waiver for applicants demonstrating equivalent competence).

Each of the twenty state universities in California accepts a maximum of 70 semester units of credit in transferable courses completed in the community college. Full junior standing requires the completion of 60 semester units in transferable courses. The student who was eligible to enter a state university at graduation from high school may transfer at any time with a 2.0 grade point average or higher in the community college. This eligibility from high school is based upon a combination of the grade point average of work completed in the last three years of high school (excluding physical education and military science) and the SAT total or the ACT composite score.
Visual and performing arts, 1 year: art, dance drama/theater, or music.

Electives, 3 years: selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture.

Waiver of Foreign Language Subject Requirement—The foreign language subject requirement may be waived for applicants who demonstrate competence in a language other than English equivalent to or higher than expected of students who complete two years of foreign language study. Consult with your school or counselor of any CSU campus admissions or relations with schools office for further information.

The student who was not admissible on high-school graduation must complete a minimum of 56 semester baccalaureate-degree level units with a 2.0 grade point average, including a minimum of 30 semester units from the General Education Course Pattern list. The 30 units in General Education must be completed with a C or better in each course, and must be chosen from Areas A, B, C, and D. Included must be courses from Areas A1, A2, A3, and B4.

Chaffey College is authorized to certify a maximum of 39 units of the 48–unit state general education requirement. See page entitled “General Education Certification Course Pattern” for courses which meet this requirement.

Students have an additional option for meeting general education requirements by fulfilling a new Intersegmental General Education Transfer Curriculum (IGETC). See page entitled “Intersegmental General Education Transfer Curriculum (IGETC)” for courses which meet this requirement.

Courses Transferable to the California State University

Courses numbered from 1–99 are transferable for baccalaureate degree credit at the California State University. All baccalaureate degree level courses transferable to the California State University are marked Transfer credit: CSU in the “Announcement of Courses” section of this catalog.
California State University
General Education Certification
Course Pattern

Each candidate for the bachelor’s degree from a CSU institution shall complete a pattern of general education courses which total a minimum of 48 semester units. Chaffey may certify a maximum of 39 semester units toward meeting this requirement; the remaining 9 semester units must be completed in the CSU at the upper-division level.

Full general education certification from Chaffey College requires a minimum of 39 units distributed as follows:

- **Area A** — 9 units required.
- **Area B, C, and D** — A minimum of 9 units. is required in each area
- **Area E** — 3 units required.

Courses in Areas A1, A2, A3, and B4 must be completed with a grade of C or better.

The following Chaffey College courses meet this pattern:

**AREA A. COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING**

Minimum 9 units

A1. Oral Communication (one course)
   Communication Studies 2, 4, 6, 8

A2. Written Communication (Required)
   English 1A

A3. Critical Thinking (one course)
   Communication Studies 72
   English 1B
   Philosophy 76

**AREA B. PHYSICAL UNIVERSE AND ITS LIFE FORMS**

Minimum 9 units

Choose at least one course from each area. At least one of the physical science or life science courses must have a laboratory.

B1. Physical Science
   Astronomy 20
   Chemistry 10*, 20A*
   Earth Science 1, 1 & L*, 5, 5 & 5L*, 8
   Geography 4, 4 & 5*
   Geology 1*, 2*, 6, 20*
   Physics 5, 5 & 6*, 20*, 45*

B2. Life Science
   Anthropology 1, 1 & L*
   Biology 1*, 2*, 3*, 10, 11, 12, 15, 20*, 22*, 23, 23 & 23L*, 50*
   Geography 6

B3. Laboratory Activity
   This requirement is satisfied by completion of any laboratory course in B1 or B2. Laboratory courses are identified with an asterisk (*).

B4. Mathematics
   Mathematics 25, 31, 35, 61, 65A
   Social Science 10
   Statistics 10

**AREA C. ARTS, LITERATURE, PHILOSOPHY, AND FOREIGN LANGUAGES**

Minimum 9 units

Choose at least one course from each area.

C1. Arts
   Art 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 25A, 42, 44
   Broadcasting 20, 30
   Communication Studies 14
   Fashion Design 20
   Fine Arts 50
   Interior Design 11, 12
   Music 1, 2A, 2B, 3A, 4, 21, 26
   Photography 1, 10
   Theatre Arts 1, 7, 8, 20, 21, 23
   Theatre Arts: Dance 49

C2. Humanities
   English 1C, 30, 31, 32, 33, 68, 70A, 70B, 71, 75A, 75B, 76, 78, 80A, 80B, 81
   French 1, 2, 3, 4
   German 1, 2, 3, 4
   Humanities 1A
   Philosophy 70, 72, 73, 74, 80, 81, 82
   Spanish 1, 2, 3, 4, 5, 11, 12

**AREA D. SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS AND BEHAVIOR; HISTORICAL BACKGROUND**

Minimum 9 units

Choose courses from three different disciplines.

Anthropology 2, 2 & 2L, 3
Child Development 2, 4, 26
Communication Studies 12, 74, 76
Consumer Studies 11
Economics 1, 2, 4, 8
Geography 1, 10
History 1, 2, 5, 6, 9, 10, 17, 18, 50, 51, 70, 71
Political Science 1, 2, 7, 10
Psychology 1, 20, 65
Sociology 10, 14, 18

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

Minimum 3 units

- Biology 13, 14
- Consumer Studies 10, 15, 40
- Food Service Management 15
- Guidance 3
- Physical Education Lecture 15
- Psychology 5
- Social Science 17, 22
- Sociology 16

**STATE REQUIREMENT IN U.S. HISTORY**

History 17 or 18

and

U.S. CONSTITUTION / STATE AND LOCAL GOVERNMENT

Political Science 1
Intersegmental General Education Transfer Curriculum for Transfer to CSU and UC

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from Chaffey College to a campus in either the California State University (CSU) or University of California (UC) system without the need, after transfer, to take additional lower-division general education courses to satisfy campus general education. Depending on a student's major and field of interest, the student may find it advantageous to take courses fulfilling either the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer.

The course requirements listed below must be entirely completed before the IGETC can be certified. Chaffey College will certify course work from other colleges according to the approved IGETC list of the originating college. Students who have earned advanced placement credit for courses which are recognized as equivalent to Chaffey College courses listed below will receive credit for IGETC. All courses must be completed with a minimum grade of C. Note: Courses meeting this requirement must be a minimum of 3 semester/4–5 quarter units.

AREA 1 ENGLISH COMMUNICATION

Group A: English Composition (Required—CSU/UC)
English 1A

Group B: Critical Thinking — English Composition (Required—CSU/UC)
English 1B

Group C: Oral Communication (CSU only—CSU requirement only)
Communication Studies 2, 6, 8

AREA 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(1 course—CSU/UC)
Statistics 10

AREA 3 ARTS AND HUMANITIES

(3 courses minimum—CSU/UC)
(At least one course from the Arts and one course from the Humanities)

ARTS:
Art 2, 4, 6
Broadcasting 20, 30
Fine Arts 50
Music 2A, 2B, 3A, 3B, 4
Theatre Arts 1, 20, 21
Theatre Arts: Dance 49

HUMANITIES:
English 1C, 30, 31, 32, 33, 68, 70A, 70B, 71, 75A, 75B, 76, 78, 80A, 80B, 81
French 2*, 3, 4
German 2*, 3, 4
History 1, 2, 5*, 6*, 9*, 10*, 20*, 25, 50*, 51*, 70*, 71*
Philosophy 70, 72, 73, 74, 80, 81, 82
Spanish 2*, 3, 4, 5

AREA 4 SOCIAL AND BEHAVIORAL SCIENCES

(3 courses minimum—CSU/UC)
(Courses from at least two disciplines)
Anthropology 2, 3
Child Development 2, 4
Communication Studies 12, 74
Economics 11*, 2, 4, 8
Geography 10
History 5*, 6*, 9*, 10*, 15***, 18***, 20*, 50*, 70*, 71*
Political Science 1**, 2, 7, 10
Psychology 1, 20, 85
Sociology 10, 14, 18, 70

AREA 5 PHYSICAL AND BIOLOGICAL SCIENCES

(2 courses minimum—CSU/UC)
(At least one Physical Science course and one Biological Science course; one must include a laboratory. Laboratory courses are underlined)

PHYSICAL SCIENCES:
Astronomy 20
Chemistry 10**, 20A, 20B, 70, 75A, 75B
Earth Science 1*, 2, 10**, 11*, 12*, 15**, 20
Geology 1, 2, 20, 22, 85
Physics 1**, 3, 5, 6, 10**, 11**, 45**, 46**, 47**

BIOLOGICAL SCIENCES:
Anthropology 1, 1 & 1L
Biology 1**, 4, 5, 10**, 11, 12, 15**, 20, 22, 23,

LANGUAGE OTHER THAN ENGLISH — UC Requirement Only

Complete 2 years of the same foreign language of high school level work with a grade of C or better. OR earn a score of 3 or higher on the Foreign Language Advanced Placement Test OR 550 on the College Board Achievement Test in Foreign Language. OR complete one of the following courses:

French 2*
German 2*
Spanish 2*

GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS

(Not part of IGETC; may be completed prior to transfer.)

UC accepts high school course work to meet this requirement. Students should consult the catalog of the campus they wish to attend to determine the course(s) necessary.

CSU requires 2 courses, one from Group 1 and one from Group 2.

1. Political Science 1***
2. History 17***, 18***

* Courses designated with an asterisk may be counted in one area only.
** Indicates that transfer credit may be limited by either UC or CSU, or both.
*** Courses used to meet this requirement may not be used to satisfy requirements for IGETC.

Please consult with a counselor for additional information.
University of California

The campuses of the University of California are located in:
Berkeley
Los Angeles
Irvine
San Diego
Davis
Santa Barbara
Riverside
San Francisco (Medical Center)
Santa Cruz

All of the nine branches of the University of California accept a maximum of 70 semester units of credit in transferable courses completed in the community college. Courses which are accepted by the university are described in an articulation agreement between Chaffey College and the university.

Students planning to transfer should become familiar with the general university admission requirements. In addition, students should become familiar with the specific requirements of the particular campus to which transfer is planned by examining the university catalogs and separate bulletins of various schools and colleges of the university. Because breadth (general education) requirements and lower-division major requirements vary with each campus, students should consult with a counselor in the college counseling center for specific information.

MINIMUM ADMISSION REQUIREMENTS FOR FRESHMAN APPLICANTS
You must meet the Subject Requirement, Scholarship Requirement, and Examination Requirement to be eligible for admission to the university as a freshman. If you don’t meet the Subject and Scholarship Requirements, you may qualify for admission by examination alone.

Subject Requirement
To satisfy this requirement, you must complete the high school courses listed below, with a grade point average described by the Scholarship Requirement. This sequence of courses is also known as the “a–f” requirements.
You must take 15 units of high school courses to fulfill the Subject Requirement, with at least 7 of the 15 units earned in the last two years of high school. (A unit is equal to an academic year or two semesters of study.)
California applicants: To be acceptable to the University of California, courses must appear on a list certified by your high school principal as having met the university’s admission requirements. Your counselor or principal will have a copy of this list.

A. HISTORY/SOCIAL SCIENCE
2 years required
Two years of history/social science, including one year of U.S. history or one-half year of U.S. history and one-half year of civics or American government; and one year of world history, cultures, and geography.

B. ENGLISH
4 years required
Four years of college preparatory English that include frequent and regular writing, and reading of classic and modern literature. No more than two semesters of ninth-grade English may be repeated. Consult with your counselor to determine how these grades can be improved.

C. MATHEMATICS
3 years required, 4 recommended
Three years of college preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Math courses taken in the seventh and eighth grades may be used to fulfill part of this requirement if your high school accepts them as equivalent to its own courses.

D. LABORATORY SCIENCE
2 years required, 3 recommended
Two years of laboratory science providing fundamental knowledge in at least two of these three areas: biology, chemistry, and physics. Laboratory courses in earth/space sciences are acceptable if they have as prerequisites or provide basic knowledge in biology, chemistry, or physics. No more than one year of ninth grade laboratory science may be used to meet this requirement.

E. LANGUAGE OTHER THAN ENGLISH
2 years required, 3 recommended
Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, and composition.

F. COLLEGE PREPARATORY ELECTIVES
2 years required
Two units (four semesters), in addition to those required in “a–e” above, chosen from the following areas: visual and performing arts, history, social science, English, advanced mathematics, laboratory science, and language other than English (a third year in the language used for the “e” requirement or two years of another language).

Scholarship Requirement
The Scholarship Requirement defines the grade point average (GPA) you must attain in the “a–f” subjects described above.
If your GPA is 3.3 or higher, you have met the minimum requirement for admission to the University of California. If your GPA is below 3.3 but above 2.81, you have met the minimum requirement if you achieve the college entrance test score indicated on the Eligibility Index just ahead.
Honors Courses: The university assigns extra points as follows for up to four units of certified honors–level work: A=5 points, B=4 points, C=3 points. D grades are not considered in these calculations. See your counselor for details.

D and F Grades: D and F grades in the “a–f” courses must be repeated. Consult with your counselor to determine how these grades can be improved.

Examination Requirement
You must submit the following test scores:

n One aptitude test, either the Scholastic Assessment Test (SAT)**, or the American College Test (ACT). The verbal and mathematics scores on the SAT must be from the same sitting. The ACT composite score is used.

n Three College Board Achievement Tests (Ach)**, including English Composition; Mathematics Level 1, Level 2, or 2C; and one test in one of the following areas: English literature, foreign language, science, or social studies.

Admission By Examination Alone
If you do not meet the Subject and Scholarship Requirements, you may be able to qualify for admission to the university by examination.
To satisfy the minimum requirements for qualifying by examination alone, you must achieve a total score of 1300 or higher on the SAT, or a composite score of 31 or higher on the ACT. In addition, you must earn a total score of 1650 or higher on the three College Board Achievement Tests, with a minimum score of 500 on each test.
You cannot qualify for admission by examination alone if you have completed 12 or more units of transferable course work at another college or university, or if you have taken transferable college courses in any subject covered by the College Board Achievement Tests.
Minimum Admission Requirements for Transfer Applicants

To qualify for admission to the University of California as a transfer student, you must meet one of the three sets of requirements described below. The Subject, Scholarship, and Examination Requirements discussed in this section refer to the requirements described in the freshman admission section.

1. If you were eligible for admission to the university when you graduated from high school—meaning you satisfied the Subject, Scholarship, and Examination Requirements—you are eligible to transfer if you have a C (2.0) average in your transferable college course work.

2. If you meet the Scholarship Requirement but did not satisfy the Subject Requirement, you must take college courses in the subjects you are missing to be eligible to transfer. You will need to earn a grade of C or better in each one. (The University will waive up to two units of the required high school course work except in mathematics and English.) The two alternatives (b) and (c) are not interchangeable—a student must select one or the other and pass these courses with a grade of C or better.

3. If you were not eligible for admission to the University of California when you graduated from high school because you did not meet the Scholarship Requirement, or you did not meet the Scholarship Requirement and did not complete all the required “a–f” subjects, you must:
   a. Complete 84 quarter units, or 56 semester units, of transferable college credit with a grade point average of at least 2.4, and satisfy either (b) or (c) below.
   b. Take college courses in the subjects you are lacking and earn a grade of C or better in each one. (The University will waive up to two units of the required high school course work except in mathematics and English.)
   c. Complete one college course in mathematics, one in English, and one selected from either U.S. history, laboratory science, or foreign language. You must earn a grade of C or better in each course. The course in mathematics must assume a proficiency level equivalent to three years of high school mathematics (i.e., elementary algebra, advanced algebra, and geometry). The course may be trigonometry, or a more advanced course in mathematics or statistics, for which advanced algebra is a prerequisite. All courses, with the exception of mathematics, must be transferable. Students should consult with a counselor in the College Counseling Center or Transfer Center for specific information.

Note: The two alternatives (b) and (c) are not interchangeable—a student must select one or the other and pass these courses with a grade of C or better.

Courses Transferable to the University of California

The courses which are transferable to the University of California are marked Transfer Credit: UC in the Announcement of Courses section of the catalog.

University of California

General Education Requirements

Chaffey College students intending to transfer to the University of California have the option of completing either the general education/breadth requirements specific to the UC campus to which they intend to transfer or completing the new Intersegmental General Education Transfer Curriculum. See page entitled “Intersegmental General Education Transfer Curriculum (IGETC)” for courses which meet this requirement.

Specific requirements of the IGETC, as well as requirements for each of the UC campuses, are available in the Counseling Center and Transfer Center.

Private Colleges and Universities

Admission to private colleges and universities varies with each transfer school. Please consult the transfer school catalog for specific requirements, or make an appointment in the Chaffey College Counseling Center with a counselor for clarification of admission standards.
Announcement of Courses

The courses on the following pages are alphabetically and numerically arranged.

The first line indicates the official designation of the course, a descriptive title, and the number of units each semester. Next is a statement of the number of class and laboratory hours per week. Following are lines indicating prerequisites, corequisites, recommended preparation, and/or transfer credit. Finally there is a brief course description.

Courses that are divided into parts (semesters) marked A, B, C, or D are usually taken in that sequence. In such sequences, A is usually a prerequisite to B, etc. A, B, C, etc., may also be used to designate variable units.

Semester System Course Numbers Defined

1-99
College transfer and baccalaureate degree level: courses comparable to those offered in the first two years of a four-year college. Courses transferable to the California State University are marked Transfer Credit: CSU and courses transferable to the University of California are marked Transfer Credit: UC. Some transferable courses have credit limitations. Students are directed to consult a counselor for details.

300-399
Not degree applicable remedial and college preparatory courses. Courses are not part of the associate degrees nor vocational certificates, although they may be prerequisites to required courses. College credit is assigned and courses may be included in the student educational plan. These courses are graded credit/no credit (CR/NC).

400-499
Associate degree level courses. May be applied to the Associate in Arts, the Associate in Science, and to vocational certificates.

600-699
Noncredit courses. Precollegiate courses are not listed in the college catalog and are not considered part of collegiate-level study.

Credit by Examination [Cx]
Courses designated [Cx] may be challenged for credit by examination.

California Articulation Numbering System (CAN)
Chaffey College is authorized to designate certain transfer-level courses with a California Articulation Number (CAN). The CAN identifies courses as either identical to or “in lieu of” courses at the four-year colleges and universities. Students are directed to consult a counselor for transfer course equivalents.

Taxonomy of Program Numbers (TOP)
Following each course description is the TOP number. This number is included for program planning and budgeting purposes and is not intended for student use.

Independent Study
Independent study courses provide challenging and in-depth study on approved topics within any subject area. Independent study proposals must have the approval of the instructor and appropriate administrator. It is expected that the study will not duplicate existing curriculum; rather, it will be of an advanced nature and extend approved courses or series of courses. Consult the Schedule of Classes for specific offerings.

Special Topics
Special topics courses offer in-depth study of topics not covered in the existing curriculum. Course content and units of credit are determined by the department. Special topics may be designed as lecture or laboratory. Consult the Schedule of Classes for specific offerings.
Accounting (ACCTG)

1A Principles of Accounting I (4) [Cx]
Class hours: 4 lecture.
Recommended preparation: Computer Information Systems 1 or 2 (may be taken concurrently), or equivalent computer experience.
Transfer Credit: CSU; UC.
Accounting meets the information needs of various users by developing and communicating financial information that is useful for decision-making. Course material covers the accounting environment, basic financial statements, accounting cycle, and operating, investing, and financing activities.
502.00

1B Principles of Accounting II (4)
Class hours: 4 lecture.
Prerequisite: Accounting 1A.
Recommended preparation: Computer Information Systems 1 or 2 or spreadsheet experience.
Transfer Credit: CSU; UC.
Accounting meets the information needs of managers by developing and communicating information that is useful for management decision-making. Course material covers the foundations of management accounting, planning control and performance evaluation, and other dimensions of decision making. Also covered is the statement of cash flows and financial analysis.
502.00

10 Cost Accounting (3)
Class hours: 3 lecture.
Prerequisite: Accounting 1B or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Fundamentals of cost accounting including planning, controlling, and product costing.
502.00

450 Federal Tax Principles I (3)
Class hours: 4 lecture.
Recommended preparation: Experience in small business.
Not Degree Applicable.
Developing skill in operating a calculator by using the touch system in a laboratory environment. Industry proficiency of 200 average strokes per minute with 98% accuracy.
502.00

460 Commercial Accounting Software (3)
Class hours: 3 lecture.
Recommended preparation: Accounting 1A, 420 or 465.
Basic concepts and techniques for using commercial accounting software designed for microcomputers; how to enter data, process data, create reports and interpret the information.
502.00

465 Financial Accounting for the Non-Accounting Major (3)
Class hours: 3 lecture.
Creation, use, and interpretation of accounting data by the business non-accounting major.
502.00

492 Special Topics: Accounting (1, 2, 3, 4, 5, 6)
This course is offered only on a credit/no credit basis.
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Selected topics for students who wish to pursue certain specializations in accounting. See class schedule for emphasis. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
502.00

492L Special Topics Laboratory: Accounting (1, 2, 3, 4, 5, or 6)
This course is offered only on a credit/no credit basis.
Class hours: 1, 3, 6, 9, 12, 15 or 18 laboratory.
Selected laboratory topics for students who wish to pursue in-depth exploration in specialized areas of accounting. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
502.00

Aeronautics (AERO)

10 Materials, Processes and Inspections (4/1) [Cx]
Class hours: 4/1 lecture.
Corequisite: Aeronautics 13AB, 14ABCD.
Transfer Credit: CSU.
Aerospace materials, hardware, manufacturing practices, blueprint reading, inspection techniques, aircraft servicing, cleaning and corrosion control as required for an FAA airframe and/or powerplant technician's license.
950.00

11 Aero Science and FAA Regulations (4/1)
Class hours: 4/1 lecture.
Corequisite: Aeronautics 13AB, 14ABCD.
Aircraft mathematics, physics, aerodynamics and flight controls, weight and balance calculations, basic AC and DC electricity, and FAA regulations required for an FAA airframe and/or powerplant technician's license.
950.00

13A,B General Aeronautics Laboratory (1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 or 11.
Transfer Credit: CSU.
General aeronautics laboratory course to fulfill FAA practical aeronautical applications in aerodynamics, physics, weight and balance, FAA and manufacturer's publications, aircraft materials and processes, blueprint reading, aircraft servicing, electricity and mathematics. May be taken up to two times for credit.
950.00

14A,B,C,D General Aeronautics Laboratory (1-1-1-1)
Class hours: 3 laboratory.
Corequisite: Aeronautics 10 or 11.
Corequisite: Aeronautics 33ABC or 34ABCD.
Transfer Credit: CSU.
Related training for FAA airframe maintenance technician's license. May be taken two times for credit.
950.00

30 Airframe Structures (4/1) [Cx]
Class hours: 4 lecture.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.
Transfer Credit: CSU.
Aircraft metallic and nonmetallic structural fabrication, inspection, and repair methods. Related training for FAA airframe maintenance technician's license.
950.10

32 Airframe Auxiliary Systems (4/1) [Cx]
Class hours: 4 lecture.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.
Transfer Credit: CSU.
Related training for FAA airframe auxiliary systems technician's license.
950.10

22 Powerplant Systems and Components II (4/1) [Cx]
Class hours: 4 lecture.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Reciprocating and turbine aircraft engine fuel metering, propeller, and auxiliary systems and components. Related training for the FAA powerplant maintenance technician's license.
950.20

23A,B,C Powerplant Aeronautics Laboratory (1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 20, 21, or 22.
Transfer Credit: CSU.
Theory, fundamentals, construction, maintenance, inspection, overhaul and operation of reciprocating and jet turbine aircraft engines. Powerplant systems and components inspection and overhaul. Related training for the FAA powerplant maintenance technician's license. May be taken two times for credit.
950.20

24A,B,C,D,E,F Powerplant Aeronautics Laboratory (1-1-1-1-1-1)
Class hours: 3 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.
Transfer Credit: CSU.
Related training for the FAA powerplant maintenance technician's license.
950.20

25A,B Powerplant Systems and Components II (4/1) [Cx]
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Reciprocating and jet turbine aircraft engine fuel metering, propeller, and auxiliary systems and components. Related training for the FAA powerplant maintenance technician's license.
950.20

26A,B Powerplant Aeronautics Laboratory (1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 20, 21, or 22.
Transfer Credit: CSU.
Related training for the FAA powerplant maintenance technician's license.
950.20

27A,B Powerplant Systems and Components II (4/1) [Cx]
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Reciprocating and jet turbine aircraft engine fuel metering, propeller, and auxiliary systems and components. Related training for the FAA powerplant maintenance technician's license.
950.20

28A,B Powerplant Aeronautics Laboratory (1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 20, 21, or 22.
Transfer Credit: CSU.
Related training for the FAA powerplant maintenance technician's license.
950.20

29A,B Powerplant Systems and Components II (4/1) [Cx]
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Reciprocating and jet turbine aircraft engine fuel metering, propeller, and auxiliary systems and components. Related training for the FAA powerplant maintenance technician's license.
950.20

31A,B Powerplant Aeronautics Laboratory (1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 20, 21, or 22.
Transfer Credit: CSU.
Related training for the FAA powerplant maintenance technician's license.
950.20

32A,B Powerplant Systems and Components II (4/1) [Cx]
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.
Transfer Credit: CSU.
Related training for FAA airframe auxiliary systems technician's license.
950.20

33A,B Powerplant Laboratory (1V-1V-1V-1V-1V-1V)
Class hours: 4 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 30, 31, or 32.
Transfer Credit: CSU.
Airframe laboratory course to fulfill FAA requirements for practical airframe experience. Subjects are metallic and nonmetallic structural fabrication, inspection, and repair. Welding, rigging and assembly, and airworthiness inspection. May be taken two times for credit.
950.10

34A,B,C,D,E,F Airframe Laboratory (1-1-1-1-1-1)
Class hours: 3 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 30, 31, or 32.
Transfer Credit: CSU.
Airframe laboratory course to fulfill FAA requirements for practical airframe experience. Subjects are aircraft electrical, hydraulic, pneumatic, instruments, landing gear, fuel, cabin atmosphere, ice and rain control, and fire protection systems. Related training for FAA airframe maintenance technician's license.
950.20
communication, and position and warning systems. May be taken two times for credit.

460 Basic Helicopter Maintenance (6)
Class hours: 3 lecture; 9 laboratory.
Prerequisite: Airframe and/or Powerplant Certificate.
Theory, fundamentals, construction, maintenance, inspection, and operation of reciprocating and turbo shaft powered helicopters.

492 Special Topics: Aeronautics (1/2, 1, 2, 3, 4, 5, or 6)
Class hours: 1/2, 1, 2, 3, 4, 5, or 6 lecture.
Special topic course in specific aeronautics areas. Topics identified by the instructor. May be attempted only four times regardless of the unit combination. However, no single-special interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

492L Special Topics Laboratory: Aeronautics
(1/2, 1, 2, 3, 4, 5, or 6)
Class hours: 1/2, 1, 2, 3, 4, 5, 18, or 18 laboratory.
Prerequisites: Aeronautics 20, 21, 22 or 20, 21, 32.
Selected laboratory topics for students who desire in-depth exploration in specialized areas of airframe and powerplant. May be taken four times for credit.

Anthropology (ANTHRO)
See also courses under Social Sciences

1 Physical Anthropology (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
(CAN ANTH 2)
Study of the biological features of humankind, utilizing knowledge from many natural and social sciences to achieve a fuller understanding of human variation and the ways in which people have adapted to their various environments.

1L Laboratory for Physical Anthropology (1)
Class hours: 3 laboratory plus one Saturday field trip.
Prerequisites: Anthropology 1 (may be taken concurrently).
Transfer Credit: CSU; UC.
Optional laboratory experience coordinated with Anthropology 1. Comparative study of both human and non-human primates to explain human variation, evolution, genetics and behavior; forensic anthropology techniques and case analysis.

2 Prehistory and Archaeological Methods (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
(CAN ANTH 6)
Study of the technical and expressive potentials of water media, their combination with other media, their potential for illustration, their historical background, and contemporary trends. Studio work concentrates on the discussion of related visual elements, color theory and practice; two-dimensional projects. Techniques of visual thinking and creative manipulation of media will be studied as a means to develop an understanding of artistic and societal trends. Study of the contemporary uses of media to assess the evolution of media technologies in the arts.

10 Fundamentals of Design in Two Dimensions (4)
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU; UC.
In depth introduction to the visual elements of two-dimensional design including color theory and practice. Techniques of visual thinking and creative manipulation of media applied to two-dimensional projects.

12 Fundamentals of Design in Three Dimensions (4)
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU; UC.
In depth introduction to the visual elements of three-dimensional design including color and surface treatments of form as well as the implications of time and environmental space. Emphasis on techniques of visual thinking and creative manipulation of media applied to three-dimensional projects.

14 Introduction to Drawing (3)
Class hours: 1 lecture; 4 laboratory.
Recommended preparation: ART 10.
Transfer Credit: CSU; UC.
(CAN ART 8)
Introduction to freehand drawing with exploration of traditional and experimental approaches. Emphasis on developing visual and perceptual awareness through the manipulation of various black and white and color media in a studio environment.

16 Introduction to Painting (3)
Class hours: 1 lecture; 4 laboratory.
Recommended preparation: Art 10 and/or Art 14.
Transfer Credit: CSU; UC.
(CAN ART 10)
Beginning techniques in acrylic and/or oil media. Emphasis on painting as a creative and problem-solving process and as a means of self-expression. Includes fundamentals of color theory and composition as applied to painting.

16 Introduction to Ceramics (3)
Class hours: 1 lecture; 4 laboratory.
Transfer Credit: CSU; UC.
Introduction to materials, tools, and processes used in making pottery and other ceramic art. Student learns use of potter's wheel, hand building, and traditional ceramics terminology as well as contemporary concepts of fired clay as art.

20 Introduction to Ceramic Sculpture (4)
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU; UC.
Introduction to sculptural processes, concepts, and materials with the emphasis on clay.

22A,B,C Ceramics Laboratory (1, 1 or 2)
Prerequisite: Art 19, 35, or 40A or 8 or equivalent with a minimum grade of C, or concurrent enrollment in other ceramic courses.
Transfer Credit: CSU; UC.
Open laboratory for current ceramics students to increase skills through the use of the ceramic facility at times other than their own class time. May be taken four times for credit, regardless of the unit combination. May require corequisites and/or prerequisites based on the content of the course.

25A Watercolor Painting (1)
Class hours: 1 lecture; 4 laboratory.
Recommended preparation: Art 14 and/or Art 10, or equivalent.
Transfer Credit: CSU; UC.
Exploration of the technical and expressive potentials of water media, their combination with other media, their potential for illustrating their historical background, and contemporary trends. Studio work concentrates on the dis-
courses are designed to educate students in the principles and techniques of art and design, with an emphasis on the use of materials and tools. Each course is structured to provide a comprehensive overview of the subject, focusing on specific areas of art and design. The courses are designed to be taken sequentially, with prerequisites for advanced courses. The courses cover a wide range of topics, from basic drawing and painting to more advanced techniques in sculpture, ceramics, and graphic design. The classes are structured to provide hands-on experience, allowing students to develop their skills and creativity. The courses are available for credit, and students may choose to take them for their personal development or to fulfill specific degree requirements. The courses are offered by different faculty members, each with expertise in their respective areas of art and design. The classes are held in various locations on campus, and students have the opportunity to work with a diverse range of materials and tools. The courses are designed to be accessible to all students, with options for both credit and non-credit courses.
410B Advanced Autobody Refinishing (5)
Class hours: 2 lecture; 7 laboratory.
Prerequisite: Autobody Repair 405A or equivalent with a minimum grade of C.
Continuing study in autobody refinishing dealing primarily with painting; types of materials, thinners, reducers and their application; and on the development of painting skills. May be taken three times for credit. 948.20

490L Special Topics Laboratory: Autobody Repair Technology (V, 1, 2, 3, 4, 5, or 6)
Class hours: 1.5, 3, 6, 9, 12, 15, or 18 laboratory.
Selected laboratory topics for students who desire in-depth experiences in a particular skill. May be taken only four times regardless of the unit combination. Agreement between instructor and student on the nature of the project prior to registration for course. 948.20

Automotive Technology (ATCH)

10 Automotive Fundamental/Repair (4) [C]
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
NOTE: Students who have completed either Automotive Technology 20A or 20B sections cannot enroll in Automotive Technology 20.
Trade and employment information. Shop operations with emphasis on overhaul, machining, and rebuilding of internal combustion engines. Operation of engine machine shop equipment. 948.00

20 Automotive Engine Rebuilding (Upper Section) (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 20A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Trade and employment information. Shop operations with emphasis on overhaul, machining and rebuilding of internal combustion engines. Operation of engine shop equipment. 948.00

20B Automotive Engine Rebuilding (Lower Section) (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 20A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Trade and employment information. Shop operations with emphasis on overhaul, machining and rebuilding of internal combustion engines. Operation of engine shop equipment. 948.00

21 Automotive Engine Design and Performance (6)
Class hours: 6 lecture.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
NOTE: Students who have completed either Automotive Technology 22A or 22B sections cannot enroll in Automotive Technology 22.
Study of engine design, fuels, compression ratios, cylinder head design, intake and exhaust port design, piston, rod and crankshaft design. Engine balance, intake and exhaust system tuning. 948.00

22 Automotive Brakes, Chassis, and Steering (11)
Class hours: 7 lecture, 12 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
NOTE: Students who have completed either Automotive Technology 22A or 22B sections cannot enroll in Automotive Technology 22.
Diagnosis, repairing, and rebuilding drum brake, disc brake and ABS systems and suspension and steering systems, tire service and balance, headlight adjustment, 2 and 4-wheel suspension alignment. Emphasis on proper shop techniques and legal aspects. 948.00

22A Automotive Brakes (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
Testing, diagnosing, repairing and adjusting drum-type, disc-type, power-assisted automotive brakes, and ABS. Wheel and tire service balance. Headlight adjustment. Proper shop techniques and legal aspects. 948.00

22B Automotive Chassis and Steering (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 22A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Testing, diagnosing, repairing and rebuilding suspension and steering systems. Wheel and tire service and balance. Two- and four-wheel suspension alignment. Proper shop techniques and legal aspects. 948.00

23 Automotive Tune-up Electrical and Fuel Systems (11)
Class hours: 7 lecture; 12 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
Principles, theory, diagnosis and repair of electrical systems. Electron theory. Ohm’s law, batteries, starters, charging systems, ignition systems, chassis dyno operation, emission control devices, carburetors, and fuel delivery systems. 948.00

23A Automotive Tune-up: Electrical (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
Principles, theory, diagnosis and operation and repair of electrical systems. Electron theory. Ohm’s law, batteries, starters, charging and ignition systems. Chassis dyno operation and emission control devices. 948.00

23B Automotive Fuel Systems (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 22A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Principles, theory, diagnosis and repair of carburetors, fuel injection and fuel delivery systems. Chassis dyno operation and emission control devices. 948.00

24 Automotive Transmissions and Drive Trains (11)
Class hours: 7 lecture; 12 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
NOTE: Students who have completed either Automotive Technology 24A or 24B sections cannot enroll in Automotive Technology 24.
Theory, diagnosis and repair of clutches, manual transmissions, manual transaxles, overdrives, drive shafts and differentials. Rearwheel and frontwheel drive automatic transmissions. 948.00

24A Automotive Drive Trains (5)’
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Transfer Credit: CSU.
Theory, diagnosis, and repair of clutches, manual transmissions, drive shafts, and differentials. 948.00
42B Automatic Transmission Repair (5V)
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Automotive Technology 24A or equivalent with a minimum grade of C.
Transfer Credit: CSU
Theory, diagnosis, and repair, and rebuilding of rear wheel and front wheel drive automatic transmissions.
948.00

26 Automotive Emission Controls (5) [C]
Class hours: 4 lecture; 3 laboratory.
Prerequisite: Automotive Technology 23 or equivalent with a minimum grade of C.
Transfer Credit: CSU
Vehicle emission adjustments and repair training for mechanics. Preparation of cars for California inspection maintenance and motor vehicle pollution control (MVPC) test.
948.00

411 Fundamentals of the Automobile (7) [C]
Class hours: 4 lecture; 3 laboratory.
Basic course covering the practical and fundamental aspects of automotive construction, maintenance, operation, and servicing. Emphasis on developing the ability to diagnose, repair, and replace in order to gain employment at a first-echelon service station and/or successfully work on one's own automobile.
498.00

412 Automotive Engine Machine Shop Technology (4) [D]
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Updated automotive machine-tool techniques and practices: hot tanking, valve grinding, head and block surfacing, rod sizing and aligning, cylinder boring, sleeveing and honing, machine care, and servicing.
498.00

425 Automotive Air Conditioning, Heating, and Cooling Systems (4)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C or high school automotive technology or equivalent with a minimum grade of B.
Theory, diagnosis and repair of automotive heating, air conditioning, and cooling systems.
498.00

440 Automotive Design and Performance I (6)
Class hours: 6 lecture.
Prerequisite: Minimum grade of C in any two of the following: Automotive Technology 20, 21, 22, 23, 24 or equivalent.
Theory and explanation of high performance production car and race car chassis and suspension systems. Chassis and suspension system layout and construction. Suspension and handling, automotive aerodynamics, race car gearing and high speed braking systems. Materials and fabrication of roll bars, interior sheet metal and small parts.
498.00

441 Automotive Design and Performance II (3)
Class hours: 2 lecture; 3 laboratory.
Prerequisite: Automotive Technology 440 or equivalent with a minimum grade of C.
Recommended preparation: Welding 1, 10 or equivalent (may be taken concurrently).
Participation in the building and preparation of race cars for different types of racing. Suspension alignment, chassis construction, engine and race preparation. Knowledge gained in Automotive Technology 440 is applied in this course. May be taken twice for credit.
948.00

452 Electrical and Computer Controls (5)
Class hours: 4 lecture; 3 laboratory.
Prerequisite: Automotive Technology 10 or equivalent with a minimum grade of C, or high school automotive technology or equivalent with a minimum grade of B.
Theory, principles of operation, diagnosis and repair, and/or replacement of electrical components and computer controls.
948.00

492 Special Topics: Automotive Technology (1, 1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Special topic course in specific automotive technology areas. Topics identified by the instructor. May be attempted only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
948.00

492L Special Topics Laboratory: Automotive Technology (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 9, 12, 15, or 18 laboratory.
Special topic laboratory course in specific automotive technology areas. Topics identified by the instructor. May be attempted only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
948.00

Basic Skills (BASSKH)

300A B,C,D Basic Skills for Students with Physical Disabilities (1, 2, 3, or 4)
This course is offered only on a credit/no credit basis.
Class hours: 3, 6, or 9 self-paced laboratory.
Not Degree Applicable.

301A,B,C,D Basic Skills in English (1, 2, 3, or 4)
This course is offered only on a credit/no credit basis.
Class hours: 2, 4, 6 or 8 self-paced laboratory.
Not Degree Applicable.

302A,B,C,D Basic Skills in Mathematics (1, 2, 3, or 4)
This course is offered only on a credit/no credit basis.
Class hours: 2, 4, 6 or 8 self-paced laboratory.
Not Degree Applicable.

321B Basic Skills for Job Placement (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Not Degree Applicable.

Biological Sciences (BIOL)

1 General Biology (4)
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
A survey of the biological principles that govern living organisms from their cellular to their ecological organization. Includes laboratory and field experiences. See class schedule for emphasis. Intended to meet general education requirements.
401.10

2 Environmental Biology (4)
Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
A field approach to the ecology of natural ecosystems in time and space and stressing natural environments in the ecosystem processes. Field participation is required. Intended to meet general education requirements.
420.00

3 California Natural History (4)
Class hours: 2 lecture; 6 laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
An ecological introduction to natural communities. Lecture topics include biographies and writings of great naturalists, energetics, materials cycling, and succession theory as well as characteristics of natural communities. Laboratory stresses interrelationships among flora and fauna, geology, and climate with emphasis on field recognition. This course is recommended for teacher preparation.
420.00

4 Field Botany (4)
Class hours: 2 lecture; 6 laboratory.
Transfer Credit: CSU; UC credit limitations. See counselor.
The biology of California plant communities emphasizing taxonomic field identification, ecology, and evolution.
420.00

10 Concepts in Biology (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
An integrated approach to the major biological themes and principles common to all living things. The position of the human species in nature.
401.00
11 Sociobiology (3)
Class hours: 3 lecture.
Recommended preparation: A course or other background in general biology.
Transfer Credit: CSU; UC.

12 Introduction to Human Genetics (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.

13 Drugs and Society (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
The biological, social, and psychological implications of drug use, misuse, and abuse in the United States past and present.

14 Health Science (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Human health and wellness, including mental health, nutrition, abuse of drugs, alcohol and tobacco, sexually transmitted diseases, other communicable and noncommunicable diseases, physical fitness, and many other aspects of positive health. May satisfy the health education unit requirement for a teaching credential in the state of California.

15 Science, Nature and Human Values (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
The ethics and epistemology of science and nature. Topics include methods in epistemology and logic to analyze arguments, culture and social roots of bioethics in a framework of Western cultural history, the nature/nurture controversy in a framework of historical conflict, and contemporary ethical traditions analyzed and applied to issues of today.

20 Human Anatomy (4)
Class hours: 3 lecture; 3 laboratory.
Recommended preparation: Completion of or eligibility for English 1A.
Transfer Credit: CSU; UC.
Medically important aspects of the structure of the human body and of the major physiological processes.

22 Human Physiology (4)
Class hours: 3 lecture; 3 laboratory.
Recommended preparation: Human anatomy, chemistry and algebra.
Transfer Credit: CSU; UC.
Emphasizes the dynamic nature of life processes in the human body, including the physiology of the cell and the functions and interrelations of the various organ systems. Lab emphasizes experimentation and scientific reasoning.

23 General Microbiology (3)
Class hours: 3 lecture.
Prerequisite: Chemistry 9 (preferred), or 10, or high school chemistry, or equivalent with a minimum grade of C.
Recommended preparation: Biology 10 or high school biology.
Transfer Credit: CSU; UC.
Introduction to microbiology with a strong emphasis on microorganisms pathogenic to humans. Mycobacterial morphology, genetics, taxonomy, metabolism, and relationship to disease; mechanisms of controlling microbes; and immunology.

23L General Microbiology Laboratory (2)
Class hours: 6 laboratory.
Prerequisite: Biology 23 (may be taken concurrently).
Transfer Credit: CSU; UC.
Introduction to microbiology laboratory techniques. Methods of culturing, staining, biochemically analyzing and classifying microorganisms.

30A Beginning Medical Terminology (3)
Class hours: 3 lecture.
Recommended preparation: Biology 30A or two years' experience in a health facility.

30B Advanced Medical Terminology (3)
Class hours: 3 lecture.
Recommended preparation: Biology 30A or two years' experience in a health facility.

50 Core Biology (4)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Chemistry 10 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Comprehensive introduction to the essential principles of biology with emphasis on cellular structure and function. Laboratory includes instrumentation, experimental design and data analysis common in the biological sciences. Recommended for majors in biology and related fields.

52 General Botany (5)
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Biology 50 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC; UC credit limitations. See counselor.
Introduction to the development and comparative morphology, function, heredity, physiology, and evolution of vascular plants and bryophytes.

55 Vertebrate Zoology (5)
Class hours: 3 lecture; 4 laboratory.
Prerequisite: Biology 50 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Biology of vertebrate animals emphasizing evolutionary history, reproduction, growth and development and functional survey of organ systems. Laboratory includes sections on histology, embryology and a comparative study of vertebrate systems.

56 Invertebrate Zoology (4)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Biology 50 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Biology of invertebrate animals emphasizing anatomy, systematics, ecology, and evolutionary relationships. Laboratory is primarily a survey of the major invertebrate phyla.

63 Population Biology (4)
Class hours: 3 lecture; 3 laboratory plus 8 hours special laboratory to be scheduled by the instructor.
Prerequisite: Biology 50 and Mathematics 420 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Introduction to the principles, theories, and methods of population biology.

90 Seminar: Biology (2)
Class hours: 2 lecture.
Prerequisite: Biology 50 or equivalent with a minimum grade of C.

92 Special Topics: Biology (1, 2, 3, 4, 5 or 6)
Class hours: 1, 2, 3, 4, 5 or 6 lecture.
Recommended preparation: A course in the biological sciences or equivalent.

92L Special Topics Laboratory: Biology (1, 2, 3, 4, 5 or 6)
Class hours: 1, 2, 3, 4, 5 or 6.
Transfer Credit: CSU; UC.
May be required with enrollment in Biology 92 as determined by the instructor. See class schedule for the current topic. May be taken only three times regardless of the unit combination. However, no single-subject, special-interest topic may be repeated.

96 Independent Study: Biology (1, 2 or 3)
Class hours: 1, 2, or 3.
Prerequisite: Acceptance into the program of study.
Transfer Credit: CSU; UC.
For the student who is capable and has the desire to explore and develop a project in biological sciences. Before registering, the student must reach an agreement with the instructor concerning subject and intended limits of the project. Individual inquiry, special techniques, and selected reading. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated.

301 Study Skills for Biological Sciences (1)
Class hours: 1 lecture.
Not Degree Applicable.
Corequisite: Enrollment in any biology course.

421 Cross Sectional Anatomy (2)
Class hours: 1 lecture; 3 laboratory.
Recommended preparation: A course in the biological sciences or equivalent.

424 Anatomy and Physiology (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Biology 424 (may be taken concurrently).
Transfer Credit: CSU; UC.
Laboratory in anatomy and physiology complementary to the content of Biology 424.

301 Study Skills for Biological Sciences (1)
Class hours: 1 lecture.
Not Degree Applicable.
Corequisite: Enrollment in any biology course.

424 Anatomy and Physiology Laboratory (1) [Cx]
Class hours: 3 laboratory.
Prerequisite: Biology 424 (may be taken concurrently).

Botany
See Biology

Broadcasting (BRDGST)

10 Introduction to Broadcasting (3) [Cx]
Class hours: 3 lecture.
Prerequisite: CSU.
Appreciation and history of the development of commercial radio and television broadcasting and their importance to American culture. Class includes basic technical, social, and artistic aspects of radio and television with an emphasis on theory of operation and regulation of broadcasting.

20 Survey of World Film (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Historical introduction to motion pictures as an art form through the study and analysis of significant films drawn from the development of world cinema. Classes focus on the specific impact of world filmmakers, the technical innovations, the techniques of commercial filmmaking, and the methods of film criticism.

30 Survey of American Film (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
The art of American theatrical films from the study and analysis of silent classics through contemporary commercial films. Viewing films, discussion, and critical lectures. Successive offerings will focus on the studio, the directors, the stars, the western, the musical, the gangster, science fiction, the epic, and the experimental film.

70 Radio Operations (3) [Cx]
Class hours: 3 lecture.
Transfer Credit: CSU.
Principles of sound reproduction and recording, microphone use and placement, sound effects, music and audio mixing. Practical experience with microphones, audio mixing control board, cueing, mixing disc and taped music with voice and sound effects. Study of FCC rules and regulations.

71 Advanced Radio Production Workshop (2)
Class hours: 2 lecture; 3 laboratory plus special laboratory.
Prerequisite: Broadcasting 70 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Application of techniques and principles from Broadcasting 70 to producing and engineering various kinds of radio programs. Topics and discussion show, the commercial, the radio documentary, and drama. In addition, the student learns the basic operation of a radio station in terms of sales, ratings, formatting, production and relations with the FCC. Complete study of FCC rules and regulations in preparation for FCC third-class license examination. May be taken twice for credit.

80 Television Production (3) [Cx]
Class hours: 2 lecture; 3 laboratory plus 9 special laboratory.
Transfer Credit: CSU.
Principles of electronic photography and videotape recording, editing, sound recording/mixing, and video mixing. Use and basic placement of video cameras, lighting, and sound equipment. Introduction to crew positions and functions.

81 Advanced Television Production Workshop (3)
Class hours: 2 lecture; 3 laboratory plus special laboratory.
Prerequisite: Broadcasting 80 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Basic elements of television programming including scripting, preproduction, production and postproduction. Elements of television directing, innocence, script preparation, handling talent, advanced editing, timing, pacing and composition. Students will produce and direct their own projects.

85A, B, C Applied Television Production (2, 3, or 4)
Class hours: 6, 9, or 12 laboratory.
Prerequisite: Broadcasting 81 or equivalent in radio, photography, commercial or graphic arts or theatre with a minimum grade of C.
Transfer Credit: CSU.
Advanced television production laboratory which produces videotape materials and exposes students to actual production situations. Students specialize in particular production areas, such as camera, audio, production supervision, floor managing, switching, video control, videotape recording and editing. Students from photography, graphic arts, and theatre are encouraged to enroll and contribute to individual productions. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated.

90 Seminar: Communications (3)
Class hours: 3 lecture.
Prerequisite: Selection made by application to the department.
Transfer Credit: CSU; UC.
Designed for a small group of students to explore and discuss topics in the communications field in a seminar situation. May be taken two times for credit.

92 Special Topics: Broadcasting (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU.
A special interest course of varying length for students who wish further exploration in specific areas of broadcasting. Topics will be determined by the instructor and may cover the range of technical, creative, and production areas of broadcasting. May be taken only six times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

92L Special Topics Laboratory: Broadcasting (1, 2, 3, or 4)
Class hours: 3, 6, 9, or 12 laboratory.
Transfer Credit: CSU.
Selected laboratory topics for students who desire in-depth exploration in specialized areas of broadcasting. May be taken four times regardless of the unit combination. However, no single interest, single-subject class may be repeated.

Business (BUS)

10 Introduction to Business (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit pending.
The American business system in its economic and social environment. A conceptual approach relating business and its legal forms to society as a whole. Includes scope, function, and organization of businesses; fundamental concepts, principles, and contemporary practices of business; emphasis on today's global competitive business environment.

13 Professional Selling (3)
Class lecture: 3 lecture.
Transfer Credit: CSU.
Study of the principles and techniques involved in selling ideas, products, and services especially the psychological and social aspects of persuasion. Techniques in preparing and making sales presentations on a direct basis to manufacturers, distributors and consumers; prospecting, preappraisal, securing appointments, customer relations and territory management. Emphasis on problem-solving.

28A Business Law I (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
Introduction to law and federal and state court systems. Intensive treatment of legal relationships established by contract; the U.S. Constitution, business torts, ethics, sales and consumer and environmental law.

28B Business Law II (3)
Class hours: 3 lecture.
Prerequisite: Business 28A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Special applications of business law covering commercial paper, creditors' rights and secured transactions, agency and employment, partnerships, corporations, personal and real property, insurance, estate planning, governmental regulation, and international law.

45 Small Business Ownership and Management (3)
Class hours: 3 lecture.
Prerequisite: Business Administration: Business 10.
Transfer Credit: CSU.
Concepts and techniques related to the ownership-management problems of a small firm from the viewpoint of a present or potential business owner. The basics of locating, financing, merchandising, buying, pricing, inventory, and credit control, public and personnel relations.

49 Business Computations (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Development of fundamental mathematical processes relating to actual business usage. Instruction in the use of the electronic calculator is an integral part of course work. Computations involved in accounting, marketing, finance, and other areas involving computations.

55 Advertising (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Historical, economic, social, and psychological appeal of advertising. Practical and psychological aspects of product packaging, trademarks, and color. Production techniques for the basic advertising media. Advertising management techniques, campaign scheduling, budgeting, and evaluation. Career opportunities and trends.

401 Introduction to International Business (3)
Class hours: 3 lecture.
Prerequisite: International Business 401 or equivalent experience.
Overview of international business concepts designed to provide both beginners and experienced business people with a global perspective on international trade including foreign investments, impact of financial markets, international marketing, and the operation of multinational corporations.

402 Introduction to Import/Export (3)
Class hours: 3 lecture.
Recommended: International Business 401 or equivalent experience.
Importing and exporting, including essential terms and techniques, organizations, regulation, terms of access, documentation, shipment and financing involved with international movement of merchandise.

405 International Marketing (3)
Class hours: 3 lecture.
Recommended: International Marketing 401 or equivalent experience.
Theory and practices of international marketing to include market entry strategies, analysis of foreign markets, culture and marketing, product design, pricing, distribution, promotion and sales.

408 International Trade Finance (3)
Class hours: 3 lecture.
Recommended: International Business 401 or equivalent.
Sources and types of finance including trade finance support role of commercial banks, trade risks, tax savings, and the role of international trade organizations in international trade finance.

410 International Business Law (3)
Class hours: 3 lecture.
Recommended: International Business 401 and Business Law 28A or equivalent.
Legal aspects and ramifications of international trade. Multinational enterprises, sovereignty, technology transfer, arbitration, negotiation and diplomacy.
**Business and Office Technologies (BUSOT)**

30 Fundamentals of Microsoft Word (1 Cr.)  
Class hours: 1 1/2 lecture.
Recommended preparation: Knowledge of keyboarding/speedwriting.
Transfer Credit: CSU.
Basic hands-on introduction to Microsoft Word for Windows. Document preparation and formatting of academic papers, reports, letters, and resumés. Develop skills and literacy in the windows environment: creating, editing, formatting, saving, printing, and disk management. Highly recommended for all college students.

40A Beginning Computer Keyboarding (3)  
(Formerly Business and Office Technologies 440)  
Class hours: 3 lecture.
Transfer Credit: CSU.
Beginning course in computer keyboarding with mastery of the alphabetic and numeric keyboard and correct touch-typing techniques. Introduction to the personal computer, word processing, disk management, and formatting of basic documents-business letters and reports. Highly recommended for all college students.

40B Computer Keyboarding: Speed and Accuracy Development (3)  
(Formerly Business and Office Technologies 40)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Analyze, evaluate, and improve keyboarding speed and accuracy using touch-typing techniques. Use the personal computer, word processing, file management and formatting, intense review of letters, numbers, and symbols and the production of basic reports, business letters, and memos/returns. May be taken two times for credit. Proficiency certificate issued after successful completion of course.

45A Beginning Word Processing: Microcomputer Software (3)  
(Formerly Office Technology 445A)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Basic word processing using current word processing software programs. Introduction to saving and retrieving documents, cursor movements, reveal codes, formatting, editing, printing, block and move, spell check, thesaurus, headers, footers, endnotes, footnotes, merge, and macros. May be taken two times for credit in alternative software versions.

45B Intermediate Word Processing: Microcomputer Software (3)  
(Formerly Office Technology 445B)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 45A or equivalent with a minimum grade of C.
Recommended preparation: Business and Office Technologies 40B or keyboarding minimum 40 words per minute and Business and Office Technologies 40C with a minimum grade of C.
Transfer Credit: CSU.
Advanced concepts and techniques in using various microcomputer software packages. Introduction to merge and document assembly, columns, macros, sorts, tables, spreadsheets, and styles. May be taken two times for credit in alternate software versions.

45C Advanced Word Processing: Microcomputer Software (3)  
(Formerly Office Technology 445C)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 45B or equivalent with a minimum grade of C.
Recommended preparation: Business and Office Technologies 460 equivalent or a minimum grade of C.
Transfer Credit: CSU.
Advanced editing features, advanced macros, advanced columns, importing and linking tables and spread sheets, graphics, desktop publishing, advanced styles, master documents, mark text features, file and disk management, document compare, and related features. May be taken two times for credit in alternative software versions.

46A Windows Software Applications: Beginning Microsoft Word (3)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40A or equivalent with a minimum grade of C.
Recommended: Business and Office Technologies 40B (May be taken concurrently). 455.
Transfer Credit: CSU.
Hands-on basic word processing using Microsoft Word for Windows in document preparation: creating, editing, retrieving, printing, formatting letters, business reports, academic papers. Use of ruler, ribbon, and toolbar to use advanced cut and paste functions. Exercise-oriented applications to enhance and develop knowledge of the Windows environment and integrative software applications. Use of mouse techniques and Windows.

46B Windows Software Applications: Intermediate Microsoft Word (3)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40A and 40B or equivalent with a minimum grade of C.
Recommended: Business and Office Technologies 40B.
Transfer Credit: CSU.
A hands-on approach to advanced concepts and techniques using Microsoft Word integrative software applications. Introduction to merge, document assembly, macros, sorts, spreadsheets, tables, and styles. Use of Windows environment, mouse techniques, pull-down menus, toolbars, ribbon bars, dialog boxes, check boxes, and scroll bars.

46C Windows Software Applications: Advanced Microsoft Word (3)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40A and 40B or equivalent with a minimum grade of C.
Recommended: Business and Office Technologies 40B.
Transfer Credit: CSU.
Advanced editing features, macros, merge and databases, integrating and linking tables and spreadsheets. Major emphasis on graphics, desktop publishing, and advanced styles. May be taken two times for credit in alternate software versions. Proficiency Certificate issued on successful completion of course.

50 Filing and Records Management (3)  
(Formerly Business and Office Technology 470)  
Class hours: 3 lecture.
Transfer Credit: CSU.
Instruction and practice work involving basic filing principles, procedures, and systems. Emphasis on noncorrespondence records, information storage, and retrieval systems. Management aspects of records retention, disposition, and the operation of a records management program.

51 Electronic Records Management (1 Cr.)  
Class hours: 1/2 lecture.
Prerequisite: Business and Office Technologies 40A or equivalent keyboarding skill.
Recommended: Business and Office Technologies 45A or 45B and/or 52.
Transfer Credit: CSU.
Not Degree Applicable.
Instruction in office skills preparation focusing on correct filing methods. May be taken two times for credit.

80 Microcomputer Business Applications: Electronic Office Management (3)  
(Formerly Business and Office Technology 470)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 45A or 47A.
Transfer Credit: CSU.
Use of integrative software applications to write, send, and receive E-mail, calendar appointments electronically, and schedule conferences with multiple users. Link/attach files electronically, launch and execute other program applications, spreadsheets, data bases, presentations, etc. May be taken two times for credit.

88 Written Communication for Business (3)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 455 or English 450 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Study and application of basic principles for producing clear, correct, and logically organized written business communication. Punctuation, capitalization, use of numerators, formats, and pronouns will be reviewed. Stress on developing writing fluency and professional tone in handling routine business communications including letters, memos, and directives as well as developing a personal resume.

90 Technical Report Writing for Business (3)  
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 455 or English 450 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Study of the principles and techniques of technical description, narration, and argumentation. Includes research, organization, preparation, and presentation of specialized and technical information in report or proposal form. The topics of the report or proposal will be relevant to the student’s major field of study.

96 Independent Study: Business and Office Technologies (1, 2, 3)  
Class hours: 1, 2, or 3 lecture.
Transfer Credit: CSU.
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or paper on an area of personal interest. Nature and extent of the project must be decided by student and instructor before the student may sign up for the course. Type and extent of the project determines the number of units allowed. May be attempted only three times, regardless of the unit combination.

300 Basic Filing (1)  
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Not Degree Applicable.
Instruction in office skills preparation focusing on correct filing methods. May be taken two times for credit.

301 Basic Recordkeeping (1)  
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Not Degree Applicable.
Instruction in office skills preparation focusing on general recordkeeping. May be taken two times for credit.

302 Basic Calculator (1)  
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Not Degree Applicable.
Instruction in office skills preparation focusing on using the calculator with speed and accuracy. May be taken two times for credit.
303 Basic Typewriting (1)
Class hours: 3 lecture.
Recommended preparation: Typing experience.
Instruction in office skills preparation focusing on typing with speed and accuracy. May be taken two times for credit.
514.00

444 Concepts and Techniques of Data Entry (2)
Class hours: 2 lecture.
Prerequisite: Typing speed of 35 words per minute and Business and Office Technologies 45A or equivalent with a minimum grade of C.
Concepts, techniques and procedures for inputting alpha and alphanumeric data on the microcomputer. Analysis of types of errors and development of percentage of accuracy and number of keystrokes.
514.00

452 Bookkeeping Procedures (3)
(Formerly Office Technology 452A/B)
Class hours: 3 lecture.
Bookkeeping procedures used in service businesses. Preparation for entry positions as bookkeeper or bookkeeping assistant and for clerical workers seeking to augment their skills.
514.00

455 Fundamental of English for Business (3)
Class hours: 3 lecture.
Study of vocabulary, punctuation, and mechanics of grammar. Emphasis on basic principles of storytelling leading to understanding of business communications.
514.00

460 Proofreading: Text-Editing Skills (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 45A or 46A, or equivalent knowledge and Business and Office Technologies 46B. Development of the essential skills needed to perform proofreading of documents.
514.00

462A Beginning Machine Transcription (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 45A or 46A, or equivalent knowledge and Business and Office Technologies 46B.
Development of a marketable skill in machine transcription. Emphasis on increasing speed and accuracy. May be taken two times for credit.
514.00

462B Advanced Machine Transcription (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 426A with a minimum grade of C or equivalent transcription experience. Business and Office Technologies 472 for legal emphasis and Biology 30A or equivalent for medical emphasis.
Recommended preparation: Business and Office Technologies 46B.
Development of advanced production skills in machine transcription utilizing word processing software. Students select an emphasis on the general, legal, or medical office. May be taken two times for credit.
514.00

465A Beginning Speedwriting and Notetaking (3)
Class hours: 3 lecture.
Recommended preparation: Typing experience.
Theoretical and practical training in Speedwriting (shorthand), an abbreviated writing system based on the letters of the alphabet. Practice and vocabulary development to prepare for the entrance examination of the National Court Reporters Association.
514.00

465B Advanced Speedwriting and Notetaking (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 40B and 465A or equivalent with a minimum grade of C.
Recommended preparation: Business and Office Technologies 455.
Continuation of Business and Office Technologies 465A. Completion of speedwriting principles. Intensive speed-building techniques to develop dictation speeds of 80 words per minute for three minutes.
514.00

467 Speedwriting/Shorthand Improvement (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 465B or previous shorthand training. Business and Office Technologies 40B with a minimum grade of C. Short-hand refresher course for all systems with intensive practice and drill on shortcuts, phrases, numbers, frequently used words, and speed-building techniques. Dictation speeds from 60 to 100 words per minute. May be taken two times for credit.
514.00

470 Electronic Office Procedures (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 454 or 464 and 460 or equivalent with a minimum grade of C.
Recommended preparation: Business and Office Technologies 454B or 465B.
Office professional duties and responsibilities. The organization of those duties, the personal qualifications of the office professional, and business ethics and etiquette. Office procedures and practices are discussed and evaluated. Emphasis will be placed on the electronic office.
514.00

471 Administrative Office Management (3)
Class hours: 3 lecture.
Introduction to the study and application of business office procedures. Emphasis on the legal and business environment.
514.00

472 Legal Office Word Processing (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 454 or 464 with a minimum grade of C or equivalent knowledge.
Recommended preparation: Business and Office Technologies 455 and 460.
Advanced features of WordPerfect in the specialized field of legal office work. Emphasis on increased speed and accuracy, use of appropriate software. Recommended for legal office associates.
514.10

473 Legal Office Procedures (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 454 or 464, or 472, or equivalent with a minimum grade of C.
Recommended preparation: Business and Office Technologies 470.
Specialized training in law office support services, preparation of court, non-court, and client documents. Overview of procedures, terminology, and document requirements in real estate, corporate, probate, family, and civil law. Application of advanced features of WordPerfect in preparation of legal documents and forms.
514.10

475 Medical Office Procedures (3)
Class hours: 3 lecture.
Prerequisite: Business and Office Technologies 454 or 464 or equivalent.
Recommended preparation: Business and Office Technologies 464 or 472.
A study of medical office assistant's perspective. Medical terminology, patient care, documentation, medical records, reimbursement, and medical ethics.
514.20

476 Medical Insurance Coding (3)
Class hours: 3 lecture.
Prerequisite: Biology 30A or equivalent.
Recommended preparation: Business and Office Technologies 475.
Study of medical coding (CPT and ICD-9) for reimbursement of physician insurance claims including history of coding and practical coding exercises.
514.20

477 Medical Insurance Billing (3)
Class hours: 3 lecture.
Prerequisites: Business and Office Technologies 476 and typing speed of 35 wpm.
Recommended preparation: Business and Office Technologies 475.
Comprehensive study of medical health insurance billing procedures including completing claims for Medicare, Medicaid, state disability, workers' compensation, and third-party carriers.
514.20

492 Special Topics: Business and Office Technology (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Special topic course in specific office technology areas.
Topics identified by the instructor. May be attempted only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
514.00

492L Special Topics Laboratory: Business and Office Technology (1, 2, 3, 4, 5, or 6)
Class hours: 1/2, 3, 6, 9, 12, 15, or 18 laboratory.
Prerequisite: Completion of 15 units of Business and Office Technology classes or related fields of study.
Special projects designed to allow capable, well-motivated students in the major to develop a project in or make a report on a facet of office technology. Instructor-agreed agreement as to the nature and extent of the project must be reached before the student enrolls. May require corequisites and/or prerequisites based on the content of the course.
514.00

Chemistry (CHEM)

9 Health Science Chemistry (5)
Class hours: 4 lecture; 3 laboratory.
Prerequisite: Mathematics 410 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

9 Introductory Chemistry (4)
Class hours: 3 lecture; 1 laboratory.
Prerequisite: Mathematics 410 or equivalent with a minimum grade of C or one year of high school algebra with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

10 Elementary Organic and Biochemistry (4)
Class hours: 3 lecture; 1 laboratory.
Prerequisite: Chemistry 10 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

12 Organic Chemistry (CHEM 12)
Class hours: 3 lecture; 2 laboratory.
Prerequisite: Chemistry 10 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

32 Organic Chemistry Laboratory (12)
Class hours: 1 laboratory.
Prerequisite: Chemistry 12 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

39 Introductory Chemistry Laboratory (3)
Class hours: 1 laboratory.
Prerequisite: Chemistry 10 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

192 Biomedical Chemistry Laboratory (12)
Class hours: 1 laboratory.
Prerequisite: Chemistry 12 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.

193 Introductory Chemistry Laboratory (3)
Class hours: 1 laboratory.
Prerequisite: Chemistry 10 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
20A General Chemistry (5)
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Chemistry 10 with a minimum grade of C or high school chemistry with a minimum grade of B.
Mathematics 25 with a minimum grade of C or two years of high school algebra with a minimum grade of B.
Transfer Credit: CSU; UC.
(CAN CHEMSEQ A)
Introduction to the science of chemistry, stoichiometry, nomenclature, atomic structure, gas laws, periodic properties, bonding in ionic compounds, bonding in covalent compounds (including valence shell electronic pair repulsion, valence bond and molecular orbital theories), thermochromism, solutions, and reactions in solution, solids, liquids, and solution properties.
1905.00

20B General Chemistry (5)
Class hours: 3 lecture; 6 laboratory.
Prerequisite: Chemistry 20A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Introduction to the methods of gravimetric, volumetric and spectrophotometric analysis and to separation techniques. Designed to meet the normal four-unit course requirement for chemistry majors, pre-med students, and pre-dentistry students. Parallels the quantitative analysis usually offered in the sophomore year in most four-year colleges and universities.
1905.00

92L Special Topics Laboratory: Chemistry (1/2, 1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, 6, 12, 15, or 18 laboratory.
Recommended preparation. A previous or concurrent chemistry laboratory with a minimum grade of C.
Transfer Credit: CSU; UC.
Topics of special interest or specific areas of specialization in chemistry with emphasis on laboratory skills, procedures, and techniques not covered in the regular curriculum.
1905.00

351 Problem Solving and Study Skills for Chemistry (1)
Class hours: 1 lecture.
Not Degree Applicable.
Discussion and problem-solving sessions to be taken in conjunction with any other chemistry course. Intensive study review skills and techniques for mastery of chemistry principles, and test-taking strategies.
1905.00

Child Development (CD)

1A Introduction to Principles and Practices in Early Childhood (3)
Class hours: 3 lecture.
Prerequisite: Negative tuberculosis test within the past 12 months.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU; UC.
History and philosophy of the care of the young child with emphasis on early childhood programs. Survey of practices, opportunities, concerns, legal requirements, qualifications and responsibilities of teachers. Knowledge of specific developmental needs of young children. Directed observation in early childhood programs including the College's Children's Center.
1305.10

1B Child Study and Observation (3)
Class hours: 3 lecture.
Prerequisite: Negative tuberculosis test within the past 12 months.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU; UC.
Current approaches for studying young children, observing and recording their behavior using various scientific techniques. Study and interpretation of young children's behavior from perspectives of child development theories.
1305.10

2 Child Growth and Development (3) [CD]
Class hours: 3 lecture.
Prerequisite: Negative tuberculosis test within the past 12 months.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU; UC credit limitations. See counselor.
Examination of the developmental years from birth to early adolescence. Social, intellectual, and physical growth are studied from relevant theoretical positions.
1305.10

3 The Child with Special Needs (3)
Class hours: 3 lecture.
Prerequisite: Child Development 2 or equivalent with a minimum grade of C.
Recommended preparation. Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Presentation of different types of physical and behavioral difficulties that interfere with normal cognitive, social, and emotional growth. Recognition of these difficulties, where to seek appropriate professional help, and how to work with these children in the home and in the school.
1305.20

4 Child, Family, and Community (3)
Class hours: 3 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU; UC.
Study of society and its cultural impact upon the behavior of young children including family structure, understanding children as a product of their culture heritage and development of community resources relating to health, education, welfare, recreational, religious, and counseling organizations.
1305.10

6 Storytelling for Young Children (1)
Class hours: 1 lecture.
Transfer Credit: CSU.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Introduction to storytelling techniques, story selection, and evaluation of authors and illustrators of children's books on the importance of age-appropriate story content, presentation methods, and culturally unbiased materials.
1305.10

7 Creative Language for Young Children (1)
Class hours: 1 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Early language development from birth through the years. Development of language activities for young children.
1305.10

8 Curriculum Development: The Sciences (3)
Class hours: 3 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Introduction to how children learn and develop concepts about the world where they live. Piaget's theory of children's conceptual development, including the ideas of classification, seriation, and conservation. Theories on right/left hemisphere and learning strategies including visual, tactile, and auditory modalities. The young child's problem-solving abilities are also examined. Theory is reinforced by activities which practice skills in each area.
1305.10

10 Art for Young Children (1)
Class hours: 1 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Introduction to the techniques of using art media with young children. Strategies for development of art appreciation and skills in young children. Suggested activities will be demonstrated.
1305.10

11 Music for Young Children (1)
Class hours: 1 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Introduction to music activities for young children. Singing, use of instruments, including the autoharp, and recordings.
1305.10

12 Dance and Rhythm for Young Children (1)
Class hours: 1 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Survey of dance theory and activities that can be used with young children. Learn how to provide rhythm and dance experiences in the preschool classroom through third grade. Develop skills in using rhythm instruments, records, body movement, and rhythm activities. Community resources are explored.
1305.10

14 Curriculum Development: The Arts and Humanizing Environment (Formerly Child Development 5)
Class hours: 3 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU.
Introduction to the arts and humanities for young children. Storytelling, language, visual arts, drama, music, and dance will be examined as an integral part of the child's world. Theories and techniques to develop children's creative abilities will be explored. Emphasis on creative
processes through appreciation of diversity in art and culture. Perspectives on values and problem solving will engage children’s participation at all levels. 1305.10

15 The School-age Child, Before and After School Care (3) Class hours: 3 lecture.
Recommended prerequisite: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU. How to work with school-age children in an extended day or before- and after-school environment; how to set up the environment, choose activities and interact with this age group. Programming, curriculum, budgeting and food handling will be examined. 1305.10

21 Health and Safety of the Young Child (3) Class hours: 3 lecture.
Recommended preparation: CPR, first aid training, and food handling.
Transfer Credit: CSU. Basic information on the building of good health habits, stressing the importance of good nutrition in the preschool years. Importance of safety information and training. Cultivation of skill in first aid and recognition of symptoms of childhood communicable diseases. Required for supervision permit. 1305.10

26 The Child in a Multicultural Society (3) Class hours: 3 lecture.
Recommended preparation: Concurrent enrollment in Child Development 92L.
Transfer Credit: CSU. Cultural differences and similarities—their impact on children and education. Resources available to teachers for educating children in a multicultural society. 1305.10

50 Administration of Child Development Programs (3) Class hours: 3 lecture.
Prerequisite: Completion of 12 units in Child Development or equivalent. Transfer Credit: CSU. Principles, techniques, and methods necessary for the efficient administration of programs in early childhood education. Private nursery schools, church-sponsored schools, public funded day-care programs, Head Start, and related programs. Particular emphasis on program development, budgeting, staff relationships, leadership/supervision, and governmental regulations, licensing, and certification. Required for Children’s Center (supervision) Permit. 1305.10

58 Parent-Teen Interactions (3) Class hours: 3 lecture.
Transfer Credit: CSU. Group discussion of problems brought to class by students employed in work experience assignments. Professionalism, staff and family relationships, and personal growth in the work place will be covered. May be taken three times for credit. 1305.10

96L Cooperative Education: Child Development 92L.
Transfer Credit: CSU. Work experience in cooperation with schools, nursery and child development centers. Work situations provide new or expanded employment opportunities. May be taken to a maximum of 16 units regardless of unit combination. May be taken three times for credit. 1305.10

418 The Professional Nanny (3) Class hours: 3 lecture.
Recommended preparation: Child Development 1A/B, 2, and 71B.
Principles and practices of professional employment in the in-home child care field. Job descriptions, contracts, negotiation skills, liabilities, and responsibilities will be addressed for the live-in and live-out nanny. 1305.40

428 Infant Caregiving: Development and Environments (3) Class hours: 3 lecture.
Recommended preparation: Child Development 2.
Transfer Credit: CSU. Concurrent enrollment in Child Development 92L. Infant development as reflected in theory and research findings including growth, motor skills, perception, cognition, social skills, and personality development. Appropriate health, safety, and environmental practices for care giving routines (diapering, napping, feeding, etc.). Infants are defined as “newborns” to “walkers.” 1305.10

429 Toddler Caregiving: Development and Environments (3) Class hours: 3 lecture.
Recommended preparation: Child Development 1A/B, 2, 4, 21, 428.
A comprehensive outline of toddler development as reflected in theory and research findings including growth, motor skills, perception, cognition, social skills, and personality development. Also explored are appropriate health, safety, and environmental practices for care giving routines (diapering, napping, feeding, etc.). Toddlers are defined as “walkers to three years of age.” 1305.10

451 Advanced Administration of Child Development Programs (3) Class hours: 3 lecture.
Prerequisite: Completion of 12 semester units in Child Development.
Recommended preparation: Child Development 50, and one year of teaching experience. Advanced study of issues facing directors of Childhood Development Programs. Examination and analysis of new and proposed state regulations. Introduction to policies specific to state funded programs. Title 5 regulations, evaluation of programs utilizing state mandated Program Quality Review. Development of advocacy skills, proposals and grant writing for funding. Emphasis on personnel administration, selection, supervision, evaluation. Required for Children’s Center Supervision Permit. 1305.10

457A, B, C, D Parent-Child Interaction (1, 2, 3, or 3) Class hours: 1, 1, 2, or 3 lecture.
Prerequisite: Child Development 1A/B, 2, and 428.
Overview of the parent-child relationship from birth to early childhood. Stages of childhood development. Interpersonal communication, limits and guidelines for children’s behavior. Successful parenting practices. 1305.10

472C Internship in Child Development (3) Class hours: 2 lecture; 10 sem. credit limitations. See counselor.
Prerequisite: Completion of 12 semester units in Child Development, including Child Development 71B with a grade of C or better. Supervised field placement as interns in community sites offering child development training opportunities. Sites include elementary schools, in-home child care settings, recreation programs, clinics, and specialized settings such as infant care sites. Application of curriculum issues, varying types of child development sites will be the focus of the seminar portion of the course. May be taken three times for credit. 1305.10

Communication Studies
(COMSTD)

2 Fundamentals of Effective Speaking (3) Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU. UC. (CAN SPCH 4)
Emphasis on preparing and delivering a speech before an audience. Communication theory and speech criticism are included for student application. A variety of situations are provided to prepare the student to speak with greater skill and confidence.

4 Fundamentals of Interpersonal Communication (3)
Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU; UC.
In-depth exploration of the variables of the interpersonal communication processes as they occur in day-to-day face-to-face human interaction. Current theories of interpersonal communication are analyzed and applied.

5 Fundamentals of Small Group Discussion (3)
Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU; UC.
Develop competence and confidence as a group member and leader through a combination of theoretical and practical knowledge of small groups in everyday life. Study and practice in various group activities.

8 Fundamentals of Speech Communication (3)
Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU; UC.
Survey of the fundamentals of human communication as they operate in a variety of contexts: interpersonal, small group, and public speaking. The course includes theories of rhetoric and communication for the development of skills and understanding of verbal and nonverbal communications.

12 Mass Communication and Society (3)
Class hours: 3 lecture.
Prerequisite: Completion of or eligibility for English 1A.
Transfer Credit: CSU; UC.
Examination of the forms, content, and consequence of mass communication. Historical overview and examination of mass mediated reality using theories or rhetoric and symbolic interaction. Special attention will be given to the impact of both media technology and message content on how we live and what we believe as individuals and as a society.

14 Oral Interpretation of Literature (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Theoretical and practical experience in the oral interpretation of prose, poetry, and dramatic literature. In-depth study of the oral and analytical skills required to perform literature and the critical skills required to evaluate oral interpretation performance. Recommended for student of speech communication studies, theatre, English, and the teaching professions.

16 Communications Studies: Forensics (3)
Class hours: 2 lecture, 3 laboratory.
Recommended preparation: high school forensic experience and/or Communication Studies 8 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Hands-on introduction to the terminology, application, and performance public speaking, debate, critical thinking, and deductive reasoning. Students are required to participate in intercollegiate speech tournaments or other performance activities. May be taken four times for credit.

72 Logic and Argumentation (3) [Cx]
Class hours: 3 lecture.
Prerequisite: English 1A with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Treatments of the theories and practices of argument, both formal and informal. Emphasis on language as a tool of argument. Fallacies of reasoning, practical problem-solving situations, and systems of logic. Oral exercises, including debate advocacy speeches; extensive writing requirements, including advocacy papers and analyses of refutations or arguments.

74 Intercultural Communication (3)
Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU; UC.
Identification and analysis of processes and problems of communication as affected by different cultures. Effects of differences in attitudes, social organization, role expectations, language and nonverbal behavior—all of which are interrelated. Principles of communication theory as they apply to the intercultural setting.

76 Gender and Communication (3)
Class hours: 3 lecture.
Prerequisite: Eligibility for English 1A.
Transfer Credit: CSU; UC.
Comprehensive study of the role of nonverbal communication in interpersonal relationships. Current research, discussion, and appropriate exercises are used to understand the definition and importance of nonverbal communication and its application in personal relationships.

80 Argumentation and Debate (3)
Class hours: 3 lecture.
Prerequisite: Completion of either Communication Studies 2, 4, 6, or 8 with a minimum grade of C.
Transfer Credit: CSU; UC.
Begining structured programming in BASIC for business applications. Emphasis on problem analysis, solution planning, and structured program solutions.

60A Fundamentals of Computer Programming (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Beginning structured programming in BASIC for business applications. Emphasis on problem analysis, solution planning, and structured program solutions.

60B Advanced Computer Programming (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 60A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Advanced structured BASIC programming for business applications. Emphasis on string processing and file maintenance for direct access files and interactive processing.

61 COBOL Programming (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 60A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Overview of the COBOL programming language. Emphasis on basic data manipulation techniques, syntax of structured ANSI COBOL (Common Business Oriented Language), and disk file maintenance.

62 RPG Programming (3)
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 60A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
RPG (Report Program Generator) programming language. Emphasis on planning, writing, testing, and debugging programs for business applications.

63 Systems Analysis and Design (3)
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 60A or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Overview of the computer system life cycle. Tools and techniques to aid in the analysis of a business problem in order to solve that problem using computers.

403 Fundamentals of Microcomputer Operating Systems (1) [Cx]
Class hours: 1 ½ lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Fundamental functions of current microcomputer operation system used in the development and use of business applications software for a computer.

404 Fundamentals of Microsoft Windows (1) [Cx]
Class hours: 1 ½ lecture.
Hands-on introduction to the terminology, application, and
use of the graphical operating system. May be taken two times for credit with change in software.

410A Fundamentals of Desktop Publishing (1/2) [Cr]
Class hours: 1/2 lecture.
Recommended preparation: Computer Information Systems 410 or equivalent with a minimum grade of C.
Introduction to the concepts, terminology, software, hardware and uses of desktop publishing for business. May be taken two times for credit with change in software.

410B Advanced Desktop Publishing (1/2)
Class hours: 1/2 lecture.
Prerequisite: Computer Information Systems 410A or equivalent with a minimum grade of C.
Advanced concepts in desktop publishing. Emphasis on creating style sheets and master pages, adding special effects, templates, scanned images, and long documents. May be taken two times for credit with change in software.

411A Fundamentals of LOTUS 1-2-3 (3) [Cr]
Class hours: 3 lecture.
Recommended preparation: Computer Information Systems 1 or equivalent with a minimum grade of C or equivalent experience using an electronic spreadsheet. Introduction to the use and application of LOTUS 1-2-3 for business, emphasis on worksheet construction, use, functions, graphics, and data base using the microcomputer.

411B Advanced LOTUS 1-2-3 (3)
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 411A or equivalent with a minimum grade of C.
Advanced concepts in the use and application of LOTUS 1-2-3 for business. Emphasis on advanced functions and macros using the microcomputer.

412A Fundamentals of Database Programming (3) [Cr]
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C or equivalent experience using a database management system. Introduction to the principles of developing business applications using a microcomputer data base programming language.

412B Advanced Database Programming for Microcomputers (3)
Class hours: 3 lecture.
Prerequisite: Computer Information Systems 412A or equivalent with a minimum grade of C.
Advanced concepts of the use of microcomputer data base software in the development of business software.

413A Fundamentals of Microsoft Excel (1/2)
Class hours: 1/2 lecture.
Recommended preparation: Computer Information Systems 1 or equivalent with a minimum grade of C.
Introduction to the use and application of Microsoft Excel for business. Emphasis on worksheet and workbook construction, use, functions, charts, and graphs.

413B Advanced Microsoft Excel (1/2)
Class hours: 1/2 lecture.
Prerequisite: Computer Information Systems 413A or equivalent with a minimum grade of C.
Advanced concepts of the use and application of Microsoft Excel. Emphasis on managing data, tables, advanced functions, Solver, and OLE. Introduction to macros and Excel Visual Basic.

413C Microsoft Excel Macros and Visual Basic (1/2)
Class hours: 1/2 lecture.
Prerequisite: Computer Information Systems 413B or equivalent with a minimum grade of C.
Introduction to the use of the Microsoft Excel macro language, Visual Basic, to develop automated spreadsheet applications for business.

413D Microsoft Excel Macros and Visual Basic II (1/2)
Class hours: 1/2 lecture.
Prerequisite: Computer Information Systems 413C or equivalent with a minimum grade of C.
Advanced concepts in the use of the Microsoft Excel macro language, Visual Basic, to develop automated spreadsheet applications for business.

414A Fundamentals of Presentation Graphics (1/2)
Class hours: 1/2 lecture.
Recommended preparation: Computer Information Systems 1 or equivalent with a minimum grade of C.
Introduction to the concepts, terminology, software, hardware, and uses of presentation graphics for business. Use of a popular software package to develop presentations. May be taken two times for credit with change in software.

414B Advanced Presentation Graphics (1/2)
Class hours: 1/2 lecture.
Prerequisite: Computer Information Systems 414A or equivalent with a minimum grade of C.
Advanced concepts, terminology, software, hardware, and uses of presentation graphics for business. Sophisticated enhancements to presentations including graphics, animation, photo, video, and sound media will be included. May be taken two times for credit with change in software.

464 Concepts of Data Communication (1/2)
Class hours: 1 lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C.
Introductory concepts of computer data communication. Includes hardware and software on both mainframe and microcomputers.

465 Microcomputer Hardware (4)
Class hours: 4 lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C.
Practical course covering set-up, troubleshooting, and analysis of microcomputers and related equipment. Emphasis on troubleshooting technique, configuring (upgrading) computers and interaction between hardware and software.

466 Microcomputer Utility Software (4)
Class hours: 4 lecture.
Prerequisite: Computer Information Systems 1 or equivalent with a minimum grade of C.
Introduction to several commercial utility programs for the IBM-PC and compatibles. Utility programs make using and maintaining software on microcomputers more effective. May be taken four times for credit.

467A Fundamentals of Data Communication (2)
Class hours: 2 lecture.
Recommended preparation: Computer Information Systems 1 or equivalent with a minimum grade of C.
Fundamental concepts of computer data communication. Includes hardware and software on both mainframe and microcomputers.

468 Using the Internet (1/2)
Class hours: 1/2 lecture.
Cruise the information superhighway. Introduction to accessing, hardware, software, protocols, UNIX, E-Mail, tele-net, Usenet, file transfer, WAIS, mailing lists, World Wide Web, discussion groups, and others. Research and business on the Internet also covered.

468W Creating Internet World Wide Web Pages (1/2)
Class hours: 1/2 lecture.
Design and create pages for the World Wide Web using the HyperText Markup Language (HTML), Utilization of graphics, sound, forms, and assistants are also covered.

492 Special Topics: Computer Information Systems (1, 1 1/2, 2, 3, 4, 5, or 6)
Class hours: 1, 1 1/2, 2, 3, 4, 5, or 6 lecture.
Recommended preparation: A course in basic computer information systems concepts or equivalent. Special topics in computer information systems to take advantage of the students’ knowledge of skills in specific computer information system fields. Topics will be selected each semester by the instructor. May be taken six times. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

Computer Science (CS)

1 Fundamentals of Computer Science (3)
Class hours: 3 lecture.
Prerequisite: Mathematics 420 or equivalent with a minimum grade of C.
Recommended: Mathematics 25 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Survey of the computer science field designed to familiarize the computer science, science and engineering students with elementary computer science concepts and methods. Topics include the stored program computers, central processing unit, memory and registers, input-output data operations and storage, information control, problem solving, programming via PASCAL, and elementary applications.

20 PASCAL Programming with Science Applications (3)
Class hours: 3 lecture.
Prerequisite: Computer Science 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
PASCAL programming language with scientific and mathematical applications. Input/output, processor utilization, information control, data types, loop control, file input and output, structured data types, function and procedures, problem analysis, and algorithm design.

21 Fundamentals of “C” Programming (3)
Class hours: 3 lecture.
Prerequisite: Computer Science 1 or 20, or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Introduction to the concepts, terminology, syntax, and uses of the “C” programming language.

492 Special Topics: Computer Science (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Prerequisite: Computer Science 1 or equivalent with a minimum grade of C.
Specializations in computer science. See class schedule for current topic. May be taken only six times regardless of the unit combination. However, no single-subject, special interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

Consumer Studies (CONSUM)

10 Nutrition (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to the science of nutrition and its implications for people.

11 Housing and Environment (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Planning and purchasing housing to meet family and individual needs in relation to design and current social, economic, and environmental factors.

15 Diet and Fitness (3)
(Also available as Physical Education Lecture 15)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
A lifestyle approach to fitness including the study of nutrition, disease prevention, increased cardiovascular endurance, weight control, increased strength, flexibility, stress management, and considerations of aging on the body.
20 Introduction to Foods (3)  
Class hours: 2 lecture; 3 laboratory.  
Transfer Credit: CSU.  
Basic knowledge of food science principles and food preparation techniques. Emphasis on ingredient interaction, techniques, production standards, food safety, sanitation, nutrient values, and food presentation. 1306:40

25 Healthy Cooking (2)  
Class hours: 2 lecture.  
Transfer Credit: CSU.  
Techniques of planning and preparing nutritious foods, incorporating lower levels of fat, cholesterol, and sodium into meals. Emphasis is on healthy food selection as a lifestyle. 1306:00

30 Meal Management (3)  
Class hours: 2 lecture; 3 laboratory.  
Transfer Credit: CSU.  
Principles of meal planning and the scientific and aesthetic principles of food selection and preparation. Includes equipment usage, food preparation methods, meal planning and serving. Effective management of time, energy, and money. 1306:00

40 Life Management (3)  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Understanding and using resources which influence life management skills. Family structure, goal setting, career planning, value conflicts, and resources for functioning effectively in society. 1304:00

50 Consumer Education (3)  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Management of income and expenditures for the individual and family through the life cycle. Impact of advertising, consumer protection, buymanship skills, budgeting, and savings for financial security. 1304:00

92 Special Topics: Consumer Studies (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 lecture.  
Transfer Credit: CSU.  
Special emphasis classes in foods, nutrition, consumer education, or life management. See class schedule for the current topic. May be taken four times regardless of the unit combination. No single-subject, special-interest class may be repeated. 1304:00

98 Independent Study: Consumer Studies (1, 2, 3)  
Class hours: 3, 6, or 9 laboratory.  
Transfer Credit: CSU.  
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a paper on an area of personal interest. Nature and extent of the project must be decided by student and instructor before the student may sign up for the course. Type and extent of the project determines the number of units allowed. May be attempted only three times, regardless of the unit combination. 1304:00

Cooperative Education  
(COOPED)  
Note: Cooperative Education is listed in some individual departments.  
92 Special Topics: Cooperative Education (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 lecture.  
Transfer Credit: CSU.  
Credit limitations. See counselor.  
Special project course of varying length for students who wish further career and professional development. Topics will be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course. 4930.12

96 Cooperative Education: Career Field Studies  
(1, 2, 3, or 4)  
Class hours: 5, 10, 15, or 20 hours employment per week.  
Prerequisite: Employment directly related to major.  
Enrollment in at least seven units including Cooperative Education.  
Transfer Credit: CSU.  
credit limitations. See counselor.  
Work experience that provides new or expanded learning opportunities or responsibilities directly related to the student's major. Career and professional development seminars include study of knowledge, judgments, skills and attitudes essential for success in the world of work. May be taken four times to a maximum of 16 units regardless of the unit combination. 4930.12

98 Independent Study: Cooperative Education (1)  
Class hours: 3 laboratory.  
Transfer Credit: CSU.  
Prerequisites: Employment directly related to major.  
Enrollment in at least seven units including Cooperative Education.  
Supervised employment.  
Transfer Credit: CSU.  
credit limitations. See counselor.  
A series of instructional activities including special assignments providing opportunities to develop self, career and job related assessment and development skills. Career development related projects, seminars and other individualized activities may be required. May be taken a maximum of two times for credit. 4930.12

496 Occupational Work Experience (1, 2, 3, or 4)  
Class hours: 5, 10, 15, or 20 hours employment per week.  
Prerequisite: Employment directly related to major.  
Enrollment in at least seven units including Cooperative Education.  
Occupational work experience that provides new or expanded learning opportunities or responsibilities directly related to the student's major. Career and professional development seminars include study of knowledge, judgments, skills and attitudes essential for success in the world of work. May be taken four times to a maximum of 16 units regardless of the unit combination. 4930.12

497 Cooperative Education: General Work Experience (1, 2, 3, or 4)  
Class hours: 5, 10, 15, or 20 employment per week.  
Prerequisite: Enrollment in at least seven units including General Work Experience.  
Supervised employment.  
Transfer Credit: CSU.  
credit limitations. See counselor.  
This is intended to assist students in acquiring desirable work habits, attitudes and career awareness. The work experience need not be related to the students educational goals. Career and professional development seminars include study of knowledge, judgments, skills and attitudes essential for success in the world of work. May be taken four times to a maximum of six units regardless of the unit combination. 4930.12

Correctional Science (CRSCI)  
1 Introduction to Correctional Science (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Philosophy and practices of corrections from the historical and theoretical point of view. Functions and objectives of the criminal justice system and an overview of their relationships. Overview of criminal justice and correctional processes including prisons, parole, and probation. 2105.10

2 Control and Supervision of Inmates (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Dynamics of inmate supervision in a correctional institution, security procedures, contraband control and prison atmospheres. Staff responsibilities and their application to inmate culture and inmate behavior, which are the present methods of controlling inmates. 2105.10

3 Correctional Law (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Legal aspects of corrections from conviction to release. Discussion of laws dealing with organization of state prisons, execution of sentence, terms of imprisonment and parole. Regulations concerning escapes, executive clemency, and prison records. Survey of correctional programs at the various levels of government from a legal perspective. Legal and due process rights of individuals, balancing rights of inmates versus needs of society. 2105.10

4 Public Relations and Corrections (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Various aspects of public relations and methods of communication with the public concerning correctional goals and concepts. Survey of problems and methods of improving attitudes toward correctional programs. Relations with criminal justice agencies including law enforcement and other government organizations, prison-prevention groups, and job training services. Designed for both pre-service and in-service personnel. 2105.10

5 Crime and Delinquency (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Review of the impact of crime on modern society; types of behavior which produce it, and implications for the offender, the victim, and the justice system. Survey of society's responses to the problem. Economic, psychological, and sociological issues are studied to determine motivations and control methods. The basic nature of crime. Criminal behavior and types of crime. Effects of society and victim. 2105.10

6 Correctional Interviewing and Counseling (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Role of basic interviewing and counseling processes using appropriate techniques and theories in confidence building which may be used by the correctional employee in client interviews and counseling. Stressors the importance of an open and receptive attitude for learning and the processes necessary for positive rapport and communication. 2105.10

7 Probation and Parole (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Overview of the history and philosophical foundations of probation and parole in the United States. Organization and operations of probation and parole agencies as particular segments of the criminal justice system. Probation as part of the judicial process, and parole as part of the corrections system. Theoretical concerns exemplified in probation and parole supervision, as well as the practical aspects of probation and parole services. Review and evaluation of community-based corrections and the programs included in response to criminal behavior. Issues and problems relating to the pre-sentence report, determinate versus indeterminate sentencing, the variety of roles of the criminal justice and parole office, and the legal decisions affecting probation and parole practice. Review of the relevant research in probation and parole. 2105.10

8 Ethnic Group Relations (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Survey of minority roles, problems, and relationships in correctional institutions and allied agencies. Impact and effect of stereotyping and prejudice in correctional work. Cultural and racial differences of clients and their effect upon rehabilitation programs. 2105.10

10 Violence in America (3) [Cx]  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Violence in America's past, including lynch mobs, feud, and vigilantes. Family violence including wife and child abuse. Types of violent homicide, including mass murder, assassination, and rape. A goal of the class is to replace common stereotypes of the violent offender with a more realistic understanding of these criminals. 2105.10

301 Preparation for Correctional Officer Examination Process (2)  
Class hours: 2 lecture.  
Not Degree Applicable.  
Preparation for students who plan to apply for a correction-
409 The Female Victim/Offender (3)  
Class hours: 3 lecture.
Study of the criminal justice system both as victims and as offenders. Major theories of female victimization and criminality will be presented. 2105.10

411 Juvenile Corrections (3)  
Class hours: 3 lecture. Study of the juvenile justice system from arrest through juvenile court, probation, juvenile hall, and short-term county treatment facility, and programs and procedures of the California Youth Authority. 2105.10

Dance  
See Theatre Arts: Dance

Dental Assisting (DA)  
Student must furnish own uniform and pay for physical examination.

410 Dental Anatomy (3) [Cx]  
Class hours: 3 lecture. Tooth morphology, embryology, and histology. Emphasis on oral and maxillofacial system. 1204.10

415 Applied Dental Science (2) [Cx]  
Class hours: 1 lecture. Includes the dental sciences, including the knowledge base of pathological conditions that affect the oral and maxillofacial system. 1204.10

420 Microbiology for the Dental Assistant (1) [Cx]  
Class hours: 1 lecture. Microorganisms, anaerobic, facultative, and pathogenic to humans in the oral cavity. 1204.10

425 Preclinical Chairside Skills (6) [Cx]  
Class hours: 4 lecture; 6 laboratory. Development of skills in illustration/rendering of objectsthrough experimentation with varied materials. Axonometric, perspective, orthographic, and isometric drawing techniques will be taught. 1204.10

430 Biomedical Science I (4) [Cx]  
Class hours: 4 lecture. Structure and functions of the systems of the body, study of diseases as they relate to dentistry. 1204.10

435 Registered Dental Assistant (RDA) Functions (1) [Cx]  
Class hours: 1 laboratory. Emphasis is placed on the functions designated for the Registered Dental Assistant. 1204.10

440 Dental Office Procedures (2) [Cx]  
Class hours: 2 lecture. Development of the essential skills needed to work in the business office of a dental practice. Scheduling appointments, billing and collection, completion of insurance forms, letter writing, and maintaining patient records. 1204.10

445 Dental Radiology I (3) [Cx]  
Class hours: 2 lecture; 3 laboratory. Prerequisite: Completion of one semester of the Dental Assisting Program with a minimum grade of C in dental assisting classes. Study of the principles of X-ray production, physics, biological effects, radiation safety procedures, and monitoring. Filming and mounting procedures. 1204.10

450 Oral Pathology and Pharmacology (1) [Cx]  
Class hours: 1 lecture. Study of oral pathology observed in the dental practice. Development of a working knowledge of drugs and medications that are commonly used in dentistry. 1204.10

465 Supervised Clinical I (1) [Cx]  
Class hours: 3 laboratory plus 18 hours arranged. Course designed to assist the student to demonstrate proficiency in clinical skills. The course will provide for practice of elementary dental assisting skills. 1204.10

475 Supervised Clinical II (3) [Cx]  
Class hours: 9 laboratory plus 12 hours arranged. Prerequisite: Completion of one semester of the Dental Assisting Program with a minimum grade of C in dental assisting classes. Course is designed to perfect students' competence in performing dental assisting functions. The student will be assigned to assist a practicing dentist performing dentistry for patients in a dental clinic setting. General dentistry assignments will be given, but rotational assignments will include areas of dentistry where the student can gain experience with patients in a clinical setting. 1204.10

485 Supervised Clinical III (2) [Cx]  
Class hours: 7 laboratory plus 12 hours arranged. Prerequisite: Completion, or near completion of two semesters of the dental assisting program with minimum grade of C in dental assisting classes. The student will be assigned to an extramural clinical facility. Assignments may be made to general dentistry or specialty practices of dentistry. Experience will be gained in orthodontic auxiliary utilization, adherence to accepted standards of infection control and occupational safety. 1204.10

487 Advanced Clinical Applied Technology (1) [Cx]  
Class hours: 3 laboratory. Prerequisite: Current enrollment in the dental assisting program or a valid RDA license. Use of the ultrasonic scaler by the RDA in orthodontic cement removal only. Practice on mannequins and patients for experience. Advanced practice in fabrication of temporary anterior and posterior crowns and bridges using several different materials. Advanced orthodontic instrumentation and assisting. May be taken three times for credit. 1204.10

492 Special Topics: Dental Assisting (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 lecture. A series of special topic lectures for students who desire in-depth exploration in specialized areas of dental assisting. May be taken for a total of 12 units regardless of the unit combination. 1204.10

496 Occupational Work Experience: Dental Assisting (1, 2, 3, or 4)  
Class hours: 5, 10, 15, or 20 hours employment per week. Occupational work experience that provides new or expanded learning opportunities or responsibilities directly related to the student’s major. Career and professional development seminars include study of knowledge, judgment, skills and attitudes essential for success in the world of work. May be taken four times to a maximum of 16 units regardless of the unit combination. May require course slips and/or prerequisites based on the content of the course. 1204.10

DRAFTING (DRAFT)  

21 Mechanical Design I (3) [Cx]  
Class hours: 1 lecture; 6 laboratory. Use and care of instruments; freehand lettering, geometric construction, orthographic projection, dimensioning, isometric, oblique drawing, sectioning practices, auxiliary views, both first and second auxiliaries, and decimal dimensioning. Assignments may be completed on the CAD system. 953.00

22 Mechanical Design II (3) [Cx]  
Class hours: 1 lecture; 6 laboratory. Review of the basic concepts of technical drawing. Precision dimensioning and geometric tolerancing per ANSI 14.51 standads. Additional experience in single and double auxiliary views. Intersections and development covered. The final drawing will require detail, assembly, and pictorial drawing knowledge. Assignments may be completed on the CAD system. 953.00

30 Technical Illustration and Architectural Rendering (3) [Cx]  
Class hours: 1 lecture; 6 laboratory. Use and care of instruments; freehand lettering, geometric construction, orthographic projection, dimensioning, isometric, oblique drawing, sectioning practices, auxiliary views, both first and second auxiliaries, and decimal dimensioning. Assignments may be completed on the CAD system. 953.00

40 Computer-Aided Drafting and Design I (4)  
Class hours: 2 lecture; 6 laboratory. Use and care of instruments; freehand lettering, geometric construction, orthographic projection, dimensioning, isometric, oblique drawing, sectioning practices, auxiliary views, both first and second auxiliaries, and decimal dimensioning. Assignments may be completed on the CAD system. 953.00

41 Computer-Aided Drafting and Design: Mechanical (4)  
Class hours: 2 lecture; 6 laboratory. Use and care of instruments; freehand lettering, geometric construction, orthographic projection, dimensioning, isometric, oblique drawing, sectioning practices, auxiliary views, both first and second auxiliaries, and decimal dimensioning. Assignments may be completed on the CAD system. 953.00
92 Special Topics: Drafting (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Prerequisite: Three units of drafting.
Transfer Credit: CSU, UC.
Selected topics for students who wish to gain in-depth knowledge in specific areas of drafting. Topics will be determined after consultation with an instructor. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 953.00

92L Special Topics Laboratory: Drafting (1, 2, 3, 4, 5, or 6)
Class hours: 1 1/2, 3, 6, 9, 12, 15, or 18 laboratory.
Prerequisite: Three units of drafting.
Transfer Credit: CSU.
Fundamentals of light construction, design of residences according to UBC and FHA regulations, history, sketching, floor plans, foundation elevations, details, plan schedules, and sections. Drawings will be done using a CAD system. 953.00

77 Industrial Design Applications (4) [Cz]
Class hours: 2 lecture, 3 laboratory.
Prerequisite: Drafting 22 or equivalent with a minimum grade of C or four years of high school drafting or equivalent.
Transfer Credit: CSU.
Application of drawing to the various industrial fields. Piping layouts, gear and cam design, precision dimensioning and schematic symbolism used in the structural and mechanical field. Assignments may be done using a CAD system. 953.00

78 Advanced Design Applications (4) [Cz]
Class hours: 2 lecture, 3 laboratory.
Prerequisite: Drafting 22 or equivalent with a minimum grade of C or four years of high school drafting or equivalent.
Transfer Credit: CSU.
Drawings of machine parts in the various stages of manufacturing with required back-up items such as jigs, fixtures, and dies. Mapping and structural detailing. Assignments may be done using a CAD system. 953.00

1L Earth Science Laboratory (1)
Class hours: 3 laboratory.
Prerequisite: Earth Science 1 (may be taken concurrently).
Transfer Credit: CSU, UC.
Optional laboratory for Earth Science 1. Hands-on study of material presented in Earth Science 1; includes use of instruments, models, maps, videos, etc. 1914.00

5 Oceanography (3)
Class hours: 3 lecture.
Transfer Credit: CSU, UC.
Introduction to the marine sciences. Properties of water, air-sea interaction, ocean currents; waves, tides, beaches, marine life, marine resources, ocean pollution, and the nature and origin of the sea floor. An eight-hour field trip is required in addition to normal class meetings. 1918.00

5L Oceanography Laboratory (1)
Class hours: 3 laboratory.
Prerequisite: Earth Science 5 (may be taken concurrently).
Transfer Credit: CSU, UC credit pending.
Laboratory activities investigating components of oceanography including maps and charts, ocean floor materials and topography, ocean water movements and composition, and marine organisms and their environments. 1919.00

8 Meteorology (3) [Cz]
Class hours: 3 lecture.
Transfer Credit: CSU, UC credit pending.
Study of the atmosphere. Emphasis on origin, composition, structure, and heat flow within the atmosphere. Resulting weather phenomena and climatic patterns will be analyzed. Eight-hour field trip required in addition to normal class meetings. 1913.00

92 Special Topics: Earth Science (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU, UC credit pending.
Special-interest course of varying length for students who wish further exploration in specific areas of earth science. Topics will be determined by the individual instructor. The course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course. 1914.00

Economics (ECON)
1 Introduction to Economics (3) [Cz]
Class hours: 3 lecture.
Transfer Credit: CSU, UC credit limitations. See counselor.
Origin of the economic institutions of capitalism and socialism; development of economics ideas and tools of analysis. The ideas of the great economists—Smith, Ricardo, Marx, Veblen, Marshall, Keynes, Friedman, and Galbraith. The U.S. economic system and economic issues of domestic and international importance, including unemployment, growth, deregulation, inflation, interest rates, price discrimination, and labor unions. 2204.00

2 Principles of Macroeconomics (3)
Class hours: 3 lecture.
Transfer Credit: CSU, UC.
(CAN ECON 2)
Origins of the U.S. economic system and institutions. Brief survey of capitalism and socialism, economic development, international finance and trade, theories and policies concerning full employment, interest rates, inflation, and taxation. Classical, monetarist, Keynesian, post-Keynesian, institutional, and radical views on the business cycle. 2204.00

4 Principles of Microeconomics (3)
Class hours: 3 lecture.
Transfer Credit: CSU, UC.
(CAN ECON 4)
Origins of the market institutions which form the basis of our national economy. How households decide what and how much to consume. Competition, monopoly, and near-monopoly markets. Price discrimination and regulation. The microeconomic foundations of the national economy. Labor markets, pricing policies and practices, how taxes affect
individuals and businesses. Programs designed to redistribute income to reduce poverty. The economics of race gender, and culture. The benefits from international trade. The determination of exchange rates. 2200.04

6 Principles of Financial Economics (3)
Class hours: 3 lecture.
Transfer Credit: CSU
Examination of financial economics, including the commercial banking system, the stock and bond markets, the Federal Reserve System, and monetary theory and policy. Keynesian, monetarist, and post-Keynesian views; financial internationalization and innovation. 2200.04

8 History of Economics Ideas (3)
Class hours: 3 lecture.
Transfer Credit: Eligibility for English 1A.
Transfer Credit: CSU: UC.
Historical development of the institutions and ideas related to our present economics system emphasizing the writings of the “great economists,” including Smith, Ricardo, Marx, Marshall, Hayek, Robinson, Keynes, and Schumpeter. Students will critically examine a variety of schools of thought with the objective of improving their ability to think clearly and logically. 2200.04

10 Comparative Economic Systems (3)
Class hours: 3 lecture.
Transfer Credit: CSU: UC.
Examination of how economic systems function. Emphasis is on the differences between capitalism and socialism in theory and practice, and problems in converting a socialist economy into a market economy. The historical perspective and cultural factors leading to current economic systems such as: the former Soviet Union, China, Japan, Mexico, Germany, Poland, the Czech Republic, the Slovak Republic, France, United Kingdom, Egypt, Sweden, Hungary, and the United States. 2200.04

35 The Election Campaign (3)
(Formerly also as Social Science 35 and Political Science 35)
Class hours: 2 lecture; 1 laboratory.
Transfer Credit: CSU.
Learning the democratic political process through direct involvement in an election campaign. Review of political and economic theories that affect the structure and operations of representative democracy. Relative importance of issues, party affiliation, economics, personalities, ethics, and organization is addressed. Student may choose to participate by working for a particular candidate or a partisan or non-partisan race, an initiative or referendum ballot issue, or on behalf of a special interest group that is supporting an issue, a candidate, or a slate of candidates. May be taken four times for credit. 2200.04

92 Special Topics: Economics (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU: UC.
For those students desiring to explore in greater depth certain special areas in economics. A wide variety of topics, with the particular emphasis chosen by the instructor. See class schedule for emphasis. May be taken only four times regardless of the unit combination. 2200.04

Electricity (ELCTY)

410A Introduction to Electricity (4)
(Formerly Electricity 410)
Class hours: 4 lecture.
Principles of basic electricity, Ohms Law, series and parallel circuits, study of wire and power, current flow, conductors and insulators, batteries, power and power distribution. Magnetic circuits and DC machines. 934.40

410B Introduction to Electricity Laboratory (1)
(Formerly included in Electricity 410)
Class hours: 3 laboratory.
Corequisite: Electricity 410A.
Laboratory course for Electricity 410A. Applications of basic electricity, Ohms Law, series and parallel circuits, and power, current flow, conductors and insulators, batteries, power and power distribution. Magnetic circuits and DC machines. 934.40

412A Electric Motors and Controls (2)
(Formerly Electricity 412)
Class hours: 2 lecture.
Prerequisite: Electricity 410A.
Principles of motor operation, beginning with DC motor theory and moving into AC theory. Study of sine waves through phasor and trigonometry theory. Series and parallel AC circuits, motors, generators and transformers. Hands-on laboratory using rotating equipment to confirm theory. 934.40

412B Electric Motors and Controls Laboratory (2)
(Formerly Electricity 412)
Class hours: 2 laboratory.
Prerequisite: Electricity 410A.
Corequisite: Electricity 412B.
Laboratory course for Electricity 412A. Applications of motor operation, beginning with DC motor theory and moving into AC theory. Study of sine waves through phasor and trigonometry theory. Series and parallel AC circuits, motors, generators and transformers. Hands-on laboratory using rotating equipment to confirm theory. 934.40

420A National Electric Code (2)
(Formerly Electricity 420)
Class hours: 2 lecture.
Prerequisite: Electricity 410A or equivalent.
Using and applying the National Electric Code. 934.40

420B National Electric Code Laboratory (2)
(Formerly included in Electricity 420)
Class hours: 2 laboratory.
Prerequisite: Electricity 410A or equivalent.
Corequisite: Electricity 420A.
Laboratory course for Electricity 412A using and applying the National Electric Code. 934.40

421A Electrical Blueprints (2)
(Formerly Electricity 421)
Class hours: 2 lecture.
Prerequisite: Electricity 410A or equivalent.
Basic ladder diagrams, one line diagram, electrical symbols, hydraulic symbols, hydraulic diagrams, floor plans, elevation plans, pictorials and orthographic projections. 934.40

421B Electrical Blueprints Laboratory (2)
(Formerly included in Electricity 421)
Class hours: 2 laboratory.
Prerequisite: Electricity 410A or equivalent.
Corequisite: Electricity 421A.
Laboratory course for Electricity 421A. Application of knowledge of basic ladder diagrams, one line diagram, electrical symbols, hydraulic symbols and diagrams, floor and elevation plans, pictorials and orthographic projections. 934.40

422A Static Devices (2)
(Formerly Electricity 422)
Class hours: 2 lecture.
Prerequisite: Electricity 412A or equivalent.
Basic static devices. Diodes, transistors, field effect transistors, silicon controlled rectifiers and other solid state devices used in industry. 934.40

422B Static Devices Laboratory (2)
(Formerly included in Electricity 422)
Class hours: 2 laboratory.
Prerequisite: Electricity 412A or equivalent.
Corequisite: Electricity 422A.
Laboratory course for Electricity 421A. Application of knowledge of basic static devices. Study includes diodes, transistors, field effect transistors, silicon controlled rectifiers and other industrial solid state devices. 934.40

430A Programmable Controllers (2)
(Formerly Electricity 430)
Class hours: 2 lecture.
Prerequisite: Electricity 412A or equivalent.
Basic ladder diagrams, common computer terms, operation of the programmer, developing ladder logic diagrams, loading ladder logic instructions, verifying, editing and programming of timers, counters, master control relays and jump instructions. 934.40

430B Programmable Controllers Laboratory (2)
(Formerly included in Electricity 430)
Class hours: 2 laboratory.
Prerequisite: Electricity 421A or equivalent.
Corequisite: Electricity 430A.
Laboratory course for Electricity 430A. Application of knowledge of basic ladder diagrams, common computer terms, operation of the programmer, developing ladder logic diagrams, loading ladder logic instructions, verifying, editing and programming of timers, counters, master control relays and jump instructions. 934.40

492L Special Topics Laboratory: Electricity (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, 6, 7, 12, 15, or 18 self-paced laboratory.
A special topics laboratory for students who desire in-depth exploration in specialized areas of electricity. May be taken four times regardless of the unit combination. 934.40

Electronics (ELECT)

2 Fundamentals of Electronics (3) [Cx]
(Formerly Electronics 1)
Class hours: 3 lecture.
Prerequisite: High school algebra within last 3 years or concurrent enrollment in Electronics 5.
Recommended: Acute color vision and average manual dexterity.
Transfer Credit: CSU.
Overview of the electronics field, dealing with the history of the science of electronics, the present state of electronic art, projections into the future, employment opportunities, educational requirements, basic laws, principles of electronics, and fundamental device operation with emphasis on DC circuit theory, introduction to current industry standards, procedures and skill requirements. 934.00

2L Fundamentals of Electronics Laboratory (1)
(Formerly included in Electronics 1)
Class hours: 3 laboratory.
Prerequisite: Eligibility for English 1A.
Prerequisite: High school algebra within last 3 years or concurrent enrollment in Electronics 5.
Corequisite: Electronics 2.
Recommended: Acute color vision and average manual dexterity.
Transfer Credit: CSU.
Laboratory course for Electronics 2. Practice in using basic laws, principles of electronics, and fundamental device operations with emphasis on DC circuit theory, using industry standards, procedures, and skill requirements. 934.00

5 Mathematics for Electronics (3) [Cx]
Class hours: 3 lecture.
Prerequisite: Mathematics 410, high school algebra or equivalent with minimum grade of C within the last three years.
Transfer Credit: CSU.
Introduction to the electronic applications of algebra, trigonometry, powers of ten, scientific/engineering notation, units/prefixes, roots/powers, linear equations, and graphing. A DC circuit analysis of Ohm’s law and Kirchhoff’s voltage/current laws. Computer systems mathematics and Boolean algebra. 934.00

11 Intermediate Electronics (3) [Cx]
(Formerly Electronics 10)
Class hours: 3 lecture.
Prerequisite: Electronics 2 and 5 (or equivalent) with minimum grade of C. Personal computer literacy.
Transfer Credit: CSU.
Introduction to semiconductor theory and circuits including voltage and power amplifiers, frequency effects, AC circuits, thyristors, integrated circuits, OP-AMPS, oscillators, power supplies, and communication circuits. 934.00

11L Intermediate Electronics Laboratory (1)
(Formerly included in Electronics 10)
Class hours: 3 laboratory.

Prerequisite: Electronics 2 and 5 (or equivalent) with minimum grades of C. Personal computer literacy.
Corequisite: Electronics 11.
Transfer Credit: CSU.

Laboratory course for Electronics 11. Applications of semiconductor theory and circuits including voltage and power amplifiers, frequency effects, FET circuits, thyristors, integrated circuits, OP-AMPS, oscillators, power supplies, and communication circuits.
934.00

21 Digital Electronics (3) [Cx]
(Formerly Electronics 20)
Class hours: 3 lecture.
Prerequisite: Electronics 17 or equivalent with a minimum grade of C.
Corequisite: Electronics 21.
Transfer Credit: CSU.

Digital system fundamentals; logic gates, Boolean algebra, arithmetic operations, multiplexers, flip-flops, and digital design. Shift registers, multivibrators, the 555 timer, and microprocessor fundamentals.
934.00

21L Digital Electronics Laboratory (1)
(Formerly included in Electronics 20)
Class hours: 3 laboratory.
Prerequisite: Electronics 5, 11 or equivalent with a minimum grade of C.
Corequisite: Electronics 21.

Laboratory course for Electronics 21. Applications of digital number systems, logic gates, Boolean algebra, arithmetic operations, multiplexers, flip-flops, digital design, shift registers, multivibrators, the 555 timer, and microprocessor fundamentals.
934.00

98 Independent Study: Electronics (1, 2, 3, or 4)
Class hours: 1, 2, 3, or 4 lecture.
Transfer Credit: CSU.

Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a paper on an area of personal interest. Nature and extent of the project must be decided by student and instructor before the student may sign up for the course. Type and extent of the project determines the number of units allowed. May be attempted only three times, regardless of the unit combination.
934.00

423 Microprocessor Interfacing (3)
(Formerly Electronics 422)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Electronics 21 or equivalent with a minimum grade of C.

Interfacing memory for program storage and I/O devices for system communication. Application of the microprocessor to real tasks through A/D and D/A conversion, signal conditioning, sensors, control devices and control circuits.
934.00

423L Microprocessor Interfacing Laboratory (1)
(Formerly applied in Electronics 422)
Class hours: 3 lecture.
Prerequisite: Electronics 21 or equivalent with a minimum grade of C.
Corequisite: Electronics 423.

Laboratory course for Electronics 422A. Application of the microcomputer to real tasks through A/D and D/A conversion, signal conditioning, sensors, control devices and control circuits.
934.00

425 Microprocessor Troubleshooting (3)
(Formerly Electronics 424)
Class hours: 3 lecture.
Prerequisite: Electronics 423 or equivalent with a minimum grade of C.
Corequisite: Electronics 425.

Laboratory course for Electronics 425. Practice in isolating faults in the computer's operation using standard diagnostic procedures.
934.00

431 Electronic Communication (3) [Cx]
(Formerly Electronics 430)
Class hours: 3 lecture.
Prerequisite: Electronics 21 or equivalent with a minimum grade of C. Personal computer literacy.
Recommended: Acute color vision and average manual dexterity.
Corequisite: Electronics 431.

Laboratory course for Electronics 431. Application of semiconductor theory and operations. FET's, thyristors, frequency effects, operational amplifier theory, oscillators, regulated power supplies, and communication circuits.
934.00

431L Electronic Communications Laboratory (1)
(Formerly included in Electronics 430)
Class hours: 3 lecture;
Prerequisite: Electronics 431 or equivalent with a minimum grade of C.

Corequisite: Electronics 431.

Laboratory course for Electronics 431. Application of semiconductor theory and operations. FET's, thyristors, frequency effects, operational amplifier theory, oscillators, regulated power supplies, and communication circuits.
934.00

432 Data Communications and Networks (3)
(Formerly Electronics 432)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Electronics 431 or equivalent with a minimum grade of C.

Corequisite: Electronics 432.

Laboratory course for Electronics 432. Applications of terminal devices, modulation, multiplexing and transmission media, including telephone and specialized data networks. Experiments in digital and analog signal techniques, phone circuits, networking, and data transmission.
934.00

433L Data Communications and Networks Laboratory (1)
(Formerly included in Electronics 432)
Class hours: 3 laboratory.
Prerequisite: Electronics 431 or equivalent with a minimum grade of C.

Corequisite: Electronics 433.

Laboratory course for Electronics 432A. Applications of the microprocessor to real tasks through A/D and D/A conversion, signal conditioning, sensors, control devices and control circuits.
934.00

441 Electronics Servicing I (3)
(Formerly Electronics 440)
Class hours: 3 lecture.
Prerequisite: Electronics 431 or equivalent with a minimum grade of C.

Principles of troubleshooting for modern electronic equipment. Practical skills required for troubleshooting modern electronics equipment. Solid-state, IC, audio, video, microprocessor, digital, RF communications, LASER-based, and micro controlled troubleshooting techniques. Step-by-step examples based on commonly used equipment including VCR, CB, camcorders, modular home entertainment systems, digital TV, and CD players.
934.00

441L Electronics Servicing Laboratory I (1)
(Formerly included in Electronics 440)
Class hours: 3 laboratory.
Prerequisite: Electronics 431 or equivalent with a minimum grade of C.

Corequisite: Electronics 441.

Laboratory course for Electronics 441. Practical skills for troubleshooting solid-state, IC, audio, video, microprocessor, digital, RF communications, LASER-based, and other electronic equipment.
934.00

443 Electronics Servicing II (3)
(Formerly Electronics 442)
Class hours: 3 lecture.
Prerequisite: Electronics 441 or equivalent with a minimum grade of C.

Simplified test procedures, techniques, shortcuts using electronic test equipment. Maintenance and troubleshooting, Removal, repair, replacement, and reinstallation of video-cassette players and HVS camcorders.
934.00

443L Electronics Servicing Lab II (1)
(Formerly included in Electronics 442)
Class hours: 3 laboratory.
Prerequisite: Electronics 441 or equivalent with a minimum grade of C.
Corequisite: Electronics 443.

Laboratory course for Electronics 443. Introduction to simplified testing procedures of practical value to electronics service technicians. Practical testing ideas, techniques and shortcuts based on actual shop experience. Installation and use of test equipment. Simplified troubleshooting and repair of VHS camcorders and videodisc players.
934.00

492 Special Topics Laboratory: Electronics (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, or 5 laboratory.

Special topic in specific electronics area. Topics identified by the instructor. May be attempted only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
934.00

Engineering (ENGIN)

10 Introduction to Engineering (1) [Cx]
Class hours: 1 lecture; 1 laboratory.
Transfer Credit: CSU; UC.

Introduction to the engineering profession. Educational requirements and four-year schools will be covered. The various types of engineering jobs will be presented by guest speakers and field trips.
901.00

25 Engineering Graphics and CAD (4) [Cx]
Class hours: 2 lecture; 4 laboratory.
Prerequisite: Mathematics 412 with a minimum grade of C or equivalent or Drafting 21 with a minimum grade of C.
Transfer Credit: CSU.

Descriptive geometry. Advanced principles of orthographic projection and the study of the geometric relationships between lines, planes, and objects. Solution using the computer and computer-aided digital application.
925.00

34 Elementary Surveying (3)
Class hours: 1.5 lecture; 1.5 laboratory.
Prerequisite: Mathematics 31 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.

Theory and practice of plane surveying. Traditional surveying equipment and total stations. Topographic mapping project.
957.30

50 Engineering Vectors (3)
Class hours: 3 lecture.
Prerequisite: Physics 45 and Mathematics 85A or equivalent with a minimum grade of C.
Transfer Credit: UC.
(CAN ENGR 8)

Vector treatment of statics of particles and rigid bodies. Free body diagrams and application to problems of equilibrium (two and three dimensions) with systems of forces in frames, frames and machines. Principles of friction. Distributed Forces, Centroid and Centers of Gravity and Moments of Inertia.
901.00
### ENGLISH (ENGL)

#### 1A Composition (3)

- **Prerequisite:** Score on Chaffey College English Placement Test or by English Eligibility Examination of CSU.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 1B Advanced Composition and Critical Thinking (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.

#### 1C Introduction to Literature (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.

#### 7A Creative Writing: Short Fiction (3)

- **Prerequisite:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 7B Creative Writing: Fiction (3)

- **Prerequisite:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 7C Scriptwriting (3)

- **Prerequisite:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 7D Creative Writing: Poetry (3)

- **Prerequisite:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 9A World Literature (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 9B World Literature (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 31 Introduction to Dramatic Literature (3)

- **Recommended preparation:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 61A,B,C Newspaper Production (1, 2, or 3)

- **Recommended preparation:** Eligibility for English 1A.
- **Class hours:** 3, 6, or 9 laboratory.
- **Transfer Credit:** CSU.

#### 68 Mythology (3)

- **Prerequisite:** Eligibility for English 1A.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 70A World Literature (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.

#### 70B World Literature (3)

- **Prerequisite:** English 1A or equivalent with a minimum grade of C.
- **Class hours:** 3 lecture.
- **Transfer Credit:** CSU; UC.
English as a Second Language (ESL)

300 Basic Grammar (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Basic grammar skills development focusing on the correct usage of nouns, pronouns, adjectives, and adverbs in written English. Individual prescribed instruction. May be taken two times for credit. 4930.72

301 Grammar Usage (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Grammar usage skills development focusing on identifying subjects, verbs, and subject and verb agreement, phrases and clauses, fragments and run-on sentences, capitalization and punctuation usage, and improving spelling. Individually prescribed instruction. May be taken two times for credit. 4930.72

302 Sentence Structure and Paragraph Development (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Grammar skills development focusing on pre-writing, drafting, revising for writing organization and paragraph development. Individually prescribed instruction. May be taken two times for credit. 4930.72

303 Writing Application (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Writing skills development focusing on paragraph revision, sentence structure, style, and editing. Individually prescribed instruction. May be taken two times for credit. 4930.72

304 Basic Grammar and Writing Skill Review (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. A review by application and practice of language skills including basic grammar and writing skills. Includes vocabulary development, test taking skills and GED test preparation. May be taken two times for credit. 4930.72

310 Vocabulary Building (2)
This course is offered only on a credit/no credit basis. Class hours: 2 lecture. Not Degree Applicable. Training and exercise in developing a reading vocabulary and a usable and practical vocabulary for everyday communication. 1501.00

311 Spelling Improvement (2)
This course is offered only on a credit/no credit basis. Class hours: 6 self-paced laboratory. Not Degree Applicable. Training and exercise in improving spelling skills for everyday written communication. 1501.00

350 Fundamentals of Grammar and Punctuation (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Not Degree Applicable. Practice in English grammar, punctuation, sentence structure, and sentence variety designed to prepare the insufficiently trained student for English 450. Offered on credit/no credit basis. 1501.00

450 Fundamentals of Composition (3)
Class hours: 3 lecture. Not Degree Applicable. Prerequisite: Score on the Chaflley College English Placement Test at the English 450 level, or English 350 with a grade of CR, or Business and Office Technologies 455 with a minimum grade of C, or equivalent. Careful study and practice of expository writing techniques and the frequent writing of paragraphs with the ultimate goal of writing the total essay and preparing the student for English 1A. 1501.00

English as a Second Language

301 Intermediate Level English as a Second Language (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Application and practice of English language acquisition skills including speaking and listening, grammar and vocabulary and basic writing for the beginning student for whom English is a second language. May be taken two times for credit. 4930.90

302 Intermedi evel English as a Second Language (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Application and practice of language acquisition skills including speaking and listening, grammar, vocabulary, spelling, sentence combining, writing sentences, and American culture for the intermediate student for whom English is a second language. May be taken two times for credit. 4930.90

303 Advanced Level English as a Second Language (1)
This course is offered only on a credit/no credit basis. Class hours: 3 self-paced laboratory. Not Degree Applicable. Application and practice of language acquisition skills including speaking and listening, grammar, vocabulary, spelling, writing sentences, the paragraph, idioms, note taking, and/or test taking skills for the advanced student for whom English is a second language. May be taken two times for credit. 4930.80

305A Intensive English/United States Culture: Novice-High Level (6)
This course is offered only on a credit/no credit basis. Same content as ESL 840. Class hours: 6 lecture. Not Degree Applicable. Recommended: A score of 31-54 on the CELSA placement test. Not Degree Applicable. Intensive integrated skills class at the novice-high level, designed to improve the reading, grammar, listening comprehension, and speaking skills of non-native speakers with a basic command of English. May be taken three times for credit. 4930.80

305B Intensive English/United States Culture: Novice-High Level (6)
This course is offered only on a credit/no credit basis. Same content as ESL 840. Class hours: 6 lecture. Not Degree Applicable. Recommended preparation: Score of 11-30 on CELSA placement test English as a Second Language 305A. Not Degree Applicable. Continuation of intensive integrated skills class. Improvement of reading, writing, grammar, listening comprehension and speaking skills of non-native speakers with a basic command of English. May be taken three times for credit. 4930.80

325 Listening and Speaking: Intermediate-Low Level (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Recommended: English as a Second Language 305A, 305B or a score of 11-30 on the CELSA placement test, or one year of instruction in English as a Second Language. Not Degree Applicable. Improvement of listening comprehension skills and oral skills and will be able to orally respond with phrases, short answers, and simple sentences under a variety of communicative situations for students whose primary language is not English. May be taken three times for credit. 4930.80

327 Grammar and Writing: Intermediate-Low Level (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Recommended: English as a Second Language 305A, 305B or a score of 11-30 on the CELSA placement test, or one year of instruction in English as a Second Language. Not Degree Applicable. Intensive study of grammar and writing for intermediate-low level students of English as a second language. May be taken three times for credit. 4930.80

329 Reading, Vocabulary, Idioms: Intermediate-Low Level (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Recommended: English as a Second Language 305A, 305B or a score of 11-30 on the CELSA placement test, or one year of instruction in English as a Second Language. Not Degree Applicable. Basic reading skills and vocabulary development for low-intermediate level students who are non-native speakers of English. May be taken three times for credit. 4930.80

335 Listening, Speaking and Notetaking: Intermediate-Mid Level (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Recommended: English as a Second Language 327 or score of 31-54 on the CELSA placement test. Not Degree Applicable. Intermediate-Mid level students whose primary language is not English. Improvement of listening, comprehension, and speaking skills in English. May be taken three times for credit. 4930.80

337 Writing Sentence Structure: Intermediate-Mid Level (3)
This course is offered only on a credit/no credit basis. Class hours: 3 lecture. Recommended: English as a Second Language 327 or score of 31-54 on the CELSA placement test. Not Degree Applicable. Sentence writing for non-native students with emphasis on the study and production of the four basic sentence types. May be taken three times for credit. 4930.80

98 Independent Study: Literature (1, 2, or 3)
Prerequisite: Sophomore standing, English 1A, 1B, and two additional literature courses. Transfer Credit: CSU-UC. Designed for the capable, well-motivated student. Each student explores and develops a literary project. Student-instructor agreement as to the nature and extent of the project must be reached before the student may enroll in the course. May be taken only two times regardless of the unit combination. 1501.00

Basic grammar skills development focusing on pre-writing, draft-
339 Reading, Vocabulary, Idioms: Intermediate-Mid Level (3)
This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Recommended: English as a Second Language 329 or a score of 51–54 on the CELSA placement test.
Not Degree Applicable.
Reading, vocabulary, and idioms for middle-intermediate students who are non-native speakers of English. May be taken three times for credit.
4931.00

344 Listening Laboratory (0) Class hours: 1 laboratory.
Recommended: English as a Second Language 335 or a score of 51–54 on CELSA placement test.
Corequisite: English as a Second Language 345A or 345B.
Not Degree Applicable.
Laboratory required of all students enrolled in English as a Second Language 345A or 345B. May be taken four times for credit.
4931.00

345A Listening, Pronunciation of Vowels: Intermediate-High Level (3) Class hours: 3 lecture.
This course is offered only on a credit/no credit basis.
Corequisite: English as a Second Language 344. Recommended: English as a Second Language 335 or a minimum score of 51–54 on CELSA placement test.
Not Degree Applicable.
Intensive course in oral American English with an emphasis on pronouns for intermediate-high level students who are not native speakers of English. May be taken three times for credit.
4931.00

345B Listening, Pronunciation of Consonants: Intermediate-High Level (3) This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Not Degree Applicable.
Intensive course in oral American English with an emphasis on consonants for intermediate-high level students who are not native speakers of English. May be taken three times for credit.
4931.00

347 Writing Paragraphs: Intermediate-High Level (3) Class hours: 3 lecture.
Recommended: English as a Second Language 337 or a score of 51–54 on the CELSA placement test.
Not Degree Applicable.
Paragraph writing for the high-intermediate level English as a second language student focusing on structure and on expository modes of development. May be taken three times for credit.
4931.00

349 Reading, Vocabulary, Idioms: Intermediate-High Level (3) This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Recommended: English as a Second Language 339 or a score of 51–54 on the CELSA placement test.
Not Degree Applicable.
Reading, vocabulary, and idioms for high-intermediate students who are non-native speakers of English. May be taken three times for credit.
4931.00

353 Grammar: Advanced Level (3) This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Recommended: English as a Second Language 327 or a score of 55 on the CELSA placement test.
Not Degree Applicable.
Review of basic English for the advanced student of English as a second language and finer details and subtle points in English grammar. May be taken three times for credit.
4931.00

357 Expository Writing: Advanced Level (3) This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Not Degree Applicable.
Paragraph writing emphasizing rhetorical modes to prepare the student as a second language student for English 450. May be taken three times for credit.
4931.00

359 Critical Reading: Advanced Level (3) This course is offered only on a credit/no credit basis.
Class hours: 3 lecture.
Corequisite: English as a Second Language 357. Recommended: English as a Second Language 349 or score of 55 on the CELSA placement test.
Not Degree Applicable.
Critical reading to develop versatility and efficiency in analyzing written academic material for students who are non-native speakers of English. May be taken three times for credit.
4931.00

392 Special Topics: English Language Acquisition Studies (1, 2, 3, 4, 5, or 6) These courses are offered only on a credit/no credit basis.
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Not Degree Applicable.
Special-interest course of varying length exploring specific basic oral communication skills. Topics determined by the instructor and cover a range of topics relevant to the field of English as a Second Language. See class schedule for emphasis. May be taken only four times for credit regardless of the unit combination. However, no single-subject, special-interest class may be repeated.
4931.00

392L Special Topics Laboratory: English as a Second Language (1, 2, 3, 4, 5, or 6) These courses are offered only on a credit/no credit basis.
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Not Degree Applicable.
Specializations in basic language acquisition skills. May be taken only three times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. See class schedule for current emphasis.
4931.00

450 Fundamentals of Composition for ESL Students (3) Class hours: 3 lecture.
Corequisite: English as a Second Language 357 or 359 or equivalent with a grade of CR, or Business and Office Technologies 455 or equivalent with a minimum grade of C, or passing score on the Chaffey College English Placement Test at the English 450 level, or a minimum score of 65 on the CELSA Placement Test.
Practice in English composition specifically for ESL students with emphasis on paragraphing, leading to an understanding of the essay. Designed to prepare the ESL student for English 1A. This course is equivalent to English 450.
4930.80

451 English as a Second Language Writing Laboratory (0) Class hours: 2 laboratory.
Corequisite: English as a Second Language 450. Laboratory required of all students enrolled in English as a Second Language 450 with a focus on nonnative writer issues that inhibit fluency, such as meaning and use of English tenses and idiomatic usage, especially in areas such as the use of definite article and prepositions.
4930.80

Environmental Technology (ET) (Formerly Environmentally Hazardous Materials Technology) (3) Class hours: 3 lecture.
10 Introduction to Environmental Technology (3)
Class hours: 3 lecture.
Recommended preparation: Learning skills evaluation.
Transfer Credit: CSU.
General overview of the environmental hazardous materials technology area. History of pollution leading to current legislation, potential effects of pollution, and an overview of the regulatory framework. Career opportunities in the areas of handling and management of hazardous substances.
2135.00

11 Hazardous Waste Generation/Reduction/Treatment (3) Class hours: 3 lecture.
Prepared: Chemistry 8 and Mathematics 25 or equivalent.
Transfer Credit: CSU.
Industrial process and their generation of waste streams in seven selected industries: electropolishing, metal finishing and printed circuit board production, oil refining and chemical production, steel production, general manufacturing, printing and graphic reproduction, agriculture and consumer services. Examination of the changes of various raw materials and chemicals used in industry that occur as they move through the industrial process, and understanding the material balance concept of inventory. Discussion of applicable regulations and the importance of waste minimization/treatment concepts. Home hazardous waste generation and reduction.
2135.00

13 Health Effects of Environmentally Hazardous Materials (3) Class hours: 3 lecture.
Prepared: Biology 10 or high school biology or equivalent.
Transfer Credit: CSU.
Acute and chronic health effects produced by exposure to chemical, physical, and biological agents. Emphasis will be on those hazardous materials commonly associated with industrial operations, waste disposal and remediation sites. Routes of entry, toxic effects, risk evaluation, permissible exposure limits, medical surveillance, control methods for reducing exposure, and understanding and MSDS's.
2135.00

15 Hazardous Waste Management Applications (4) Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU.
Overview of hazardous waste regulation with emphasis in generator compliance, site investigation and remediation, health, enforcement and liability. Explanation of the hazardous waste regulatory framework and introduction to the wide variety and types of environmental resources available. Development of research skills in the hazardous waste area. Laboratory provides "hands on" application of the regulations at the technician level. Proper methods of preparing a hazardous waste manifest, labeling of storage containers, sampling and analysis, preparing a Phase I Environmental Audit, and selecting environmental consultants.
2135.00

20 Hazardous Materials Management Applications (4) Class hours: 3 lecture; 3 laboratory.
Prepared: Environmental Technology 10 and 13 and Chemistry 9 or equivalent.
Transfer Credit: CSU.
Requirements and applications of federal, state and local laws and regulations relating to hazardous materials. Emphasis on compliance with Department of Transportation, OSHA Hazard Communication, SARA Title III Community Right-to-Know, Underground Tank, Asbestos, Proposition 65, and Air Toxics Regulations. Understanding the legal framework of hazardous materials laws. Application of these laws, such as proper labeling, shipping, and handling of hazardous materials; obtaining and interpreting MSDS's; permitting and monitoring functions, as well as planning and reporting functions in a laboratory setting.
2135.00

23 Safety and Emergency Response (4) Class hours: 3 lecture; 3 laboratory.
Transfer Credit: CSU.
Hands-on instruction in safety and emergency response to chemical and physical exposures in industrial and field settings. Hazard analysis, contingency planning, housekeeping and safety practices including proper use and selection of Personal Protective Equipment (PPE), site control and evaluation, handling drums and containers, field sampling and monitoring, proper use of instruments, incident response planning, emergency response including field exercises in the use of Powered Air-purifying Respiratory
Fashion Design (FASHD)

20 History of Fashion (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Prerequisite: Basic apparel construction using knit fabrics; emphasis on lingerie and activewear constructed from spandex core fibers. May be taken two times for credit.

40 Contemporary Clothing Construction (2) [Cx]
Class hours: 1 lecture; 3 laboratory.
Transfer Credit: CSU.
Principles and techniques for developing fundamental skills in clothing construction of woven fabrics. May be taken three times for credit.

1303.10

40 Advanced Clothing Construction (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Fashion Design 40 or equivalent with minimum grade of C.

Transfer Credit: CSU.
Techniques on costume sewing and tailoring; handling of specialty fabrics. May be taken three times for credit.

1303.10

60 Basic Pattern Making (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Fashion Design 40.
Transfer Credit: CSU.
Theory of designing flat patterns from scale blocks and using industry standards.

1303.10

70 Advanced Pattern Making (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Fashion Design 40.
Transfer Credit: CSU.
Application of pattern making techniques in construction of garments from original design.

1303.10

72 Fashion Draping (2)
Class hours: 1 lecture; 3 laboratory.
Recommended: Fashion Design 60 or equivalent.
Transfer Credit: CSU.
Three dimensional draping in muslin and translation of the drape to a hard pattern.

1303.10

410 Basic Design and Creativity (2)
Class hours: 2 lecture.
Identification and utilization of the elements and principles of design in apparel production and visual merchandising. Emphasis on creative expression.

1303.00

421 Study of Ethnic Costume (3)
Class hours: 3 lecture.
World survey of ethnic clothing as it relates to the social, political, economic, and religious contexts of use in its country of origin. Contemporary applications of ethnic dress as a design source in today's fashion apparel.

1303.00

430 Fashion Design (2)
Class hours: 2 lecture.
The working role of the designer in the fashion industry.

1303.10

441 Intermediate Clothing Construction (2)
Class hours: 1 lecture; 2 laboratory.
Prerequisite: Fashion Design 40.
Basic apparel construction using knit fabrics; emphasis on lingerie and activewear constructed from spandex core fibers. May be taken two times for credit.

1303.10

444 Fitting and Alterations (1)
Class hours: 3 laboratory.
Basic principles of custom alterations and fit. Includes business emphasis.

1303.30

480 Design Collection (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Fashion Design 70.
Corequisite: Fashion Design 72.
Preparation of a collection of garments for use in a runway show. Students must sketch, design, draft or drape patterns, select designer fabrics, and construct garments in collection.

1303.10

482 Industry Internship: Fashion Design (1)
Class hours: 5 laboratory.
Prerequisite: Completion of at least one year of fashion design courses.
Industry internship in cooperation with area private and public sector employers providing new or expanded learning opportunities directly related to fashion design and production and readying the student for employment.

1303.00

492 Special Topics: Fashion Design (1, 2, or 3)
Class hours: 1, 2, or 3 lecture.
Pursues specializations in Fashion Design. See class schedule for the current topics. May be taken only three times regardless of the unit combination; however, no single-subject, special-interest class may be repeated.

1303.10

498L Independent Study: Fashion Design (1, 2, or 3)
Class hours: 3, 6, or 9 laboratory.
Specialized study in fashion design, through research and documentation or applications in design and production. Independent work and study will be supervised by appointed instructor.

1303.00

Fine Arts (FINART)

50 Introduction to Fine Arts (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to music, the visual arts, and theatre including war and the arts, religion and the arts, television, cinema, and dance, and/or principles of art criticism.

1001.00

Food Service Management (FSM)

11 Food Service Management Supervision (3) [Cx]
Class hours: 3 lecture.
Recommended: Concurrent enrollment in Food Service Management 470 or Hotel and Food Service Management 496.
Transfer Credit: CSU.
Supervisor's or manager's role in understanding and developing personnel programs and establishing productive labor-management relationships. Job descriptions, hiring practices, training procedures, advancement programs, and recruiting responsibilities.

1306.10

15 Nutrition in Health (3)
Class hours: 3 lecture.
Transfer Credit: CSU.

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French (FR)

1.2 Elementary French (4-4)
Class hours: 4 lecture.
Prerequisite: For French 2; French 1 or equivalent with a minimum grade of C.
Corequisite: French 10.
Transfer Credit: CSU; UC.

Canadian Elementary French (CAN FRENCH 201)
Contains a systematic presentation of language patterns and of the underlying cultural ideas that lead to facility in the four basic skills—oral, oral, written, and writing. Reading, selection, introduces various aspects of the life and culture of the French-speaking people. Because stress is placed upon early oral and total competence, the language laboratory is utilized for regular pronunciation drill and the building of vocabulary patterns. Films and an audiovisual program containing cultural presentations and further practice in comprehension supplements the textbook. 1102.00

3.4 Intermediate French (4-4)
Class hours: 4 lecture.
Prerequisite: French 2 for French 3; French 3 or equivalent with a minimum grade of C for French 4.
Corequisite: French 10.
Transfer Credit: CSU; UC.
Review basic grammar and presents more elaborate constructions as preparation for advanced reading and writing. Provides opportunity for speaking and writing French on an increasingly advanced level. Includes reading, discussing, and writing about selections from French literature of increasing difficulty. 1102.00

10 French Language Laboratory (0)
Class hours: 1 laboratory.
Corequisite: French 1, 2, 3, 4.
Lab required of all students enrolled in French classes. Corequisite: French 10.
Transfer Credit: CSU.
Practice in hearing and speaking French, with emphasis on everyday speech patterns. Subjects for extemporaneous conversation stress practical situations and cultural background. May be taken two times for credit. 1102.00

15, 16 French Conversation (2-2)
Class hours: 2 lecture.
Prerequisite: French 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.

92 Special Topics: French Literature, Language and Culture (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Recommended: French 3.
Transfer Credit: CSU; UC.
Special interest classes of varying length for students who seek further development in specific areas of literature and extended knowledge of the language and culture. Variety of topics offered with particular emphasis determined by the instructor. May be taken for a maximum of nine units; however, no single-subject special-interest class may be repeated. 1102.00

98 Independent Study: French Literature (1, 2, or 3)
Class hours: 1, 2, or 3.
Prerequisite: French 4 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Designed for the capable, well-motivated student. Each student explores and develops a literary project. Student-instructor agreement as to the nature and extent of the project must be reached before the student may enroll in the course. May be taken only three times for credit regardless of the unit combination. 1102.00

Geography (GEOG)

1 World Regional Geography (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Regional geography of the world surveying the major cultural and physical regions. Use of maps and regional analysis to interpret world patterns of demography, economics, resources, religions, and languages in relationship to landforms and climate. Current world problems discussed in an international framework. 2206.00

4 Physical Geography (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
The global physical world, its dynamics and spatial relationships. Physical environment presented as an integration of the atmosphere, hydrosphere, lithosphere, and the biosphere. Processes and spatial relationships that created the global mosaic. Broad based course with an interdisciplinary outlook. 2206.00

5 Physical Geography Laboratory (1)
Class hours: 3 laboratory.
Prerequisite: Geography 4 (may be taken concurrently).
Transfer Credit: CSU; UC.
Field observation and analysis of environmental settings accompany Geography 4. Laboratory is held in the field for on-site interpretation of climate, soils, landforms, plant, and animal distribution. 2206.00

6 Global Ecology (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Global perspectives on ecology. Geographical approach to the biosphere: environmental principles, economics and environment, human impact, extinction and biodiversity, food population crises, the social environment, global warming, and contemporary values in global environmental issues. 2206.00

10 Cultural Geography of North America (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
The cultural geography of North America in time and space. Use of maps and the study of North American culture is traced through discovery, exploration, settlement patterns, aboriginal patterns, national interests, economic exploitation, agriculture, commerce, ethnicity, demography, and changing attitudes. Emphasis on the origin and diffusion of North American cultural traditions. 2206.00

11 World Cultures (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Geographic aspects of world cultures in relationship to land and sea. Dynamics of different societies and their impact on the natural world is traced through development, growth, settlement patterns, economic development, agricultural practices, commercial exploitation, demographics and political evolution through changing attitudes. 2206.00

96 Independent Study: Physical/Cultural Geography (1, 2, or 3)
Class hours: 1, 2, or 3 lecture.
Prerequisite: Acceptance into the program of study.
Transfer Credit: CSU; UC.
For the student who is capable and has the desire to explore and develop a problem in physical geography. Schedules arrangement with the instructor concerning subject and intended limits of the project. Individual inquiry, special techniques, and selected reading. 401.00

Geology (GEOL)

1 Physical Geography (4)
Class hours: 3 lecture, 2 laboratory.
Transfer Credit: CSU; UC.
(CAN GEOL 2)
Study of the earth, composition, structure, distribution, and modification of earth materials and processes that shape the surface. Eight-hour field trip required in addition to normal class meeting. 1914.00

2 Historical Geography (4)
Class hours: 3 lecture, 2 laboratory.
Prerequisite: Geology.
Transfer Credit: CSU; UC.
(CAN GEOL 4)
History of the earth and life forms on the earth. Changes in
tectonic plates and life forms through time and study of fos-
sils. Eight-hour field trip required in addition to normal class meeting. 1914.00

6 Geology of National Parks and Monuments (3) Class hours: 3 lecture. Recommended preparation: Geology 10 or equivalent with a minimum grade of C.

Transfer Credit: CSU. Physical and historical geology of California, including the development of the twelve geomorphic divisions. Eight-hour field trip required in addition to normal class meeting. 1914.00

10 Environmental Geology (3) Class hours: 3 lecture.

Transfer Credit: CSU; UC credit pending. Application of geological principles in understanding envi-
ronmental hazards and resources. Emphasis on human interaction with active processes. Eight-hour field trip required outside of normal class meetings. 1914.00

20 Introduction to Paleontology (4) Class hours: 3 lecture, 1 laboratory. Recommended preparation: Geology 2, Biology 10 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. Morphology and evolution of fossil organisms. Includes interpretation of fossil record and environments. Eight-hour field trip required in addition to normal class meeting. 1914.00

German (GER) 1,2 Elementary German (4-4) Class hours: 4 lecture.

Prerequisite: For German 2: German 1 or equivalent with a minimum grade of C.

Corequisite: German 10.

Transfer Credit: CSU; UC. Contents a systematic presentation of language patterns and of the underlying cultural ideas that lead to facility in the four basic skills - aural, oral, reading, and writing. Readings, selections introduce various aspects of the life and culture of the German-speaking people. Because stress is placed upon early oral/aural competence, the language laboratory is utilized for regular pronunciation drill and the acquisition of speech patterns. Films, videotapes, and records contain-ing cultural presentations and further practice in compre-
hension supplement the textbook. 1103.00

3, 4 Intermediate German (4-4) Class hours: 4 lecture.

Prerequisite: German 2 for German 3: German 3 or equivalent with a minimum grade of C. Corequisite: German 10.

Transfer Credit: CSU; UC; (CAN GERMAN A) contains a systematic presentation of language patterns and of the underlying cultural ideas that lead to facility in the four basic skills - aural, oral, reading, and writing. Readings, selections introduce various aspects of the life and culture of the German-speaking people. Because stress is placed upon early oral/aural competence, the language laboratory is utilized for regular pronunciation drill and the acquisition of speech patterns. Films, videotapes, and records contain-ing cultural presentations and further practice in compre-
hension supplement the textbook. 1103.00

10 German Language Laboratory (0) Class hours: 1 laboratory.

Corequisite: German 1 or 2.

Lab required of all students enrolled in German classes. 1103.00

15, 16 German Conversation (2-2) Class hours: 2 lecture.

Prerequisite: German 1 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC credit limitations. See counselor.

Practice in the patterns of natural German speech through dialogs and pictures which lead to extemporaneous conver-
sation. May be taken twice for credit. 1103.00

98 Independent Study: German Literature (1, 2, or 3) Class hours: 1, 2, or 3 lecture.

Prerequisite: German 4 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. Designed for the capable, well-motivated student. Each stu-
dent explores and develops a literary project. Student- instructor agreement as to the nature and extent of the project must be reached before the student may enroll in the course. May be attempted only three times for credit regardless of the unit combination. 1103.00

Gerontology (GERO) 10 Introduction to Work with Older Adults (4) Class hours: 3 lecture; 3 laboratory.

Transfer Credit: CSU; UC. Overview of occupations, services, and community resources to meet the needs of the increasing number of older adults. Includes information on aging and old age, on-
site internship experience in community agencies, training in laws and regulations governing work with the elderly, and career information. 1305.30

18 Sociology of Aging (3) (Available also as Sociology 18) Class hours: 3 lecture.

Recommended preparation: Sociology 1.

Transfer Credit: CSU; UC. Aging as a social process. Age status and inequality; role expecta-
tions; gender and ethnic differences. Society's response to the increasing population of older people. Inter-
genational and public policy issues. Cross-cultural data and information on myths about aging. May be taken as Honors Course. 2208.00

21 Developmental Psychology: Adulthood and Aging (3) (Available also as Psychology 21) Class hours: 3 lecture.

Prerequisite: Psychology 1 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC credit limitations. See counselor.

Human development in adulthood with particular emphasis on biological and environmental influences. Social, cogni-
tive, and physical changes are examined in light of contem-
orary research and theory. Designed to help persons of all ages understand the aging process from a psychological perspective. 2201.00

22 Dying and Death (3) (Available also as Social Science 22) Class hours: 3 lecture.

Transfer Credit: CSU; UC. Perspectives on death - cross-cultural and historical. Death in American society. Health care systems (the hospital and the dying patient, hospice, etc.). Death and the process of dying. Bioethics - dying in technology age. Euthanasia, suicide, funerals, grief, and bereavement. The law and death. Living wills, organ donation, autopsies. Life after death - old and new meanings. An interdisciplinary course with emphasis in the disciplines of sociology, psy-
chology, and philosophy. 2201.00

25 Counseling the Older Adult (3) Class hours: 3 lecture.

Transfer Credit: CSU; UC. Preparatory training in counseling skills with emphasis on how to work with older adults. Specific issues related to older adults facing transitions in their lives, methods of helping people adjust to changes more common to older adults, and develop-
ing coping strategies for older adults, their families, and associates. 1505.30

31 Teaching Fitness and Wellness to Older Adults (3) (Formerly Gerontology 31) (Available also as PE Lecture 31) Class hours: 3 lecture.

Transfer Credit: CSU; UC. For people who are responsible for and/or interested in teaching older people exercises designed primarily for their use and showing them how to exercise properly. Programs...
<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1305.30</td>
<td>Myths, stereotypes, and realities related to the physiological processes of aging, health, and wellness. Ethnic and sexual differences as well as environmental factors as contributory variances. Health practices for prevention of specific chronic problems and the necessity of being physically active in maintaining a healthy lifestyle.</td>
<td>3</td>
<td>This course is offered only on a credit/no credit basis.</td>
</tr>
<tr>
<td>401</td>
<td>College Survival Skills (1)</td>
<td>3</td>
<td>Development of learning skills, study techniques, and motivation in order to increase success in college. College services and programs are explained.</td>
</tr>
<tr>
<td>402</td>
<td>Orientation to College (2)</td>
<td>2</td>
<td>Designed to increase student proficiency and retention in college and to develop the student's learning study, study techniques, and motivation in order to increase success in college. College services and programs are explained.</td>
</tr>
<tr>
<td>404</td>
<td>Employment Planning (2)</td>
<td>2</td>
<td>Recommended preparation: Guidance. Development and application of skills in employment planning and critical job seeking techniques. Self-appraisal, self-appraisal, self-appraisal, job market analysis, preparation of an employment plan, resume and interview preparation, applicable employment practices, regulations, and laws. Recommended for students nearing completion of associate degree, vocational certificate, or for students entering, re-entering, or seeking advancement in the job market.</td>
</tr>
<tr>
<td>405</td>
<td>Tutor Training (2)</td>
<td>2</td>
<td>Opportunity to explore guidance-related topics in greater depth. Emphasis selected by the instructor from variety of topics. May be taken two times for credit.</td>
</tr>
<tr>
<td>492</td>
<td>Special Topics: Guidance (1, 2)</td>
<td>1</td>
<td>Orientation to College (2) Recommended preparation: Completion of the courses to be tutored with a minimum grade of B. Designed to teach students how to be effective tutors in a community college setting. Emphasis on tutoring and study techniques; practical skills to use in a variety of tutoring situations.</td>
</tr>
<tr>
<td>4930.10</td>
<td>300 Health Science Skills Review (1)</td>
<td>3</td>
<td>Application of appropriate health science skills in a simulated laboratory setting. Skills taught will correspond to skills levels in current health science program. May be taken only four times for credit.</td>
</tr>
<tr>
<td>4930.10</td>
<td>310 Computers in Health Science Studies (1)</td>
<td>3</td>
<td>Application of appropriate health science skills in a simulated laboratory setting. Skills taught will correspond to skills levels in current health science program. May be taken only four times for credit.</td>
</tr>
<tr>
<td>4930.10</td>
<td>405 Computer Applications for Health Science (1)</td>
<td>3</td>
<td>Application of appropriate health science skills in a simulated laboratory setting. Skills taught will correspond to skills levels in current health science program. May be taken only four times for credit.</td>
</tr>
<tr>
<td>4930.10</td>
<td>410 Pharmacology in Nursing (3)</td>
<td>3</td>
<td>Basic understanding of micro-computer functions and an introduction to computer applications used in Health Science courses, such as SASMIS, Dentrix, and MSRADS. Students will learn the necessary skills to utilize specific computer software programs associated with health care clinical sites and learn to access resources on the Internet.</td>
</tr>
<tr>
<td>412</td>
<td>Physiology of Aging (2)</td>
<td>2</td>
<td>A basic understanding of micro-computer functions and an introduction to computer applications used in Health Science courses, such as SASMIS, Dentrix, and MSRADS. Students will learn the necessary skills to utilize specific computer software programs associated with health care clinical sites and learn to access resources on the Internet.</td>
</tr>
<tr>
<td>463</td>
<td>Social Work Designee Training (3)</td>
<td>3</td>
<td>Not Degree Applicable. Recommended preparation: Medical Terminology. Following the model curriculum as developed by the Department of Health Services, introducing the Nursing Assistant to their role as a home health aide: employers expectations and the following: interpretation of medical and social needs of the patients; personal and in-home care and service skills; nutrition and food preparation for the client; and cleaning and care tasks in the home.</td>
</tr>
<tr>
<td>4920.20</td>
<td>415 Nursing Enrichment (3)</td>
<td>3</td>
<td>Recommended preparation: Certification for Nursing Assistant. Nursing education experience for students from diverse ethnic cultural backgrounds. Nursing as a career. Concepts and skills which form the common framework for education.</td>
</tr>
<tr>
<td>4930.10</td>
<td>425 Intravenous Therapy (3)</td>
<td>3</td>
<td>Legal and ethical issues in intravenous therapy; fluid and electrolyte balance; parenteral fluids, equipment and techniques for peripheral intravenous therapy and blood withdrawal, complications of intravenous therapy and administration of intravenous medication. Skills performance in patient care setting required.</td>
</tr>
<tr>
<td>4930.10</td>
<td>430 Cultural Diversity in Health and Illness (3)</td>
<td>3</td>
<td>Cultural diversity as it affects the care of clients receiving health care services. Research and exploration of cultural and ethnic diversity and health care.</td>
</tr>
<tr>
<td>4930.10</td>
<td>492 Special Topics: Health Science (1, 2, 3, 4, 5, or 6)</td>
<td>1</td>
<td>Recommended preparation: Admission to a Health Science program. Selected special topics in a Health Science field for students who desire an extensive exploration in a specialized Health Science subject. May be taken for a total of 12 units regardless of the unit combination; however, no single subject, special-interest course may be repeated.</td>
</tr>
</tbody>
</table>
492L Special Topics Laboratory: Health Science (1, 2, 3, 4, 5, or 6)
Course hours: 1, 2, 3, 6, 9, 12, 15, or 18 laboratory.
Prerequisite: Admission to a Health Science program.
Special topics are selected for students who wish to take an independent study, an elective for a major in Health Science.
Course may be repeated.
1202.20

History (HIST)

1 World History: Pre-Civilization to 1500 (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
( CAN HISTSEQ C )
Comparative, integrative study of the world’s major civilizations from pre-history to 1500. Specific civilizations to be covered include those in Eurasia (Mesopotamia, Egypt, Hebrews, Greece and Rome, India and China) in addition to those in Africa and the Americas.
2205.00

2 World History: 1500 to Present (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
( CAN HISTSEQ )
Cross-cultural study of all the major civilizations of the world since 1500. This uniting theme is the emergence of global integration built around the rise of national states and the impact of the West.
2205.00

5 Early Western Civilizations (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Development of the cultural foundations of Western peoples from prehistoric times to the rise and diffusion of civilization in the era of Middle Eastern dominance and the Middle Ages culminating with the Renaissance and Reformation periods in Western Europe.
2205.00

6 Modern Western Civilizations (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Development of the cultural foundations of Western peoples from the Commercial Revolution to the present. Emphasis on the mass socio-cultural and political development of the nation-state in Europe through the French Revolution, the Industrial Revolution and the changes created in Western society by mass politics, world wars and their aftermath as seen in the modern world.
2205.00

9 History of Asian Civilizations I (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Cultural development of Asian peoples from prehistoric times to the sixteenth century A.D. with emphasis on the religion and philosophy as well as early social and political institutions in China, India, and Japan.
2205.00

10 History of Asian Civilizations II (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Cultural development of Asian peoples and nations from the sixteenth century A.D. to the present with emphasis on the tension created by the impact of the West on traditional Asian institutions in China, Japan, India, and Southeast Asia, and focusing particularly on the response of these cultures in terms of socioeconomics and political developments.
2205.00

17 History of the United States (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
( CAN HIST B )
(Survey of U.S. History from colonial foundations through reconstruction (1865). Satisfies the California State University requirement in American History.
2205.00

18 History of the United States (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
( CAN HIST 18 )
(Survey of U.S. History from colonial foundations through reconstruction (1865). Satisfies the California State University requirement in American History.
2205.00

Development of the United States from the Reconstruction Era (1865) until the present. Satisfies the California State University requirement in American History.
2205.00

20 Contemporary History of the United States from 1945-Present (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Careful analysis of recent events in U.S. history from 1945 to the present, including important historical movements and trends which demand closer scrutiny than History 18.
2205.00

21 The Sixties in American History (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Issues and events of the most turbulent decade in recent American history—the 1960s. May be taught in lecture or seminar format.
2205.00

25 Women in United States History (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
General survey of women in U.S. history from the colonial era to the present.
2205.00

37 California History (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Development of California during the Indian, Spanish, Mexican, and Anglo-American periods of settlement (1541-present).
2205.00

40 Retrospective on the 20th Century: World War II (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
World War II from the perspective of various viewpoints relative to the war’s impact on but not limited to the following: history, sociology, philosophy, literature, the arts, business-technology, psychology, science, political science, religion, economics, and sports. Faculty from different disciplines will present materials relative to their expertise.
2205.00

50 African-American History I (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
African-American experience from the seventeenth-century to the present. Focuses on the transition from slavery to emancipation.
2205.00

51 African-American History II (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
African-American experience from emancipation to the present. Focuses on the transition from a rural to an urban milieu.
2205.00

70 Chicano: Mexican History as it Relates to the United States (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Indian, post-Conquest, and Spanish-Colonial Mexico. Presentation of major events in the United States and Mexico that have formed the basis for diplomatic history. Eighteenth and nineteenth century revolution and independence, the Mexican-American War, filibustering and border raiding, 1910 Mexican Revolution, subsequent Mexican immigration to the United States, and present-day border problems.
2205.00

71 Chicano: The Chicano Minority in the United States (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Conflicts between Anglo and Chicano cultures. Conditions and problems dealing with Mexican immigration and urbanization from nineteenth century to the present.
2205.00

90 Seminar in History (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit pending.
Designed to bring together one or more faculty members and a small group of students with a common interest to pursue study of a selected topic in history through the seminar approach. May be taken two times for credit.
2205.00

92 Special Topics: History (1, 2, 3, 4, 5, or 6)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit pending.
Special-interest course of varying length for students who wish further exploration in specific areas of history. Topics may be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single, special-interest class may be repeated. May require prerequisites and/or prerequisites based on the content of the course.
2205.00

Home Economics

See Consumer Studies

Hotel and Food Service Management (HOTFS)

10 Introduction to Hospitality Management (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Hospitality industry and its interrelationships with hotel, restaurant, travel, and leisure industries. Economic and social influences of leisure, basic management disciplines, and career opportunities.
1306.10

11 Institutional Purchasing (2)
Class hours: 2 lecture.
Prerequisite: Completion of units in the Hotel and Food Service Management program.
Transfer Credit: CSU.
Purchasing of supplies necessary to operate a hotel or motel. Furnishing, housekeeping, and equipment. Specifi- cations, sources, grades, standards, criteria for selecting and purchasing, and techniques for receiving and storage.
1306.30

12 Hotel and Food Service Accounting (3)
Class hours: 3 lecture.
Prerequisite: Successful completion of mathematics competency requirement.
Transfer Credit: CSU.
Bookkeeping and accounting in the food service industry. Analysis of calculating and preparing weekly and monthly labor cost reports and preparing monthly profit and loss statement for the average food service establishment.
1306.10

14 Quantity Food Production Management (3)
Class hours: 3 lecture.
Recommended: Concurrent enrollment in Hotel and Food Service Management 496.
Transfer Credit: CSU.
Management techniques necessary for quality food produc- tion. Record keeping, staffing, standardizing recipes, terminology, storage, servicing, and emergencies.
1306.10

16 Principles of Food Preparation (2) [C]
Class hours: 2 lecture.
Recommended: Hotel and Food Service Management 496.
Transfer Credit: CSU.
Methods of food preparation, principles, and cookery.
1306.30

18 Sanitation, Safety, and Equipment Management (2) [C]
Class hours: 2 lecture.
Transfer Credit: CSU.
Food-borne diseases, sanitation and safety standards. Selection of equipment; first aid and fire prevention.
1306.10

Catalog 1996–97
HOTEL AND FOOD SERVICE MANAGEMENT 109
20 Food and Beverage Purchasing and Cost Controls (2)
Class hours: 2 lecture.
Transfer Credit: CSU
Purchasing food and beverages for food service operations. Basic information on sources, grades, standards, and criteria for selecting and purchasing. Techniques for receiving and storage. Development of specifications. 1306.10

417 Menu Planning, Purchasing and Controls (2)
Class hours: 2 lecture.
Recommended: Hotel and Food Service 496L
Menu planning for food service incorporating sound nutrition principles. Purchasing food and beverages for food service. Basic information on sources, grades, standards, and criteria for selecting and purchasing. Techniques for receiving and storage. Development of specifications. 1306.30

422 Hotel Operations (3)
Class hours: 3 lecture.
Operation and organization for the front office within a variety of hospitality lodging situations. Career opportunities, systems of guest accommodations, front office routines and reports, machine operation, room rates, principles of people management, and application of data processing, management and engineering operations. 1307.00

424 Dining Systems and Restaurant Operations (3)
Class hours: 1 lecture; 4 laboratory.
Prerequisite: Hotel and Food Service Management 14.
Methods for food service operations. Analysis and simulation of a food service operation. Controls and methods for food preparation, serving, menu management, consumer relations, and subsystems. 1306.10

426 Hospitality Law (2)
Class hours: 2 lecture.
Laws relating to the hospitality industry. Legal aspects of management, employment, guest laws, labor laws, and guest issues. 1307.00

428 Hotel and Food Service Human Resources Management (3)
Class hours: 3 lecture.
Recommended preparation: Hotel and Food Service Management 10.
Management theory and experience applied to the realities of hotel and food service industry. Principles of people management are presented in terms of how they apply on-the-job. Elements of personnel management, awareness and appreciation of skills, attitudes and abilities needed to manage people effectively. Student builds a strong foundation for increasing skills and knowledge for achieving success through people at any level of management. Multiculturalism, conflict resolution, benefit and compensation, legal considerations. 1307.00

430 Hospitality Marketing Management (2)
Class hours: 2 lecture.
Marketing strategies applied to hotel-motel industries, restaurant and institutional food service. Identification of the market, image development, advertising, sales promotions, public relations and administration and control of a marketing plan. 1307.00

434 Catering and Banquet Organization (3)
Class hours: 1 lecture; 4 laboratory.
Prerequisite: Hotel Food Service Management 16 and Mathematics 305. Current negative tuberculosis test.
Catering/banquet aspect of food service management. Planning, compiling and costing of banquet and catering menus, batch preparation of appetizers, main courses and desserts in accordance with standards of professional food service operations. Pricing techniques, contracts, safety, sanitation, liability considerations and storage. 1306.30

436A Culinary Arts I (2)
Class hours: 1 lecture; 1 laboratory.
Prerequisite: Hotel and Food Service Management 16 (may be taken concurrently) and Mathematics 305 or 308 or equivalent. Proof of current negative tuberculosis test.
Theory and preparation of stocks, soups, sauces, salads, hors d’oeuvre, produce items, starches, and vegetables in accordance with the standards of professional food service operations. 1306.30

438B Culinary Arts II (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Hotel Food Service Management 16 (may be taken concurrently) and Mathematics 305 or 308 or equivalent. Proof of current negative tuberculosis test.
Skills in entire cooking, baking and knowledge of portioning, accuracy in measuring, baking cakes, pies, breads, rolls, yeast and non-yeast products, meringues, icings and decorations. Emphasis is on quality baking and creative decorating. 1306.30

493 Special Topics: Food Service Management
(1/4, 1 or 2, 3, 4, 5, or 6) Class hours: 1/4, 1, 2, 3, 4, 5, or 6 lecture.
Special-interest course of varying length for students who wish further information in specific areas of food service management. Topics and course content determined by the individual instructor. See class schedule for emphasis. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 1306.00

496 Work Experience (1, 2, 3, or 4)
Class hours: 5, 10, 15 or 20 hours employment per week.
Prerequisite: Major in Hotel and Food Service Management or related program.
Supervised work experience in the operation of a hotel, motel, or food service operation. Includes front office, night audit, and marketing experience. May be taken 4 times for a maximum of 16 units. 1306.00

Humanities (HUMAN)

1A Survey of American Ethnic Studies (3)
Class hours: 3 lecture.
Recommended preparation: English 1A or equivalent.
Transfer Credit: CSU; UC credit pending.
Survey and study of the experience of people of color in the United States and introduction to fundamental theories of race and social relationships which have resulted from the produced legal, political, and social, and political straitification. Examination of key concepts and terms which include racism, sexism, Afrocentrism, anti-Semitism, and diaspora. 4903.30

20 The Holocaust: History and Philosophy (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit pending.
Examination of the philosophical underpinnings and historical developments leading to the rise of Nazi Germany and the implementation of a policy of destruction for Europe’s Jewry. 4903.30

Human Services (HUSVC)

1 Introduction to Interviewing and Counseling Techniques (3)
Class hours: 3 lecture.
Prerequisite: Completion of at least 12 college units with a minimum G.P.A. of 2.0.
Transfer Credit: CSU.
Introduction to basic interviewing and counseling techniques through the integration of theory, practice, and application. Includes helping skills, stages of counseling, and professional issues. 2104.00

Information and Computer Sciences

See Computer Information Systems and Computer Science
free access. Bubble diagrams and adjacencies. Set of working drawings — residential and commercial. 1302.00

22 Interior Design Materials (3)  
Class hours: 3 lecture.  
Prerequisite: Interior Design 10 or equivalent with a minimum grade of C.  
Recommended: Art 10.  
Transfer Credit: CSU.  
Materials and treatments used in current design installations. Window treatments, wall treatments, floor coverings, furniture construction, cabinet woods, and interior architectural details. Health and safety requirements. 1302.00

23 Interior Rendering (3)  
Class hours: 2 lecture; 1 laboratory.  
Prerequisite: Interior Design 18 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
Addition of color to perspective views of furnishings and interiors. Experimentation with a variety of techniques and media in the illustration of furnishings, accessories, and backgrounds. Rendering of various hard and soft textures. 1302.00

25 Interior Design Management (2)  
Class hours: 2 lecture.  
Prerequisite: Interior Design 10, 22 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
Practical course in the special problems encountered in the interior design profession, including measuring and estimating materials, purchasing, client relationships, ethics, methods of compensation, contracts and business agreements. 1302.00

30 Advanced Design Studio (3)  
Class hours: 3 lecture; 1 laboratory.  
Prerequisite: Interior Design 18, 21, 22, 23, or equivalent with a minimum grade of C. Interior Design 25 (may be taken concurrently).  
Transfer Credit: CSU.  
Advanced level course integrating knowledge, problem solving, and visual and oral communication. Furniture layouts, space planning, elevations, renderings, estimates, schedules, selection of interior components and material, reflected ceiling, lighting, and electrical plans for a residential and a commercial project. 1302.00

92 Special Topics: Interior Design (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 lecture.  
Prerequisite: Journalism 10 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
Special interest course of varying length for students who wish further exploration in specific areas of interior design. Topics will be determined by instructor and may cover a range of topics relevant to the interior design field. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 1302.00

31 Advanced Design Studio (3)  
Class hours: 3 lecture.  
Prerequisite: Interior Design 18, 21, 22, 23, or equivalent with a minimum grade of C. Interior Design 25 (may be taken concurrently).  
Transfer Credit: CSU.  
Advanced level course integrating knowledge, problem solving, and visual and oral communication. Furniture layouts, space planning, elevations, renderings, estimates, schedules, selection of interior components and material, reflected ceiling, lighting, and electrical plans for a residential and a commercial project. 1302.00

40 Introduction to Management (3)  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
A survey of management concepts, basic functions, and skills as they apply at all levels within the contemporary work environment. Design and implementation of management theory with actual management practice in order for the organization to become more effective, efficient, and internationally competitive. 506.30

42 Human Resource Management (3)  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Furnishment and implementation of human resource policy concerned with the major aspects of how an organization deals with its people — how it acquires them, utilizes them, rewards them, and separates them. Explores how the personnel functions integrate with the overall strategy of the firm in determining the success of the firm. 506.30

50 Management (MGMT)  
Class hours: 3 lecture.  
Role of retailing in serving the needs of the community. Analysis of consumer needs, store location, financial requirements, and legal process of starting a retail operation; planning for store layout, merchandise mix, vendor negotiation, pricing, displaying, advertising, selling, and controlling of merchandise. 506.00

460 Total Quality Management Concepts (3)  
Class hours: 3 lecture.  
Basic principles, objectives, and policies of a total quality management program. Implementation of continuous quality improvement and the understanding of the various quality philosophies. For individuals who want to understand and implement change to existing processes. 506.00

10 Newswriting (3)  
Class hours: 3 lecture.  
Prerequisite: Eligibility for English 1A.  
Recommended preparation: Typing ability.  
Transfer Credit: CSU.  
Principles of writing news stories with emphasis on selecting and organizing information in a clear, accurate, coherent, and concise manner. Fundamentals of correct grammar and spelling are stressed, as well as news copy preparation and format. 602.00

61A, B, C Newspaper Production (1, 2, or 3)  
(Available also as English 61A, B, C)  
Class hours: 3, 6, or 9 laboratory.  
Recommended preparation: Typing and/or computer skills; ability to take black-and-white photos.  
Transfer Credit: CSU.  
Experience in planning, editing, and producing a bi-weekly newspaper. Students cover campus and community events and write news and feature stories, editorials, reviews and headings. Edit copy for typesetting, type-set the prepared copy using the department’s computers. Take, print, and edit photos. Paste up page flats for printing and distribute finished paper on campus. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 602.00

92 Special Topics: Journalism (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 lecture.  
Prerequisite: Journalism 10 or equivalent with a minimum grade of C or eligibility for English 1A.  
Transfer Credit: CSU.  
Special interest course of varying length for students who seek further development in specific areas of journalism. Wide variety of topics with particular emphasis left to the instructor. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 602.00

102 Special Topics Laboratory: Interior Design (1, 2, 3, 4, 5, or 6)  
Class hours: 1, 2, 3, 4, 5, or 6 laboratory.  
Prerequisite: Interior Design 18, 21, 22, 23, or equivalent with a minimum grade of C. Interior Design 25 (may be taken concurrently).  
Transfer Credit: CSU.  
Special interest course of varying length for students who wish further exploration in specific areas of interior design. Topics will be determined by instructor and may cover a range of topics relevant to the interior design field. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 1302.10

35 College Algebra (4)  
Class hours: 4 lecture.  
Prerequisite: Mathematics 420 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
Coordinate geometry and graphing techniques including conic sections. Solutions to higher degree equations. Functions: notation, composition, inverse, polynomial, rational, exponential, and logarithmic. Systems of equations and inequations, including solving systems by matrices and determinants. Sequences, series, binomial expansion, and mathematical induction. 1701.00

31 Plane Trigonometry (4)  
Class hours: 4 lecture.  
Prerequisite: Mathematics 25 (may be taken concurrently) and Mathematics 412 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
Trigonometric functions including definitions of the circular functions: radian measure; identities; graphs; functions of multiple angles; trigonometric equations; solution of right and oblique triangles; applications; vectors; inverse trigonometric functions; rotation of axes; complex numbers; polar coordinates, graphs, equations of conics and parametric equations. 1701.00

61 Pre-calculus (4)  
Class hours: 4 lecture.  
Prerequisite: Mathematics 25 and Mathematics 31 or equivalent with minimum grade of C.  
Transfer Credit: CSU; UC credit limitations. See counselor.  
For students who have taken college algebra and trigonometry, but need a review and/or a modern approach to these courses. Real and complex number systems; polynomial, rational, exponential, logarithmic and trigonometric functions and equations; trigonometric identities; applied trigonometry; and systems of equations and inequations. 1701.00

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and inverses; trigonometric concepts emphasized as needed for calculus, including identities, equations and applications.

65A Calculus I (4) [Cx]
Class hours: 4 lecture.
Prerequisite: Mathematics 61 or equivalent with a minimum grade of C taken during the previous year. A prerequisite verification card must be obtained from the Department of Mathematics prior to registration.
Transfer Credit: CSU; UC.
(CAN MATH 18 B)
Functions, limits, continuity; differentiation of algebraic and trigonometric functions with applications; integration of algebraic and trigonometric functions; the definite integral and some applications including area and volume.

65B Calculus II (4) [Cx]
Class hours: 4 lecture.
Prerequisite: Mathematics 65A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
(CAN MATH 18 B)
Some applications of the definite integral including work and centroids of planar regions; differentiation and integration involving logarithmic, exponential, hyperbolic, inverse trigonometric and inverse hyperbolic functions; techniques of integration; indeterminate forms and improper integrals; infinite series; conic sections; polar coordinates and parametric equations.

75 Calculus III (5) [Cx]
Class hours: 5 lecture.
Prerequisites: Mathematics 65B or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Solid analytic geometry, vectors, vector-valued functions, functions of several variables, including partial derivatives and multiple integrals with applications; and elements of vector analysis.

85 Differential Equations (4) [Cx]
Class hours: 5 lecture.
Prerequisite: Mathematics 75 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
(CAN MATH 24)
Methods of solving ordinary differential equations with applications primarily to the physical sciences.

92 Special Topics: Mathematics (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU; UC credit pending.
Special-interest course of varying length for students who wish further exploration in specific areas of mathematics.
Topics will be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

300 Group Enrichment Workshop for Arithmetic (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Corequisite: Mathematics 305 or 307.
Not Degree Applicable.
A small group enrichment workshop for students concurrently enrolled in Mathematics 305 or 307 covering practical application of arithmetic, investigation of certain arithmetic principles in greater depth than the lecture or lab class, group problem-solving and arithmetic for interest activities.

305 Arithmetic: A Complete Study (3)
This course is offered only on a credit/no credit basis.
Class hours: 3 lecture or 9 self-paced laboratory.
Not Degree Applicable.
Fundamental operations involving whole numbers, common fractions, decimals, ratios, proportions, and percents.

307 Re-Entry Review of Arithmetic (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Not Degree Applicable.
Review of fundamental arithmetic operations involving whole numbers, fractions, decimals, and percents.

308 Interpretive and Measurement Mathematics (2)
This course is offered only on a credit/no credit basis.
Class hours: 6 supervised laboratory.
Recommended preparation: Mathematics 305 or 307.
Not Degree Applicable.
An introduction and a survey of interpretation of charts and graphs, English and metric systems of measurement, computations with units of measurement, basic principles of geometry, simple statistics and simple probability.

315 Preview of Algebra (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Recommended preparation: Mathematics 305 or 307.
Not Degree Applicable.
For students who have never taken algebra. Operations with signed numbers and introductions to: order of operations, evaluating expressions, linear equations, algebraic factoring and operations with algebraic fractions.

350 Mathematics Study Skills (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Corequisite: Concurrent enrollment in a mathematics class.
Not Degree Applicable.
Application and practice of study skills including previewing concepts, test reading, note-taking, preparing for and completing assignments, daily review, test preparation, test-taking, and final review from content and in synchrony with math class taken concurrently.

394L Special Projects: Basic Mathematics (1, 2, 3, 4, 5, or 6)
This class is offered on a credit/no credit basis.
Class hours: 3, 6, 9, 12, 15, or 18 self-paced laboratory.
Recommended: Mathematics 315.
Fundamental algebraic operations of addition, subtraction, multiplication, and division. Special products and factoring, rational expressions and their operations, solution and application of linear and fractional equations, graphing of linear equations in two variables, introduction to radicals and quadratic equations.

410 Elementary Algebra (4)
Class hours: 4 lecture or 12 self-paced laboratory.
Prerequisite: Ability to perform basic arithmetic operations.
Recommended: Mathematics 315.
Fundamental algebraic operations of addition, subtraction, multiplication, and division. Special products and factoring, rational expressions and their operations, solution and application of linear and fractional equations, graphing of linear equations in two variables, introduction to radicals and quadratic equations.

410G Group Enrichment Workshop for Elementary Algebra (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Corequisite: Mathematics 410 or 411.
A small group enrichment workshop for students concurrently enrolled in Mathematics 410 or 411 covering practical application of elementary algebra, investigation of certain elementary algebra principles in greater depth than the lecture or lab class, group problem-solving and elementary algebra for interest activities.

411 Re-Entry Review of Elementary Algebra (2)
This course is offered only on a credit/no credit basis.
Class hours: 6 self-paced laboratory.
Recommended preparation: Elementary Algebra.
A review of elementary algebra including integer operations, polynomial operations, evaluating expressions, polynomial operations with algebraic fractions, introduction to the Cartesian Coordinate System, graphing linear equations, and introduction to radicals and quadratic equations.

412 Plane Geometry (3)
Class hours: 3 lecture.
Prerequisite: Mathematics 410 or equivalent with a minimum grade of C.
Deductive reasoning, polygons, triangles, quadrilaterals, circles, parallels, constructions, and similarity.

419 Mathematics Tutor Preparation (2)
Class hours: 6 self-paced laboratory.
Prerequisite: Mathematics 410 or equivalent with a minimum grade of C.
Recommended: Guidance 405.
Review of mathematics through trigonometry. Theory of tutorial instruction. Procedures for working in a mathematics laboratory as a tutor or instructional assistant.

420 Intermediate Algebra (4)
Class hours: 4 lecture or 12 self-paced laboratory.
Prerequisite: Mathematics 410 or equivalent with a minimum grade of C.

420G Group Enrichment Workshop for Intermediate Algebra (2)
(Formerly Mathematics 91)
Class hours: 3 self-paced laboratory.
Corequisite: Mathematics 420 or 421.
Recommended preparation: Mathematics 410 or 411.
A small group enrichment workshop for students concurrently enrolled in Mathematics 420 or 421. Enrichment activities cover practical application of intermediate algebra, investigation of certain intermediate algebra principles, in greater depth than the lecture or lab class, group problem solving, and intermediate algebra for interest activities.

421 Re-entry Review of Intermediate Algebra (2)
This course is offered only on a credit/no credit basis.
Class hours: 6 self-paced laboratory.
Recommended preparation: Mathematics 420.
Review of intermediate algebra including solving linear equations and absolute value equations, algebraic factoring, operations with rational expressions, solving inequalities, simplifying exponential and radical expressions, solving quadratic equations and inequalities, and graphing linear and nonlinear equations.

Music (MUSIC)
1 Fundamentals of Music (3) [Cx]
Class hours: 3 lecture.
Recommended: Concurrent enrollment in Music 51A.
Transfer Credit: CSU; UC credit limitations. See counselor.
Not open to students who have credit for Music 3A-B.
Introduction to developing at an elementary level the basics of sight singing, ear training, reading music, and simple chord structures. Designed for the general college student, the elementary education major, and as an introduction to musicianship. Recommended for the student starting in music with no scholastic music background. Concurrent enrollment in Beginning Piano helpful.

2A Music History and Literature (3-3) [Cx]
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Chronological survey of music in Western culture. Music
**Class hours:** 3 studio.

**Prerequisite:** 1A or 3A or equivalent with a minimum grade of C.

**Transfer Credit:** CSU; UC.

Further exploration of guitar literature and the capabilities of the solo guitar. Student must provide own guitar for use in class. May be taken two times for credit. 1004.00

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**Class hours:** 4 studio.

**Prerequisite:** Knowledge in notation. Corequisite for music majors and minors.

**Transfer Credit:** CSU; UC.

Basic course for the music major and minor and an elective for the general college student who has the necessary prerequisites. Includes review of fundamentals of notation, structure of diatonic scales, intervals, chords, and study of basic forms. Ear training and development of skill in sight singing are emphasized. 1004.20

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**Class hours:** 3 lecture.

**Transfer Credit:** CSU; UC.

Survey course for the music major and minor and an elective for the general college student who has the necessary prerequisites. Includes review of fundamentals of notation, structure of diatonic scales, intervals, chords, and study of basic forms. Ear training and development of skill in sight singing are emphasized. 1004.00

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**Class hours:** 2 lecture.

**Transfer Credit:** CSU; UC.

Study and performance of a wide variety of music transcribed or composed specifically for guitar ensemble. Emphasis on the development of student's ability to play his/her assigned part, and on problems of phrasing, tone production, finger- ing, articulation, and interpretation. Attendance at public performances is required. May be taken four times for credit. 1004.10

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**Class hours:** 2 studio.

**Prerequisite:** Music 41 or equivalent with a minimum grade of C.

Recommended Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Exploration of the musical resources of the guitar in jazz. Emphasis on chord construction and melodic improvisation. Student must provide own guitar for use in class. May be taken two times for credit. 1004.00

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**Class hours:** 3 studio.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Survey of rock music styles covering their origins, development and cultural impact. Designed to make students aware of the role of rock music in shaping our society. 1004.00

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**Class hours:** 3 lecture.

**Transfer Credit:** CSU; UC.

Music and music cultures around the world, focusing on their role(s) in those cultures. Extensive listening and musical vocabulary development to facilitate the discussion and interpretation of the music. Some performance expected. 1004.00

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**Class hours:** 2 studio.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Understanding the vocal process and attaining the confidence needed to produce an adequate vocal sound. Study of individual songs as suited to the beginner and adapted to individual needs. Also included are activities designed to improve the ability of the student to sing music at sight. May be taken two times for credit. 1004.00

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**Class hours:** 2 studio.

**Prerequisite:** Music 41 or equivalent with a minimum grade of C.

Recommended Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Study and performance of a wide variety of standard and contemporary literature for mixed choirs, both a cappella and accompanied. Primary focus is on teaching about choral performance. Emphasis on the development of the ability to carry independently the assigned part and on problems of phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. Each course may be taken only four times for credit. 1004.10

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**Class hours:** 3 studio.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Chamber ensemble for the advanced choral musician who is dedicated to high-level performances of the finest vocal chamber literature. Attendance at all public performances is required. May be taken four times for credit. 1004.10

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**Class hours:** 2 lecture.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Basic fundamentals which prepare the student for most styles of guitar playing. Emphasis on chording, right-hand technique, and melodic playing, as well as basic music reading. Student must provide own guitar for use in class. May be taken two times for credit. 1004.00

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**Class hours:** 2 studio.

**Prerequisite:** Audition. **Recommended Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Study and performance of a wide variety of standard and contemporary literature for mixed choirs, both a cappella and accompanied. Primary focus is on teaching about choral performance. Emphasis on the development of the ability to carry independently the assigned part and on problems of phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. Each course may be taken only four times for credit. 1004.10

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**Class hours:** 3 studio.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Study and performance of a wide variety of standard and contemporary literature for mixed choirs, both a cappella and accompanied. Primary focus is on teaching about choral performance. Emphasis on the development of the ability to carry independently the assigned part and on problems of phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. Each course may be taken only four times for credit. 1004.10

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**Class hours:** 2 studio.

**Prerequisite:** Eligibility for English 1A. **Recommended Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Study and performance of a wide variety of standard and contemporary literature for mixed choirs, both a cappella and accompanied. Primary focus is on teaching about choral performance. Emphasis on the development of the ability to carry independently the assigned part and on problems of phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. Each course may be taken only four times for credit. 1004.10

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**Class hours:** 1 lecture.

**Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Performance of popular music in a variety of styles. Reading from lead sheets and construction of song arrangements. Approach to improvisation. May be taken two times for credit. 1004.00

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**Class hours:** 1 lecture.

**Recommended:** Concurrent enrollment in Music 300. **Transfer Credit:** CSU; UC.

Performance of popular music in a variety of styles. Reading from lead sheets and construction of song arrangements. Approach to improvisation. May be taken two times for credit. 1004.00
Transfer Credit: CSU-UC
Individual instruction in voice, piano, band or orchestral instruments. One lesson per week with a private instructor of the voice, piano, band, orchestra, etc. and paid for by the student. Sixteen lessons per semester must be certified by the private instructor. Five hours’ practice per week required. Credit is granted upon the successful completion of performance examinations given by the college staff in which the student demonstrates accomplishments of established requirements. May be taken four times for credit. 1004.00

57A,B,C,D Applied Music: Individual Study (1-1-1-1)
Class hours: 1 lecture.
Prerequisite: Audition required prior to enrollment. With the exception of Music 57A, each course is prerequisite to the next. Courses 1-6 taken in sequence regardless of the semester enrollment begins.
Cost: Music 300 and enrollment in one of the college performance ensembles (Music 31, 32, 33, 60, 61, 62, or 63).
Transfer Credit: CSU-UC.
Individual program for study of a musical instrument or voice. One hour lesson per week with an approved specialist, and five hours of supervised practice, both on campus. 1004.00

60 Jazz Band (1/1)
Class hours: 3 studio.
Prerequisite: Intermediate to advanced proficiency on one’s musical instrument. Ability to read music. Audition on first day of class on the following instruments: trumpet, trombone, saxophone, bass and bass guitar, keyboards, drums, guitar, and auxiliary percussion.
 Recommended: Concurrent enrollment in Music 300.
 Transfer Credit: CSU-UC.
Instrumental studio/performing group emphasizing reading, improvisation and stylistic concepts as they apply to the intermediate/advanced player. In most instances, student is expected to supply his/her own instrument. Attendance at public performances is required. May be taken four times for credit. 1004.10

62 College-Community Band (1/1)
Class hours: 3 studio.
Prerequisite: Audition on the first day of class on any one of the standard band instruments. Nominal proficiency required.
Recommended: Concurrent enrollment in Music 300.
Transfer Credit: CSU-UC.
Basic course in training the beginning or intermediate student in the elements of successful rock band performance, including rudimentary sightreading and style concepts. May be taken four times for credit if an additional instrument is studied. 1004.10

63 Rock Band Workshop (1/1)
Class hours: 3 studio.
Prerequisite: Nominal proficiency on one’s musical instrument including rudimentary sightreading. Instruments accepted: saxophone, guitar, bass guitar, drums, piano, synthesizer, and auxiliary percussion.
Transfer Credit: CSU-UC.
Basic course in training the beginning or intermediate student in the elements of successful rock band performance, including rudimentary sightreading and style concepts. May be taken four times for credit if an additional instrument is studied. 1004.10

64 Drum Workshop (1)
Class hours: 2 studio.
Recommended: Concurrent enrollment in Music 300.
Transfer Credit: CSU-UC.
Development of technical and creative skills for drumset performance. Emphasis on musicianship and style analysis with extensive in class performance expected. May be taken two times for credit. 1004.10

65 Basic Improvisation (1)
Class hours: 2 studio.
Prerequisite: Nominal proficiency on one’s musical instrument including the ability to read music.
Recommended: Concurrent enrollment in Music 300.

Transfer Credit: CSU-UC.
Basic techniques and resources of instrumental improvisation as they apply to contemporary musical styles. May include outside performance. 1004.00

70A,B Harmony and Intermediate Music: Theory (1-1-1)
Class hours: 3 lecture.
Prerequisite: Music 38 and SB1 or equivalent with minimum grade of C.
Corequisite: Music 52 or satisfactory completion of keyboard skill proficiency examination.
Transfer Credit: CSU-UC.
Complete study of diatonic harmonies, including a review of triad formations and principles of voice leading. Extensive study of seventh chords and ninth chords, chromatic harmony and modulation as found in the works of composers of the period of common harmonic practice. Includes formal analysis, advanced ear training, and sight singing. 1004.00

92 Special Topics: Music (1, 2, 3, or 4)
Class hours: 1-1.2, 3, or 4 lecture.
Prerequisite: By audition or nominal proficiency for (performance-related courses).
Transfer Credit: CSU-UC.
Special-interest class, of varying length, for students who wish to further develop in specific areas of music performance and background. Topics selected by the instructor and a wide range of interests from listening to performance. May be attempted only four times regardless of the unit combination. However, no single-subject special-interest class may be repeated. 1004.00

300 Music Practicum (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 laboratory.
Corequisite: Registration in a performance class. Not Degree Applicable.
Supervised practice of material designated by performance-related courses. May be taken four times for credit. 1004.00

Nursing (A.D.N.) (NURADN)
Students must apply for admission into the Nursing (A.D.N.) program

1 Orientation to Nursing Curriculum (1/1) [Cx]
Class hours: 1 lecture; 1/1 laboratory.
Prerequisite: Eligibility for advanced placement into Nursing (A.D.N.) program.
Transfer Credit: CSU.
Maslow’s Hierarchy of Basic Human Needs and Erikson’s Stages of Development as a conceptual basis for the utilization of the nursing process and the development of written nursing care plans. Sociocultural factors and individual differences as applicable are recognized to care of the gerontological client. Techniques of therapeutic communication. 1203.00

2 Transition in Nursing (2) [Cx]
Class hours: 1/1 lecture; 1/1 laboratory.
Prerequisite: Graduate of a Vocational Nursing School or equivalent or one year completion of nursing courses with minimum grade of C.
Transfer Credit: CSU.
Core curriculum of the Associate Degree Nursing Program including theories of Maslow and Erikson. Sociocultural factors and individual differences are considered in care of the acutely ill medical-surgical client (the adult and older adult). Utilization of the nursing process: basic techniques, and therapeutic communications. 1203.00

10 Nursing Process I (1/1) [Cx]
Class hours: 5 lecture; 15 laboratory.
Prerequisite: Admission into the Nursing (A.D.N.) Program (see Program brochure). Completion of English 1A, Biology 20 and Mathematics 401 or equivalent with minimum grades of C. Biology 22 may be taken simultaneously.
Transfer Credit: CSU.
Nursing process directed towards assisting the individual in meeting specified threatened basic needs. The study and impact of pathophysiology on the nursing care of the geriatric, maternal and newborn clients and their families as it affects the client status on the growth continuum. Emphasis on sociocultural and individual differences, physical, sexual, and psychological well being. Maslow’s hierarchy of basic needs and Erikson’s stages of development. Client-centered communication and interpersonal relationships. Clinical application at long-term care facilities and maternal child health facilities. Nursing leadership and management focus on professionalism. 1203.00

20 Nursing Process II (10) [Cx]
Class hours: 5 lecture; 1 laboratory.
Prerequisite: Nursing (A.D.N.) 10 and Biology 22 or equivalent with minimum grades of C. Biology 23 (may be taken concurrently).
Transfer Credit: CSU.
Nursing care of infants, children, adolescents, and adults, assisting them to meet their basic needs at each stage of growth and development. Maslow’s hierarchy of basic needs and Erikson’s stages of development are the guideline lines for nursing assessments. Emphasis on sociocultural factors and individual differences are recognized. The nursing process is taught as it relates to child health and nursing. Specialized threats to oxygen, nutrition, elimination, mobility, and sexuality. Guided practice in the pediatric, and medical-surgical units of the clinical agency and selected community agencies. Nursing leadership and management focus on professionalism. 1203.00

31 Nursing Process III (6)
(Formerly Nursing: ADN 30)
Class hours: 3 lecture; 2/1 laboratory.
Prerequisite: Nursing: ADN 20 and Biology 23 or equivalent with minimum grades of C.
Transfer Credit: CSU.
Utilization of nursing process directed toward assisting the individual in meeting specified threatened basic needs. Emphasis on sociocultural and individual differences, physical, sexual, and psychological well being. Maslow’s hierarchy of basic needs and Erikson’s stages of development. Specialized threats to fluid and electrolyte balance, oxygen, nutrition, sexuality and maturation of aberrant cells. Client-centered communication and humanistic perspective set the climate for interpersonal relationships. Clinical application at specified medical-surgical units and community health facilities. Nursing leadership and management focus on case management. 1203.00

35 Mental Health and Psychiatric Nursing (3)
Class hours: 2 lecture; 4/1 laboratory.
Prerequisite: Nursing: ADN 20 and Biology 23 or equivalent with minimum grades of C.
Transfer Credit: CSU.
The study of mental health and psychiatric illness as it affects the client status on the growth continuum. Utilization of nursing process directed toward assisting the individual in meeting specified threatened basic needs. Emphasis on sociocultural and individual differences, physical, sexual, and psychological well being. Maslow’s hierarchy of basic needs and Erikson’s stages of development. Client-centered communication and humanistic perspective set the climate for interpersonal relationships. Clinical application at specified psychiatric hospitals and community health facilities. Nursing leadership and management focus on case management. 1203.00

40 Nursing Process IV (10) [Cx]
Class hours: 5 lecture; 15 laboratory.
Prerequisite: Nursing (A.D.N.) 31 and 35 or equivalent with minimum grade of C.
Transfer Credit: CSU.
Utilization of nursing process directed toward assisting the individual in meeting specified threatened basic needs. The study and impact of pathophysiology on the nursing care of the geriatric, maternal and newborn clients and their families as it affects the client status on the growth continuum. Emphasis on sociocultural and individual differences, physical, sexual, and psychological well being. Interventions based on assessment of client’s needs according to Maslow’s hierarchy of basic needs and Erikson’s stages of development. Specialized threats to fluid and electrolyte balance, safety, sensory, oxygen, elimination, nutrition, and sexuality. Client-centered communica-
tion and humanistic perspective set the climate for interpersonal relationships. Clinical application at specified medical-surgical units, acute care facilities, long-term care settings, and community health facilities. Nursing leadership and management focus on setting priorities and coordinating client care.

50 Professional Issues in Nursing (1) [Cr]
Class hours: 1 lecture.
Transfer Credit: CSU
Influence of historical contributions, ethics, current health care delivery system, quality assurance, expanded role of the nurse, political action, continuing education, and health care reform.

92 Special Topics: Nursing (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Prerequisite: Admission to the Nursing (A.D.N.) program.
Transfer Credit: CSU
Individualized courses designed to assist the student in nursing and related fields of study. May be taken only four times regardless of unit combination; however, no single-subject special-interest class may be repeated.

92L Special Topics Laboratory: Nursing (1, 2, 3, 4, 5, or 6)
This class is offered only on a credit/no credit basis.
Class hours: 3, 6, 9, 12, 15, or 18 laboratory.
Prerequisite: Admission to the Nursing (A.D.N.) program.
Transfer Credit: CSU
Individualized courses designed to assist the student to demonstrate proficiency in clinical nursing skills. May be attempted only four times regardless of unit combination; however, no single-subject special-interest class may be repeated.

96 Cooperative Education: Nursing (ADN) (1, 2, 3, or 4)
Class hours: 5, 10, 15, or 20 hours of employment per week.
Prerequisite: Completion of at least one term of ADN program in good standing. Enrollment in a minimum of 7 units including Cooperative Education. Both student and work experience must meet the state (BRN) and college cooperative work experience education regulations.
Transfer Credit: CSU
Work experience in cooperation with clinical agencies. Provides expanded learning opportunities directly related to the student's major. First-time students are required to attend 3 career development seminars offered through the Cooperative Education Office. May be attempted 4 times to a maximum of 16 units regardless of unit combination.

400 Success and Survival in Nursing (2) [Cr]
Class hours: 1 1/4 lecture; 1 laboratory.
Nursing in the twenty-first century in a multicultural community. Exploration of personal resources, interpersonal traits, and technology in development of nursing skills.

470 Nursing Seminar (1)
Class hours: 1 lecture.
Concurrent: Nursing (A.D.N.) 96.
Professional issues related to nursing student's work experience. May be attempted only four times for credit regardless of the unit combination.

Nursing: Vocational (V.N.)
(NURVN)
Students must apply for admission into the Nursing (V.N.) program.

300 NCLEX Review for VN Licensure Examination (2)
Class hours: 2 lecture.
Prerequisite: Completion of an accredited vocational nursing program for eligibility through work experience or education.
Overview of common diseases with treatment modalities using the nursing process. Review of over 300 questions with rationale for answers. Test taking techniques and preparation for the computerized NCLEX examination. This course is offered only on a credit/no credit basis.

410 Trends and Concepts of Vocational Nursing (1) [Cr]
Class hours: 1 lecture.
Prerequisite: Acceptance into the Vocational Nursing program or equivalent.

414 Fundamentals of Nursing Practice (6) [Cr]
Class hours: 3 lecture; 9 laboratory.
Prerequisite: Acceptance into the Vocational Nursing program.
Concurrent: Vocational Nursing 410, 414, 420A, 425A.
Fundamental principles and techniques of nursing skills necessary for the beginning vocational nursing student to provide basic nursing care to individuals using Maslow hierarchy of needs, physiological alignment and position, mobility, comfort, elimination, heat and cold, fluid and electrolyte balance; need for security by adaptation to stress, rest, acceptance of loss and grieving; need for safety, including body mechanics, implications of restraints and administration of oral and topical medications. Needs and principles of human growth and development of the adult and elderly according to Erikson and threats to the elderly individual as related to basic nursing practice emphasized. Clinical application at extended care facilities. Leadership focuses on recognition of VN roles in the extended care facility. Field trips required as part of this course.

418 Introduction to Medical-Surgical Nursing (6) [Cr]
Class hours: 3 1/2 lecture; 9 laboratory.
Prerequisite: Acceptance into the Vocational Nursing program.
Concurrent: Vocational Nursing 410, 414, 420A, and 425A.
Recommended: Biology 30A, 424, Psychology 1.
Introduction to concepts, principles, and skills which form the basis for medical-surgical nursing. Maslow's theory of physiologic needs serve as a framework for beginning nursing practice. Utilizing the components of the nursing process, students will identify the basic needs/problems of the patients during the perioperative period. Major areas of focus and threats to basic needs will include vital signs assessment skills, nursing process medical-surgical asepsis, charting documentation, wound care, placement, and care of the endotracheal and tracheostomy tubes. Supervised laboratory experience is provided within an acute hospital setting. Leadership focus: Role and responsibility as a health team member. Field trips required as part of this course.

420A Basic Pharmacology (1) [Cr]
Class hours: 1 1/2 lecture.
Prerequisite: Acceptance into the Vocational Nursing Program or application to the program.
Concurrent: Vocational Nursing 410, 414, 418, and 425A for Vocational Nursing students; Mathematics 401 and Biology 30A for limited enrolled students.
Study of pharmacokinetics, pharmacodynamics, and pharmacotherapeutics. Utilization of the nursing process to administer laxatives, sedatives, hypnotics, analgesics, antibiotics, anesthetics, and anesthetic medications. Legal responsibilities of the practitioner. Essential to drug administration is the mastery of drug abbreviations, techniques of administration, and arithmetic calculations.

420B Basic Pharmacology (1) [Cr]
Class hours: 1 lecture.
Prerequisite: Completion of the first semester of the Vocational Nursing Program or Vocational Nursing 420A or application to the program.
Concurrent: Vocational Nursing 420B, 430.
Pharmacological agents which affect the cardiovascular, gastrointestinal, respiratory, endocrine systems, and treat mental and emotional disorders. Generic, trade names, uses, dosages, routes, actions, and adverse effects emphasized. Utilized the nursing process to administer medications in the acute and mental health clinical settings.

420C Basic Pharmacology (1) [Cr]
Class hours: 1 lecture.
Prerequisite: Completion of two semesters of the Vocational Nursing Program or application to the program.
Concurrent: Vocational Nursing 440, 490.
Pharmacological agents which treat diseases or disorders of the urinary, musculoskeletal, neurological, reproductive, and integumentary systems. Immunopharmacology, anti-infective and chemotherapeutic agents. Drugs affecting eye and ears.

425A Nutrition in Health and Disease (1) [Cr]
Class hours: 1 lecture.
Prerequisite: Acceptance into the Vocational Nursing Program or application to the program.
Concurrent: Biological 30A, 424, Mathematics 401, Psychology 1.
Recommended: Vocational Nursing 410, 414, 418, 420A.
Basic elements of nutrition, the nutrients (proteins, carbohydrates, fats, vitamins, minerals, and water) and their functions in the body. Principles of diet therapy for the hospitalized patient.

425B Nutrition in Health and Disease (1) [Cr]
Class hours: 1 lecture.
Prerequisite: Completion of the first semester of the Vocational Nursing Program or Vocational Nursing 425A or application to the program.
Concurrent: Vocational Nursing 420B, 430.
Recommended: Mathematics 401 and Biology 30A for limited enrolled students.
Nutritional needs and threats to the gastrointestinal tract, cardiovascular, endocrine and renal systems. Nutrition in identified topic areas: blood dyscrasias and disabling diseases.

430 Intermediate Medical-Surgical Nursing (15) [Cr]
Class hours: 8 lecture; 21 laboratory.
Prerequisite: Completion of first semester of Vocational Nursing Program or equivalent with minimum grades of C.
Concurrent: Vocational Nursing 420B, 425B.
Recommended: Mathematics 401 and Biology 30A for limited enrolled students.
Nutritional needs and threats to the gastrointestinal tract, cardiovascular, endocrine and renal systems. Nutrition in identified topic areas: blood dyscrasias and disabling diseases.

440 Growth and Development: Maternity-Pediatric Nursing (7) [Cr]
Class hours: 4 1/2 lecture; 7 1/2 laboratory.
Prerequisite: Completion of two semesters of the Vocational Nursing Program or equivalent with minimum grades of C.
Concurrent: Vocational Nursing 420C, 450.
Recommended: Vocational Nursing 420C, 450.
Recommended: Biology 30A, 424, Psychology 1.
Conception through postpartum, identifying the needs of the newborn and the family. Postpartum complications, characteristics of preterm, normal and postmature infants. Congenital disorders of the newborn. Growth, development and nutrition of infant through adolescence. Utilizing the nursing process, disease conditions are assessed and care provided. Maslow's hierarchy of human needs guides the assessment of patient's needs. Field trips required as part of this course.

441A Development of Clinical Vocational Nursing Skills (1)
This course is offered only on a credit/no credit basis.
Class hours: 3 self-paced laboratory.
Prerequisite: Admission to the Vocational Nursing Program.
### Philosophy (PHIL)

**70 Introduction to Philosophy (3)**
- Class hours: 3 lecture.
- Recommended: Eligibility for English 1A.
- Transfer Credit: CSU; UC.
- Prerequisite: Vascular Nursing 420A,B,C and Mathematics 401 or equivalent with minimum grades of C (may be taken concurrently).

**72 Seminar in Ethics (3)**
- Class hours: 3 lecture.
- Recommended: Philosophy 70; eligibility for English 1A.
- Transfer Credit: CSU; UC.
- Prerequisite: Vascular Nursing 420C, 440. All components of the nursing process are utilized to identify threats and to provide care to patients with musculoskeletal, neurological, urinary, integumentary, visual or auditory problems. Field trips required as part of this course.

**492L Special Topics Laboratory: Vascular Nursing (V, 1, 2, 3, 4, 5, or 6)**
- Class hours: 3 lecture.
- Recommended: Eligibility for English 1A.
- Transfer Credit: CSU; UC.
- Prerequisite: Vascular Nursing 420A,440 (may be taken concurrently). Current Cardiopulmonary Resuscitation Card and current Health Form.

**496 Occupational Work Experience: Vascular Nursing (1, 2, 3, or 4)**
- Class hours: 5, 10, 15, or 20 hours employment per week.
- Occupational work experience that provides new or expanded learning opportunities or responsibilities directly related to the student’s major. Career and professional development seminars include study of knowledge, judgments, skills and attitudes essential for success in the world of work. May be taken four times to a maximum of 16 units regardless of the unit combination. May require corequisites and/or prerequisites based on the content of the course.

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### Photography (PHOTO)

**1 History of Photography (3) [Cx]**
- Class hours: 3 lecture.
- Transfer Credit: CSU; UC.
- History and appreciation of photography as a medium of artistic and social communication.

**10 Beginning Photography (4) [Cx]**
- Class hours: 3 lecture.
- Transfer Credit: CSU; UC.
- Instruction in the basic principles of black-and-white and color slide photography with darkroom experience in photography relating to the use of photography in both fine art and mass media. Students must furnish an adjustable camera.
Physical Education (PE)

The physical education program is designed to fulfill the Physical Education, Recreation and Wellness requirement for graduation and to provide a basic program by which students may improve their physical condition, secure useful neuromuscular development, and gain recreational skills and interests which will continue throughout life.

The Physical Education, Recreation and Wellness requirement, a minimum of three units, may be met with the following Physical Education classes:

- Physical Education Activity: all one-half and one-unit activity classes.
- Physical Education Program: all two-unit team sports.
- Physical Education Lecture: 4, 10, 14, 15, 20, 23, 31.
- Physical Education Team: all two-unit team sports.
- Physical Education Activity: all one-half activity classes.

Train Credit: CSU
Continuation of Photography 50. Emphasizes the application of color, and other knowledge learned in Photography 50, to a more advanced commercial and artistic application. May be taken three times for credit.

77 Photography Laboratory (1)
Class hours: 3 laboratory.
Corequisite: Concurrent enrollment in another Chaffey College photography class.
Transfer Credit: CSU
Credit is for a laboratory for the current photography student who wishes to increase skills through the use of the photo-lab facility. May be taken only four times.

92 Special Topics: Photography (3, 2, 3, 4, 5, or 6)
Class hours: 6, 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU
Special-interest course, of varying length, for students who wish an introduction to a particular aspect of photography for personal use or leisure activity. May be skill-oriented or informational. Topics determined by the instructor. See class schedule for emphasis. May be taken only six times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

422 Wedding Photography (2)
Class hours: 1/2 lecture, 1/4 laboratory.
Precorequisite: Photograph 10 or equivalent with a minimum of C.
Theory and practice in the basic techniques of shooting weddings. Seeing will be emphasized—the ability to refine what already exists—as well as how light, composition and posing can be used to "make" creative images. Cameras, lighting, lenses, films, filters, special effects and business procedures and practices are included.

456 Computers and Photography (4)
Class hours: 3 lecture, 3 laboratory.
Precorequisite: Photography 10 or Art 67A.
Photography course combining new computer imaging technology with photography and related equipment and software. Using computers, students will input various photographic images to be manipulated or enhanced. The completed images will be recorded on photographic material for final presentation. Issues of electronic imaging will be explored both technically and aesthetically. May be taken three times for credit.

Physical Education Activity: all one-half and one-unit activity classes.

- Physical Education Activity: all one-half activity classes.
- Physical Education Lecture: 4, 10, 14, 15, 20, 23, 31.
- Physical Education Team: all two-unit team sports.
- Physical Education Activity: all one-half activity classes.

Train Credit: CSU
Continuation of Photography 50. Emphasizes the application of color, and other knowledge learned in Photography 50, to a more advanced commercial and artistic application. May be taken three times for credit.

Clothing worn in physical education classes must be furnished by the student.

PHYSICAL EDUCATION: ACTIVITY

Train Credit: CSU
UC credit limitations. See counselor.
Class hours: 1/2 lecture, 1/4 laboratory-activity for 1 unit unless other wise specified. Activity courses have no prerequisite unless specified.

1A Beginning Tennis (1)
Rules, court etiquette, history, and fundamental skills.

1B Advanced Tennis (1)
Prerequisite: Physical Education 1A or equivalent with a minimum grade of C. Rules, court etiquette, history, and advanced skills.

2 Badminton (1)
Rules, etiquette, history, and fundamental skills.

3 Beginning Golf (1)
Basic skills and course etiquette.

4 Handball (1)
Basic rules, strategies, and fundamental skills.

5 Racquetball (1)
Rules, skills, and strategies.

6 Swimming (1)
Swimming skills. Several different strokes are taught according to skill levels.

7 Springboard Diving (1)
Recommended: Previous diving or gymnastic background. Basic techniques in dry-land training, board work, and entries into the water. Emphasis on required dives.

9 Bowling (1)
Basic skills, rules, and etiquette.

10 Archery (1)
Basic skills, rules, and etiquette.

20A Volleyball (1)
Rules, court etiquette, history, and basic skills.

20B Advanced Volleyball (1)
Prerequisite: Previous volleyball experience. Advanced skills, techniques, and information to use in offense and defense patterns.

21A Slow Pitch Softball (1)
Basic skills, rules, and etiquette.

21B Advanced Slow Pitch Softball (1)
Prerequisite: Physical Education 1A or equivalent with a minimum grade of C. Advanced skills, rules, and strategies.

22 Basketball (1)
Rules, court etiquette, basic offensive and defensive positions, and basic passing and dribbling techniques.

23 Soccer (1)
Kicks, dribbles, passes, ball control, and patterns of play.

30 Body Building (1)
Class hours: 3 self-paced laboratory. Safety and proper use of body-building equipment and how to perform the drills and exercises necessary for proper toning and conditioning of the body.

30A Body Building (1)
Class hours: 1/2 laboratory. Safety and proper use of body-building equipment and how to perform the drills and exercises necessary for proper toning and conditioning of the body. May be taken four times for credit.

31 Low Impact Aerobics (1)
High energy, low impact, aerobic exercises, good posture, proper warmups and cool-down, strength, flexibility, and endurance exercise. Designed for beginning students of body conditioning.

32 Body Conditioning (1)
Methods of evaluation of total body fitness. Develops strength and flexibility of the body and sets up goals. Body mechanics in everyday activities.

33 Yoga (1)
Breath, postures, and relaxation techniques to improve health and fitness levels of the mind and body. Emphasis on gaining flexibility, muscle strength, endurance, and coordination through the physical postures. Relaxation techniques incorporated for stress reduction and mental calm.

34 Introduction to Self-Defense and Personal Safety (1)

35 Karate and Athletic Conditioning (1)
Recommended preparation: Previous martial arts experience, or athletic training in a sport skill, or athletic conditioning.
Skill development, coordination, strength and mobility in basic karate technique with application of athletic conditioning and training methodology.

45A Ski Conditioning and Orientation (3)
Orientation and conditioning for the sports of snow skiing, cross country skiing, snowboarding, water skiing, wakeboarding, and knee boarding. Designed for skiers at any level; focus of instruction on improving and cross-training from one sport to another.

92 Special Topics: Physical Education (3, 2, 3, 4, 5, or 6)
Class hours: 6, 1, 2, 3, 4, 5, or 6 lecture.
Special-interest course of varying length for students who wish further exploration in specific areas of physical education. Topics will be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

PHYSICAL EDUCATION: ADAPTIVE

Train Credit: CSU
UC credit limitations. See counselor.

1 Self Defense for Students with Disabilities (2)
Class hours: 1 lecture, 3 laboratory.
Prerequisite: Students with specific disabilities and educational limitations must have a physician's recommendation for class activities. Personal safety including awareness, assessment and action in self-defense. Physical skills required to improve physical fitness level.

2 Wheelchair Basketball for Students with Disabilities (2)
Class hours: 1 lecture, 3 laboratory.
Prerequisite: Students with specific disabilities and educational limitations must have a physician's recommendation for class activities. Prepares students to complete in the sport of wheelchair basketball using national and international wheelchair basketball rules.
4 Racquetball for Students with Disabilities (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Students with specific disabilities and educational limitations must have a physician's recommendation for class activities.
Prepares students with disabilities to learn the basic skills in the sport of racquetball using adapted rules and specialized equipment. 835.10

5 Golf for Students with Disabilities (2)
Class hours: 1 lecture; 3 laboratory.
Recommended preparation: Students with specific disabilities and educational limitations must have a physician's recommendation for class activities.
Prepares students with disabilities to learn golf and in some cases be screened to participate in this sport. Emphasis on specialized equipment and compensatory instructional strategies. 835.10

6 Archery for Students with Disabilities (2)
Class hours: 1 lecture; 3 laboratory.
Recommended preparation: Students with specific disabilities and educational limitations must have a physician's recommendation for class activities.
Prepares students with disabilities to learn archery using specialized adapted equipment and compensatory techniques. 835.10

7 Wheelchair Tennis for Students with Physical Disabilities (2)
Class hours: 1 lecture; 3 laboratory.
Recommended preparation: Students with specific disabilities or educational limitations must have a physician's recommendation for class activities.
Prepares students with disabilities to compete in the sport of tennis using rules adapted for physical limitations. 835.10

8 Body Building for Students with Disabilities (1)
Class hours: 1 lecture; 1 laboratory.
Recommended preparation: Students with specific disabilities and educational limitations must have a physician recommendation for class activities.
Weight training to improve muscle to fat ratio. Body composition assessments will evaluate progress. 835.10

9 Body Conditioning for Students with Disabilities (2)
Class hours: 1 lecture; 3 laboratory.
Prerequisite: Physical Education: Adaptive 8. Students with specific disabilities and educational limitations must have a physician’s recommendation for class activities.
Physical fitness cardiovascular conditioning, muscles strength and endurance, flexibility, individualized exercise prescriptions, safety, and appropriate use of adapted fitness equipment. 835.10

10 Aquatics for Students with Disabilities (1)
Class hours: 1 lecture; 1 laboratory.
Prerequisite: Students with specific disabilities and educational limitations must have a physician’s recommendation for this course.
Improve the range of motion of joints and cardiovascular fitness for students with disabilities. Class is held in a four-foot-deep heated pool. A chair lift provides easy transfer. 835.10

11 Bowling for Students with Disabilities (1)
Class hours: 1 lecture; 1 laboratory-activity.
Prerequisite: Students with specific disabilities and/or educational limitations must have a physician’s recommendation for class activities.
Prepares students with disabilities to participate and compete in the sport of bowling. Specialized equipment to compensate for physical limitations if necessary. 835.10

PHYSICAL EDUCATION: LECTURE

1 Introduction to Physical Education (2)
Class hours: 2 lecture.
Transfer Credit: CSU; UC. Introduction to the required physical education program and its relationship to the entire educational program. A guide to students in making a choice whether or not they want physical education as their chosen field of study. 835.30

2 Introduction to Athletic Training (3)
Class hours: 2 lecture; 1 laboratory.
Recommended preparation: Current first-aid and cardiopulmonary resuscitation cards.
Transfer Credit: CSU; UC. Principles and knowledge necessary to provide fundamental health care for athletics for those not directly involved with sports medicine. Supplements first-aid background while stressing a preventive approach. 835.00

3 Adapted Wellness and Fitness (2)
Class hours: 2 lecture; 1 laboratory.
Prerequisite: Students with specific disabilities and/or educational limitations must have a physician’s recommendation for class activities.
Transfer Credit: CSU. Introduces students with disabilities to all the major topics of wellness. Development of individualized assessment and wellness plans. 835.00

4 Introduction to Physical Fitness and Wellness (2)
Class hours: 2 lecture; 1 laboratory.
Transfer Credit: CSU. Theoretical and physical aspects of physical fitness and wellness for the development of a complete lifetime fitness program. 835.30

6 Reflexology (2)
Class hours: 2 lecture.
Transfer Credit: CSU. Reflexology as related to exercise and stress related circulation. Analysis of theories, practices and practical application of reflexology and how they relieve stress, tension, improve blood supply and promote the unblocking of nerve impulses. 835.00

7A First Aid (2)
Class hours: 2 lecture.
Transfer Credit: CSU; UC.
Transfer Credit: CSU. Theoretical and physical aspects of physical fitness and wellness for the development of a complete lifetime fitness program. 835.30

7B Advanced First Aid and Emergency Response (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Designed primarily for the person responsible for the emergency care of the sick and injured prior to authorized medical attention. Meets the American Red Cross requirement for certification (certified through Chaffey College). 835.00

9 Water Safety Instructors Course (3)
Class hours: 3 lecture.
Prerequisite: A current advanced Life Saving and Water Safety Certificate. Ability to swim the nine basic strokes with proficiency.
Recommended preparation: Physical Education: Lecture 14 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC. Designed primarily for special-interest groups responsible for teaching life saving and water safety and all levels of swimming skills. Information and practice to develop functional teaching skills required by cities, counties and states for all waterfront programs. Safety consciousness, accident prevention, rescue, and all aquatic skills. Meets the American National Red Cross requirements for certification. 835.00

10 Therapy of Aerobic Fitness Instruction (2)
Class hours: 2 lecture.
Transfer credit: CSU. Theory and skills necessary designed to instruct a safe and effective aerobic fitness program. Basic anatomy and physiology, kinesiology, and injury prevention. 835.00

11 Football Film Analysis (2)
Class hours: 2 lecture.
Transfer Credit: CSU. Comprehensive film review of football techniques by football coaches. For physical education majors who want to coach football. Films reviewed from four-year colleges, community colleges, and high schools. May be taken two times for credit. 835.00

12 Principles and Practices of Officiating Team Sports (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor. Study of the principles of officiating in team sports, including interpretation of rules and analysis of good mechanics of officiating. Brief history and research of the sport to seek aids to better officiating. 835.00

13 Professional Activities: Coaching Team Sports (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor. Information and experience for prospective players, coaches, and teachers. Introduction to the physical, mental, and emotional aspects of playing and coaching competitive sports. 835.00

14 Lifeguard Training (3) (Formerly Physical Education Lecture 8)
Class hours: 3 lecture.
Recommended preparation: Swim 500 yards continuously using each of the following strokes for at least 100 yards: crawl, breaststroke, sidestroke. Tread water for two minutes using legs only. Submerge to a depth of seven feet and return to a predetermined object to the surface. Transfer Credit: CSU. Designed primarily for special-interest groups responsible for preventing water accidents and making water rescues. Information and practice to develop functional water rescues and accident prevention required by lifeguard crews. Meets the American Red Cross requirements for certification and includes certification in First Aid and CPR. 835.00

15 Diet and Fitness (3)
(Formerly also as Consumer Studies 15)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor. A life style approach to fitness including the study of nutrition, exercise, prevention, increased cardiovascular endurance, proper weight control, increased stress resistance, stress management, and considerations of aging on the body. 835.00

20 Introduction to Holistic Health of Various Cultures (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Transfer Credit: CSU.
Holistic health practices and principles from various cultures with special emphasis on lifelong learning of stress reduction; the relationship between the mind and body and its effect upon health and the healing process. 835.00

23 Multicultural Wellness and Fitness (3)
Class hours: 3 lecture.
Transfer Credit: CSU. Analysis of cultural attitudes toward wellness; nutrition; physical health; mental health as it influences health education, cultural theories of disease and treatment; special health problems of cultural groups. Improvement of communication between the health professional, the student, and the community. 835.00

31 Teaching Fitness and Wellness to Older Adults (3)
(Formerly Physical Education Lecture 30)
(Formerly also as Gerontology 31)
Class hours: 3 lecture.
Transfer Credit: CSU. For persons who are responsible for and/or interested in teaching older people exercises designed primarily for their physical activity needs. 835.00
use and showing them how to exercise properly. Programs dealing with those physical exercises necessary for an active healthful life, endurance exercises to condition the cardiovascular system, calisthenics chosen for strength areas, and stretching positions to improve joint mobility. Rehabilitative exercises for the cardiac patient and the stroke victim. Safety precautions and accident prevention for the elderly during physical exercise. Also includes chair and bed exercises for persons who cannot move about.

835.00

92 Special Topics: Physical Education

119

Recommended preparation: A course in physical education or equivalent with a minimum grade of C.

Class hours: 1, 2, 3, 4, 5, or 6 lecture.

Recommended preparation: Previous participation in competitive basketball.

9 Independent Study: Physical Education (3)

Class hours: 3 lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

98 Independent Study: Physical Education (3)

Class hours: 3 lecture.

Transfer Credit: CSU; UC credit limitations. See counselor.

Designed for the capable, well-motivated student. Each student develops a project in a physical education area of his/her own interest. Student-instructor/division chairperson agreement as to the nature and extent of the project must be reached before the student may enroll.

835.50

400 Sports Education and Athletic Orientation to College (2)

(Formerly Physical Education Lecture 300)

Class hours: 2 lecture

In-depth analysis of personal, professional, and academic issues relative to achievement potentials for student-athletes. Designed to increase student-athlete’s knowledge of NCAA regulations, athletic program requirements as well as profiency and retention in college. Learning styles, study techniques, motivation, library usage, and college programs and services. Introduction to the variety of segments of higher education in California. Instruction and assignments designed to meet the needs of students from diverse cultures and backgrounds.

835.00

421 Racism and Sexism in Sports (3)

Class hours: 3 lecture

Dynamics of racism and sexism in sports. Institutional, cultural, and psychological aspects of racism and sexism. An examination of racist and sexist attitudes, behavior, and policies in sports.

835.00

PHYSICAL EDUCATION: TEAM

Transfer Credit: CSU; UC credit limitations. See counselor.

835.00

Physical Education Team 1 through 11: 1/2, 1, 2, 3, 4, 5, or 6

11 Competition Stroke, Swimming Team Activity, Men and Women (1)

Recommended preparation: Previous water polo experience, or above average swimming ability.

10 Tennis Team Activity, Men and Women (1)

Basic tennis rules and stroke skills for competitive play.

835.10

11 Competition Stroke, Swimming Team Activity, Men and Women (1)

Recommended preparation: Previous water polo experience, or above average swimming ability.

10 Tennis Team Activity, Men and Women (1)

Basic tennis rules and stroke skills for competitive play.

835.10

119 Volleyball Team Activity, Women (1)

Recommended preparation: Competitive volleyball background.

Designed for women interested in learning competitive volleyball and joining the women’s intercollegiate team.

835.10

3 Basketball Team Activity, Women (1)

History, rules, and fundamental skills needed for competitive women’s basketball.

835.10

4 Softball Team Activity, Women (1)

Prerequisite: Past competitive softball experience. Overall development of skills and knowledge needed for competitive softball play.

835.10

5 Water Polo Team Activity (1)

Prerequisite: Previous water polo experience or advanced swimming certificate or equivalent. Rules, etiquette, history, and advanced skills of water polo designed for perspective water polo team participants.

835.10

6 Basketball Team Activity, Men (1)

Recommended preparation: Previous participation in competitive basketball.

835.10

7 Basketball Team Activity, Men (1)

Recommended preparation: Previous participation in competitive basketball.

835.10

8 Track Team Activity, Men and Women (1)

Prerequisite: Student must demonstrate ability at required levels of skill in track and field. Specific experience in track and field. Emphasis on fundamental theory and skills.

835.10

15 Wheelchair Basketball Team (2)

Prerequisite: Students with specific disabilities and/or educational limitations must have a physician’s recommendation for class activities. Advanced skills for students who will compete on a wheelchair basketball team.

835.10

21 Football Team Class (2)

Recommended preparation: Competitive football background. Information and practice to develop basic skills and techniques. For students who wish to compete in the interscholastic sport of football but is open to all.

835.10

22 Volleyball Team Class, Women (2)

Recommended preparation: Competitive volleyball background. Basic functional volleyball skills and techniques. For students who wish to compete in the interscholastic sport of volleyball but is open to all.

835.10

23 Basketball Team Class, Women (2)

Prerequisite: Past competitive basketball experience. History, rules, and fundamental skills for intercollegiate competition.

835.10

24 Softball Team Class, Women (2)

Prerequisite: Past competitive softball experience. Skills and knowledge needed for competitive softball play at the intercollegiate level.

835.10

25 Water Polo Team Class (2)

Prerequisite: Previous water polo experience or advanced swimming of equivalent. Rules, etiquette, history, and advanced skills.

835.10

26 Basketball Team Class, Men (2)

Recommended preparation: Competitive basketball background. Basic skills and techniques. For students who wish to compete in the interscholastic sport of basketball but is open to all.

835.10

27 Basketball Team Class (2)

Recommended preparation: Competitive baseball background. Designed for men interested in playing and learning competitive baseball at the college level.

835.10

28 Track Team Class, Men and Women (2)

Prerequisite: Student must demonstrate ability at required levels of skill in track and field. Theories, principles, philosophies, and practical application for competition in track.

835.10

30 Tennis Team Class (2)

Rules, court etiquette, history, and advanced skills.

835.10

31 Swimming Team Class, Men and Women (2)

Recommended preparation: Above average swimming ability. Rules and fundamental skills involved in competitive swimming strokes.

835.10

Physical Education Team 41 through 51: Arrange 175 hours.

41 Intercollegiate Football (2)

Recommended preparation: Competitive football background. Basic and advanced skills for competing in football contests. Information and daily practice to develop a high level of proficiency in football skills and techniques.

835.50

42 Intercollegiate Volleyball Team, Women (2)

Opportunity for women to compete at the intercollegiate level in volleyball.

835.50

43 Intercollegiate Basketball Team, Women (2)

Opportunity for women to compete at the intercollegiate level in basketball.

835.50

44 Intercollegiate Softball Team, Women (2)

Opportunity for women to compete at the intercollegiate level in softball.

835.50

45 Intercollegiate Water Polo Team (2)

Prerequisite: Previous water polo experience, or above average swimming ability. Competitive intercollegiate pole team involving skills and knowledge of all aspects of competitive play.

835.50

46 Intercollegiate Basketball Team, Men (2)

Opportunity for men to compete at the intercollegiate level in basketball.

835.50

47 Intercollegiate Baseball Team, Men (2)

Opportunity for men to compete at the intercollegiate level in baseball.

835.50

48 Intercollegiate Track Team, Men and Women (2)

Opportunity for men and women to compete at the intercollegiate level in track.

835.50

49 Intercollegiate Cross Country Team, Men and Women (2)

Opportunity for men and women to compete at the intercollegiate level in cross country running.

835.50

50 Intercollegiate Tennis Team, Men and Women (2)

Opportunity for men and women to compete at the intercollegiate level in tennis.

835.50

51 Intercollegiate Swimming Team, Men and Women (2)

Recommended preparation: Above average swimming ability. Opportunity for men to compete at the intercollegiate level in swimming.

835.50

Physics (PHYS)

5 The Ideas of Physics (3)

Class hours: 3 lecture.

Prerequisite: Mathematics 410 or equivalent with a minimum grade of C.
Position, velocity, and acceleration of objects will be described using vectors. The concepts of mass, force, Newton's Laws of Motion, momentum, impulse, work, energy, and power will be used to describe: straight line motion, projectile motion, circular motion, collisions, and vibrations. Forces and pressures in static and moving fluids will be studied. Rotational motion will include: torque, moment of inertia, angular momentum, and static equilibrium. For students majoring in a physical science or in engineering.

1902.00

46 Physics for Scientists and Engineers II (5) [Cx]
Class hours: 4 lecture; 3 laboratory.
Prerequisite: Physics 45 or equivalent with a minimum grade of C. Mathematics 65B or equivalent.
Corequisite: Mathematics 65B.
Transfer Credit: CSU; UC credit limitations. See counselor.
(CAN PHYSSEQ B)
Electromagnetic concepts. Electric force, electric field, Gauss' law, electric potential energy, electric potential, capacitance, resistance, electromotive force, RC circuits, magnetic field, magnetic force, Ampere's law, Faraday's law, inductors, LC circuits, and LCR circuits. For students majoring in a physical science or in engineering.
1902.00

2 Introduction to Political Science (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Use of methods and concepts to analyze political institutions, behavior, cultures, and ideologies. Various political systems (American and non-American) and the factors that lead to stability, change, and revolution.
2207.00

3 California Politics and Culture (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
State, county, and municipal government with an emphasis on California's unique heritage, culture, people, and politics.
2207.00

7 International Relations (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to recent and contemporary international politics including foreign policies of the major countries, problems of developing nations and of the more important tension areas.
2207.00

10 Comparative Politics (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Political systems of industrialized countries and the Third World; analysis of the cross cultural similarities and differences of various political systems.
2207.00

17 Model United Nations (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Preparation for the Model United Nations Conference of the Far West to be held during the Spring. Students study concepts and principles of international relations, international organizations, the rules and regulations that govern the United Nations, current international problems and the background of the country Chaffey is assigned to represent. May be taken three times for credit.
2207.00

21 Urban Politics (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Analysis of the politics of urban and suburban areas in the United States, other industrialized countries, and the Third World. Important issues such as unemployment, poverty, racism, and as the impact of economic change will be examined.
2207.00

12 Law and Society (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Analysis of law, its functions, cultural variations, legal theories of justice, and law as a tool of social change. A comparative analysis of Western and Third World legal systems will also be included.
2207.00

35 The Election Campaign (3)
(Also available as Economics 35 and Social Science 35)
Class hours: 2 1/2 lecture; 1/2 laboratory.
Transfer Credit: CSU.
Learning the democratic political process through direct involvement in an election campaign. Review of political and economic theories that affect the structure and operations of representative democracy. Relative importance of issues, party affiliation, economics, personalities, ethics, and organization is addressed. Student may choose to participate by voting for a particular candidate in a partisan or
Professional Nursing

See Nursing

Psychology (PSYCH)

1 Introduction to Psychology (3) [Cx]
Class hours: 3 lecture.
Transfer Credit: CSU; UC. (CAN PSY 2)
Survey of modern psychology, including research methods of psychology, perception, learning, motivation, personality, abnormal behavior and therapy, social behavior, and brain mechanisms in behavior and consciousness. 2001.00

5 Personal and Social Awareness (3)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Factors affecting personal and social awareness and formal and informal means of assessing them. Sessions are interactive, incorporating perspectives drawn from the various schools of psychological thought and the experiences of individuals in the class. 2001.00

20 Developmental Psychology: Childhood and Adolescence (3)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Study of human development from conception through adolescence. The physical, social and cognitive development of the growing child and adolescent are examined in light of contemporary research and theory. 2001.00

21 Developmental Psychology: Adulthood and Aging (3)
(Also available as Gerontology 21)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Study of human development in adulthood with particular emphasis on biological and environmental influences. Social, cognitive and physical changes are examined in light of contemporary research and theory. Designated to help persons of all ages understand the aging process from a psychological perspective. 2001.00

25 Developmental Psychology: Lifespan Development (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
An overview of human development from conception through aging with particular emphasis on biological and environmental influences. Social, cognitive and physical changes in the growing child, adolescent and adult are examined in light of contemporary research and theory. 2001.00

40 Elementary Physiological Psychology (3)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Brain and nervous system structure and function in psychological processes such as perception, learning, memory, motivation, emotion, mental disorders, language, cognition, and consciousness. 2001.00

45 Psychoactive Drugs: The Chemistry of Consciousness (3)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
The major classes of psychoactive drugs, their subjective effects, and the mechanisms of their actions on the brain. Basic concepts in nerve cell psychology and brain structure and function requisite for an understanding of drug actions. 2001.00

55 Abnormal Psychology (3)
Class hours: 3 lecture.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Study of human behavior from the perspective of interaction and socialization. Introduction to methods and content of social psychology with emphasis on social behavior in small and large groups, interpersonal relations, attitudes and beliefs, persuasion, and social influence. 2001.00

80 Introduction to Research Methods in Psychology (4)
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Psychology 1 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Survey of research methods currently used in psychology – introspection, naturalistic observation, case study, and laboratory experiments. Designed for the psychology major and others who require familiarity with such research techniques. Emphasis on student participation in conducting research and analyzing data. 2001.00

92 Special Topics: Psychology (1, 2, 3)
Class hours: 1, 2, or 3 lecture.
Transfer Credit: CSU; UC.
For those students who would like to explore certain special areas of psychology in greater depth. Wide variety of topics offered, with the particular emphasis left up to the instructor. Psych 292 may be taken two times for credit; however, the emphasis must be different each time. 2001.00

Radiologic Technology (X-Ray) (RADTEC)

Students must apply for admission to the Radiologic Technology program and must pay for a physical examination.
Prerequisite for Radiologic Technology courses: Admission to the Radiologic Technology program.

10 Anatomy and Radiographic Positioning I (3)
(Formerly Radiologic Technology 410)
Class hours: 3 lecture.
Transfer Credit: CSU.
Anatomical positioning of the chest, upper and lower extremities, shoulder and pelvic girdle, abdomen and intravenous urography. 1225.00

10L Laboratory for Anatomy and Radiographic Positioning I (1)
(Formerly Radiologic Technology 411L)
Class hours: 1 laboratory.
Transfer Credit: CSU.
Simulated positioning of the chest, upper and lower extremities, shoulder and pelvic girdle, abdomen and intravenous urography. 1225.00

15 Medical Procedures for Radiologic Technologists (2)
(Formerly Radiologic Technology 415)
Class hours: 2 lecture.
Prerequisite: A current provider cardiopulmonary resuscitation card.
Transfer Credit: CSU.
Simulation of medical procedures used within the diagnostic imaging department. Emphasis on medical and surgical asepsis. 1225.00

20 Radiologic Science and Protection (3)
(Formerly Radiologic Technology 420)
Class hours: 3 lecture.
Transfer Credit: CSU.

20L Laboratory for Radiologic Science and Protection (3)
(Formerly Radiologic Technology 421L)
Class hours: 3 laboratory.
Transfer Credit: CSU.
On-campus radiographic laboratory for the performance of a series of experiments to illustrate radiation therapy, radiographic exposure factors and methods for radiation safety and protection of the patient and operator. 1225.00

25 Anatomy and Radiographic Positioning II (3)
(Formerly Radiologic Technology 425)
Class hours: 3 lecture.
Transfer Credit: CSU.
Anatomy and radiographic positioning of the spine and bony thorax and the gastrointestinal tract. The use of computers in radiography. 1225.00

30 Radiographic Clinical Education I (1)
Class hours: 3 laboratory.
Transfer Credit: CSU.
Clinical application of theory as it applies to patient care, patient flow, immobilization and medical procedure skills. Departmental procedures. 1225.00

35 Radiographic Imaging (4)
(Formerly Radiologic Technology 435)
Class hours: 4 lecture.
Transfer Credit: CSU.
The art and science of radiographic imaging using a variety of film/screen combinations. The use of exposure control charts, grids and filtration in imaging. State and federal regulations. Analyzing the image for optimum radiographic quality. Quality assurance and Quality Control. 1225.00
36 General Radiographic Laboratory (1)  
(Formerly Radiologic Technology 431)  
Class hours: 3 laboratory.  
Transfer Credit: CSU.  
On-campus radiographic laboratory for the performance of a series of experiments to illustrate radiation theory, radiographic image quality, radiographic-contrast control, and simulated patient positioning.  
1225.00

40 Radiographic Clinical Education II (8)  
(Formerly Radiologic Technology 441)  
Class hours: 24 laboratory.  
Transfer Credit: CSU.  
Guided practice in the application of radiologic technology to patients in the hospital environment.  
1225.00

50 Radiographic Clinical Education III (6)  
(Formerly Radiologic Technology 451)  
Class hours: 33 laboratory.  
Transfer Credit: CSU.  
Guided practice in the application of radiographic technology to patients in the hospital environment.  
1225.00

55 Radiographic Equipment and Clinical Application II (4)  
(Formerly Radiologic Technology 455)  
Class hours: 2 lecture.  
Transfer Credit: CSU.  
Development of general radiographic and fluoroscopic equipment application. Exposure techniques and patient-technologist relations.  
1225.00

60 Radiographic Clinical Education IV (11)  
(Formerly Radiologic Technology 461)  
Class hours: 55 laboratory.  
Transfer Credit: CSU.  
Guided practice in the application of radiologic technology to patients in the hospital environment.  
1225.00

65 Anatomy and Radiographic Positioning III (5)  
(Formerly Radiologic Technology 465)  
Class hours: 5 lecture.  
Transfer Credit: CSU.  
Anatomy and radiographic positioning of the patient for the calvarium, facial area, sinuses, and temporal bone including special examinations for each of these areas. Neurons, synapses, and special methods of film enhancement are also covered.  
1225.00

70 Radiographic Clinical Education V (11)  
(Formerly Radiologic Technology 471)  
Class hours: 55 laboratory.  
Transfer Credit: CSU.  
Guided practice in the application of radiologic technology to patients in the hospital environment.  
1225.00

75 Pathology and Special Radiographic Procedures (6)  
(Formerly Radiologic Technology 475)  
Class hours: 5 lecture.  
Transfer Credit: CSU.  
Defines special procedure radiography within diagnostic radiology. A review of anatomy and physiology of various systems of the body, in-depth study of positioning, patient preparation, special procedure equipment, accessories, and related subspecialties of radiography. Investigation of contrast media, their use and contraindications. Study of pathology as it relates to radiographic diagnosis. Radiology and radiation protection are reviewed.  
1225.00

80 Radiographic Clinical Education VI (4)  
(Formerly Radiologic Technology 481)  
Class hours: 2 laboratory.  
Transfer Credit: CSU.  
Guided practice in the application of radiologic technology to patients in the hospital environment.  
1225.00

85 Development of Advanced Radiographic Skills II (2)  
(Formerly Radiologic Technology 485)  
Class hours: 2 lecture.  
Transfer Credit: CSU.  
Application of radiographic theory to develop proficiency in routine and advanced radiographic skills. Prepares the student for the written certifying examinations at the state and national level.  
1225.00

Reading (READ)  
10 Reading Laboratory (0)  
Class hours: 2 laboratory.  
Laboratory required of all students enrolled in Reading 50 or Reading 350.  
4930.70

50 Advanced Reading (4)  
Class hours: 4 lecture.  
Corequisite: Reading 10.  
Recommended: A score of 17–35 on the College Board reading test (given during assessment).  
Transfer Credit: CSU.  
Program of systematic training to develop literal and critical comprehension, vocabulary and speed skills for advanced students.  
4930.70

300 Introduction to Reading (1)  
This course is offered only on a credit/no credit basis.  
Class hours: 3 self-paced laboratory.  
Not Degree Applicable.  
Designed to facilitate success in college and the attainment of academic and vocational goals for students with a variety of backgrounds and learning skills. Includes specific reading skills such as locating the main idea, making inferences, and understanding the paragraph. May be taken two times for credit.  
4930.70

301 Basic Reading and Study Skills (1)  
This course is offered only on a credit/no credit basis.  
Class hours: 3 self-paced laboratory.  
Not Degree Applicable.  
Designed to facilitate success in college and the attainment of academic and vocational goals for students with a variety of backgrounds and learning skills. Includes reading skills in comprehension, vocabulary and study skills. May be taken two times for credit.  
4930.70

302 Intermediate Reading and Study Skills (1)  
This course is offered only on a credit/no credit basis.  
Class hours: 3 self-paced laboratory.  
Not Degree Applicable.  
Designed to facilitate success in college and the attainment of academic and vocational goals for students with a variety of backgrounds and learning skills. Includes specific reading skills such as reading comprehension, reading rate and vocabulary. May be taken two times for credit.  
4930.70

303 Basic Critical Reading and Study Skills (1)  
This course is offered only on a credit/no credit basis.  
Class hours: 3 self-paced laboratory.  
Not Degree Applicable.  
Designed to facilitate success in college and the attainment of academic and vocational goals for students with a variety of backgrounds and learning skills. Includes specific reading skills such as reading comprehension, reading rate, and vocabulary. May be taken three times for credit.  
4930.70

350 Reading Improvement (4)  
This course is offered only on a credit/no credit basis.  
Class hours: 4 lecture.  
Corequisite: Reading 10. Recommended preparation. A score between 9–16 on the College Board Reading Test.  
Not Degree Applicable.  
Program of systematic training to develop literal and critical comprehension, vocabulary, and speed for students with average reading skills. May be taken two times for credit.  
4930.70

Real Estate (RE)  
10 Real Estate Principles (3)  
Class hours: 3 lecture.  
Transfer Credit: CSU.  
Fundamentals of real estate covering basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in the specialized courses.  
511.00

Science (SC)  
300 Introduction to Science (1)  
Class hours: 3 laboratory.  
Not Degree Applicable.  
Introduction to some fundamental scientific concepts designed to improve performance in science classes. Eight hour field trip required in addition to normal class meetings.  
1901.30

Social Science (SCS)  
See also courses under Anthropology, History, Philosophy, Political Science, Psychology and Sociology.

10 Statistics for Social Science (4)  
Class hours: 3 lecture, 3 laboratory.  
Prerequisite: Two years of high-school algebra or Mathematics 25 or equivalent with a minimum grade of C.  
Transfer Credit: CSU.  
UC credit limitations. See counselor.  
Survey of techniques used to analyze and understand data generated by observation, inquiry, and scientific investigation. Purpose and application of statistics, frequency distributions and graphing, central tendency, variability, percentile, standard scores, the normal distribution, regression, correlation, probability, hypothesis testing, simple and two-factor analysis of variance, and non-parametric techniques.  
2201.00

11 Computer Applications for the Social Sciences (3)  
Class hours: 3 lecture.  
Recommended: Basic word processing knowledge.  
Transfer Credit: CSU.  
A basic understanding of micro-computer functions used in the Social and Behavioral Sciences. Students will prepare academic and research papers according to Social Science standards, and to access specialized resources on the Internet. Introduction to Social Science applications for data analysis; social survey software.  
2104.00

13 Introduction to Social Work and Social Welfare (3)  
Class hours: 3 lecture.  
Recommended: English 1A.  
Transfer Credit: CSU. UC.  
Historical overview of social welfare and as institutional response to social needs. Analysis of current trends and future possibilities. A comprehensive exploration of the scope of social work.  
2104.00

17 Human Sexuality (3)  
Class hours: 3 lecture.  
Recommended preparation: Behavioral science courses.  
Transfer Credit: CSU. UC.  
Interdisciplinary introduction to human sexuality, with an emphasis on sexual values, sexual communication, and sexual relationships. Includes physiological, cross-cultural, sociological, and psychological information, as well as an evaluation of sex research. Lectures are supplemented by class discussion, video presentations, demonstrations.  
2201.00

22 Dying and Death (3)  
(available also as Gerontology 22)  
Class hours: 3 lecture.  
Recommended preparation: Introductory courses in psychology, sociology, anthropology, religion and philosophy.  
Transfer Credit: CSU. UC.  
Life after death – old and new meanings. An interdisci- plinary course with emphasis in the disciplines of sociology, psychology, and philosophy. 2201.00

35 The Election Campaign (3) (Available also as Economics 35, Political Science 35) Class hours: 2 lecture/1 laboratory. Recommend preparation: Political Science 1 and any course in economics.

Transfer Credit: CSU; UC. Learning the democratic political process through direct involvement in an election campaign. Review of political and economic theories that affect the structure and operations of representative democracy. Relative importance of issues, party affiliation, economics, personalities, ethics, and organization is addressed. Student may choose to participate by working for a particular candidate in a partisan or non-partisan race, an initiative or referendum ballot issue, or on behalf of a special interest group that is supporting an issue, a candidate, or a slate of candidates. May be taken four times for credit. 2201.00

40 Retrospective on the 20th Century: World War II (3) (Also available as History 40) Class hours: 3 lecture.

Transfer Credit: CSU; UC. World War II from the perspective of various viewpoints relative to the war’s impact on but not limited to the following: history, sociology, philosophy, literature, the arts, business/technology, psychology, science, political science, religion, economics, and sports. Faculty from different disciplines will present materials relative to their expertise.

90 Seminar: Social Science (3) Class hours: 3 lecture.

Transfer Credit: CSU; UC. Designed to bring together one or more faculty members and a small group of students with a common interest to pursue study of a selected social science topic through the seminar approach. May be taken two times for credit.

92 Special Topics: Social Science (1/2, 1, 2, 3, 4, 5, or 6) Class hours: 1, 1 1/2, 2, 3, 4, 5, or 6 lecture.

Transfer Credit: CSU; UC credit pending. Special-interest course of varying length for students who wish further exploration in specific areas of social science. Topics will be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

98 Independent Study: Social Science (1/2, 1, 2, 3, or 4) Class hours: 1/2, 1, 2, 3, or 4 lecture.

Prerequisite: Acceptance into the program of study.

Transfer Credit: CSU; UC. Special project course designed for the capable, well-motivated student. Choose a social science topic to explore and develop a project or a report. Student-instructor agreement as to the nature and extent of the project must be reached before the student enrolls. May be taken only three times for credit regardless of the unit combination.

Social Work Designee Training

See Gerontology

Sociology (SOC)

See also Social Science courses.

10 Introduction to Sociology (3) Class hours: 3 lecture.

Transfer Credit: CSU; UC. (SAP/CIC 2) Characteristics of social life, the process of interaction, the consequences of group membership, the structure of institutions of modern society, and the conditions affecting social change.

2201.00

11 Popular Culture (3) Class hours: 3 lecture. Recommended preparation: Sociology 10 or Anthropology 3.

Transfer Credit: CSU. Made-to-sell, media-permeated, instantaneously transmitted environments as it reflects and reshapes the way Americans think, buy, eat, play, dress, vote, and interact. Confusion and overlap among entertainment, selling, and culture. Field observation of two or three popular culture settings such as a sports event, a TV studio taping, a mall.

1208.00

14 Sociology of Gender (3) Class hours: 3 lecture. Recommended: Sociology 10.

Transfer Credit: CSU; UC. Role and status of women and men in society, examining issues of gender equity and recent changes that affect the family, education, the economy, law and religious institutions, historical and cross-cultural information. Myths about gender differences and gender inequality.

16 Marriage, Family and Intimate Relationships (3) Class hours: 3 lecture.

Transfer Credit: CSU; UC. Basic issues concerning marriage, family and intimate relationships. Romantic love, mate selection, gender roles, intimacy and communication, sexuality and relationships, parenting, divorce, single parent families, remarriage, and cohabitation. Cross-cultural, social class, and ethnic realities. Changing family patterns and theories relating to the future of the family.

18 Sociology of Aging (3) (Also available as Gerontology 18) Class hours: 3 lecture.

Recommended preparation: Sociology 1.

Transfer Credit: CSU; UC credit limitations. See counselor. Aging as a social process. Age status and inequality; role expectation; gender and ethnic differences. Society’s response to the increasing population of older people. Inter-generational and public policy issues. Cross-cultural data and information on myths about aging. May be taken as Honors Course.

19 Sociology of Deviance (3) Class hours: 3 lecture.

Recommended preparation: Sociology 1.

Transfer Credit: CSU; UC. Deviance in relation to social and cultural causes and consequences. Several theoretical perspectives are considered including anomie, social disorganization, cultural conflict, role theory, and labeling. An evaluation of the consequences of deviant acts for both the actor and society.

20 Sociology of Race and Ethnic Relations (3) Class hours: 3 lecture.

Recommended: Sociology 10.

Transfer Credit: CSU; UC credit limitations. See counselor. Social problems in modern industrial societies. Discussion of the techniques of social problems research. Social deviance, alcohol and drug abuse, crime, poverty, and sexism.

2208.00

70 Social Problems (3) Class hours: 3 lecture.

Prerequisite: Sociology 10 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. (CAN SOC 4) Social problems in modern industrial societies. Discussion of the techniques of social problems research. Social deviance, alcohol and drug abuse, crime, poverty, and sexism.

2208.00

92 Special Topics: Sociology (1/2, 1, 2, 3, 4, 5, or 6) Class hours: 1/2, 1, 2, 3, 4, 5, or 6 lecture.

Transfer Credit: CSU; UC credit pending. Special-interest course of varying length for students who wish further exploration in specific areas of sociology. Topics will be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

2208.00

Spanish (SPAN)

1-2 Elementary Spanish (4-4)

Class hours: 4 lecture.

Prerequisite: For Spanish 2: Spanish 1 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC credit limitations. See counselor. Sequence contains a systematic presentation of language patterns and of the underlying cultural ideas that lead to facility in the four basic skills – aural, oral, reading, and writing. Reading selections introduce various aspects of the life and culture of the Spanish-speaking peoples. Because stress is placed upon early oral-aural competence, the language laboratory is utilized for regular pronunciation drill and the acquisition of speech patterns. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice.

1105.00

3 Intermediate Spanish (4) Class hours: 4 lecture.

Prerequisite: Spanish 2 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. Complex structures of grammar and syntax accompanied by cultural, historic, and literary readings from among noted authors.

1105.00


Prerequisite: Spanish 3 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. Major characteristics of Spanish culture and selected readings from Spanish authors. Survey of Spanish literature from the earliest writings to the present. Discussion and writing about the literature.

1105.00

5 Intermediate Spanish: Hispanic-American Literature (4) Class hours: 4 lecture.

Prerequisite: Spanish 3 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC. Major characteristics of Hispanic-American culture as selected in literary readings from Hispanic-American authors. Survey of Hispanic-American literature from the earliest writings to the present.

1105.00

10 Spanish Language Laboratory (0) Class hours: 1 laboratory.

Corequisite: Spanish 10.

Laboratory required of all students enrolled in Spanish classes.

1105.00

11, 12 Reading, Writing and Grammar for the Speaker of Spanish (4, 4)

Class hours: 4 lecture.

Prerequisite: For Spanish 11 and 12: Spanish 3 or equivalent with a minimum grade of C.

Transfer Credit: CSU; UC credit limitations. See counselor. Designed for those who speak Spanish but need to develop skills of reading, writing, and grammar as well as an awareness of the heritage, culture, and history of the Hispanic world.

1105.00

15, 16 Spanish Conversation (2-2)

Class hours: 2 lecture.

Prerequisite: Spanish 1 or equivalent with a minimum grade of C.

Transfer Credit: CSU. Practice in oral and aural Spanish through monologos and dialogs stressing correct speech patterns and idiomatic expressions. Subjects for extended conversations based on everyday situations and cultural events. Spanish 15 may be taken two times for credit; Spanish 16 may be taken three times for credit.

1105.00

Catalog 1996–97

Spanish 123
92 Special Topics: Spanish Literature, Language and Culture (1, 2, or 3)
Class hours: 1, 2, or 3 lecture.
Recommended preparation: Spanish 2.
Transfer Credit: CSU; UC.
Special interest class of varying length for students who seek further development in specific areas of literature and extended knowledge of the language and culture. Topics of variety offered with particular emphasis determined by the instructor. See class schedule for emphasis. May be taken four times for credit; however, no special-interest, special-topics course may be repeated.
1105.00
98 Independent Study: Spanish Literature (1, 2, or 3)
Class hours: 1, 2, or 3 lecture.
Prerequisite: Spanish 4 or 6 or equivalent with a minimum grade of C or by application to the department.
Transfer Credit: CSU; UC.
Designed for the capable, well-motivated student. Student explores and develops a literary project. Student-instructor agreement as to the nature and extent of the project must be reached before the student enrolls. May be taken only three times for credit regardless of the unit combination.
1105.00

Statistics (STAT)
10 Elementary Statistics (4)
Class hours: 4 lecture.
Prerequisite: Mathematics 25 or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC credit limitations. See counselor.
Frequency distribution, measures of central tendency, measures of variation, elementary probability theory, discrete and continuous random variables, the binomial distribution, the normal distribution, the t-distribution, estimation of the population mean and proportion, testing hypotheses, analysis of variance, chi square analysis, linear regression and correlation.
1705.00

Theatre Arts (TARTS)
1 Introduction to Theatre (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to the world of theatre with emphasis on the dramatic experience, the types of drama, contemporary theatre, the physical theatre, the role of the director and the actor, the technical theatre, and criticism and evaluation of theatre.
1007.00
2 Stage Movement (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Study of physical movement as it relates to the body on stage. Control and use of parts of the body, movement sequences, and conscious development of movement habits.
1007.00
5 Summer Repertory (3)
Class hours: 9 laboratory.
Transfer Credit: CSU; UC.
All aspects of theatre production, such as fundamentals of play production, stage management, costume, publicity, settings, properties, make-up, and acting. Application of these fundamentals culminates in drama productions presented as a part of the college Theatre Arts Department’s program for the public. Gives interested community adults, as well as regular college students, an opportunity to participate in the drama program. May be taken four times for credit.
1007.00
6A Production Workshop I (3)
(Classically Theatre Arts 6)
Class hours: 9 laboratory.
Transfer Credit: CSU; UC.
Supervised practical experience in the preparation and performance of a production. Requires participation in one of the faculty-directed productions in either an acting or production role. May be taken four times for credit.
1007.00
6B Production Workshop II (3)
Class hours: 9 laboratory.
Recommended preparation: Theatre Arts 6A.
Transfer Credit: CSU; UC.
A continuation of supervised practical experience in the preparation and performance of a theatrical production. Requires participation in one of the faculty-directed productions in either an acting or production role. May be taken four times for credit.
1007.00
7 Acting (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
(CAN DRAM 6)
Theory of acting and acting techniques with emphasis on the ability to express through, emotion, and character through the effective use of voice, movement and script analysis. May be taken two times for credit.
1007.00
8 Intermediate Acting (3)
Class hours: 3 lecture.
Prerequisite: Theatre Arts 7 or equivalent with a minimum grade of C.
Concurrent enrollment in Theatre Arts 10 or 11 is recommended.
Transfer Credit: CSU; UC.
In depth application of the techniques explored in beginning acting with emphasis on characterization and scene study. May be taken two times for credit.
1007.00
9 Children’s Theatre (4) [Cx]
Class hours: 3 lecture; 3 laboratory.
Prerequisite: Theatre Arts 7 or equivalent with a minimum grade of C.
Transfer Credit: CSU.
Selection and presentation of a play for children at the elementary or junior high level. May be attempted four times for credit.
1007.00
10 Technical Theatre (3)
Class hours: 2 lecture; 3 laboratory plus 12 hours special laboratory.
Transfer Credit: CSU; UC.
Theory and application of costume design and construction for theatre. Research, principles of design, and construction techniques. Members of the class construct all costumes necessary for the semester’s theatrical production. May be taken three times for credit.
1007.00
11 Stage Costuming (3)
Class hours: 2 lecture; 3 laboratory plus 15 hours special laboratory.
Transfer Credit: CSU; UC.
Theory and application of costume design and construction for theatre. Research, principles of design, and construction techniques. Members of the class construct all costumes necessary for the semester’s theatrical production. May be taken three times for credit.
1007.00
20 Development of the Theatre I (3) [Cx]
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Study of the Western theatre from its beginning in Greece through Elizabethan drama. Emphasis on the historical, philosophical, and sociological influences on the development of the theatre. Plays representative of each period are read and discussed.
1007.00
21 Development of the Theatre II (3) [Cx]
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Study of the Western theatre from the seventeenth through the twentieth century. Emphasis on the historical, philosophical, and sociological influences on the development of the theatre. Plays representative of each period are read and discussed.
1007.00
23 History of Costume (3) [Cx]
(Available also as Art 64)
Class hours: 3 lecture.
Transfer Credit: CSU.
Origins and evolution of costume from primitive society to the twentieth century. Evaluation of aesthetic, technical, sociological, and psychological factors of costume and their relation to modern dress. Student may not receive credit for both Theatre Arts 23 and Art 64.
1007.00
30 Creative Dramatics (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Employing drama to help teach traditional classroom subjects. Techniques may be applied to students from two through seventeen in either a formal educational setting or informal group-learning situations. Designed to help those who are currently working with young people or who plan to do so.
1007.00
70, 71 Directing I, II (3-3)
Class hours: 3 lecture.
Prerequisite: Theatre Arts 8 or equivalent with a minimum grade of C.
Recommended: Theatre Arts 6, 9, 10, or 11.
Transfer Credit: CSU; UC.
For advanced students who wish to study acting from a directing standpoint. Prepares the student to begin directing. In Theatre Arts 71, the student directs a production for public presentation.
1007.00
75 Makeup (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to the theory, design, and application of make-up for the theatre including corrective, character and non-realistic. Practical use of theatrical makeup materials for the various theatrical forms.
1007.00
76 Stylized Acting (3)
Class hours: 3 lecture.
Transfer Credit: CSU.
Advanced techniques necessary for drama of various types — stylized, classic and modern. Some work on dialects as needed for specific scenes.
1007.00
77 Seminar in Television Production: Acting Techniques (3)
Class hours: 3 lecture.
Recommended preparation: Theatre Arts 7 and 8 or/and considerable theatre or film background.
Transfer Credit: CSU; UC.
Techniques needed to work before a camera, either motion-picture or television.
1007.00
90 Seminar: Acting (3)
Class hours: 3 lecture.
Prerequisite: Enrollment in class is based on an audition, previous acting experience and training.
Transfer Credit: CSU; UC.
Seminar designed for actors who have completed several acting classes or who have had extensive stage training through participation in public performances. Offers the actor an opportunity to examine and perform plays not normally offered in the regular program. May be taken four times for credit.
1007.00
92 Special Topics: Theatre (1, 2, 3, 4, 5, or 6)
Class hours: 1, 2, 3, 4, 5, or 6 lecture.
Transfer Credit: CSU; UC.
A course, of varying length, in a specific form of theatre or dance technique. Exact content determined by the instructor. See class schedule for emphasis. May be taken only six times regardless of the unit combination. However, no single-subject, single-interest class may be repeated.
1007.00
92L Special Topics Laboratory: Theatre (1, 2, 3, 4, 5, or 6)
Class hours: 11, 12, 13, 14, 15, or 16 laboratory.
Transfer Credit: CSU; UC.
A course, of varying length, in a specific form of theatre or dance technique. Exact content determined by the instructor. See class schedule for emphasis. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated.
1007.00
98L Independent Study Laboratory: Theatre Arts
(1, 2, or 3)
Class hours: 3, 6, or 9 laboratory.
Prerequisite: Selection made by application to the department.
Transfer Credit: CSU; UC.
Designed for the capable and well-motivated student who wishes to pursue a special area of theatre or a more advanced project in theatre than is offered in the regular program. Student who participates in this program must have completed the introductory courses or have shown a skill greater than that necessary for completion of the class offerings. The nature and extent of the project will be determined by the student and a member of the Theatre Arts staff before the student registers for the class. The extent of the project determines the number of unit allowed. May be taken only two times regardless of the unit combination.
1007.00

Theatre Arts: Dance (TARTSD)

35AB Ballet I (3-3)
Class hours: 2 lecture; 2 studio.
Prerequisite: For 35B: 35A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Basic ballet vocabulary and dance technique. 1008.00

37AB Jazz Dance I (1-1)
Class hours: 2 studio.
Prerequisite: For 37B: 37A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Basic ballet, vocabulary, and dance technique. Theatre Arts Dance 37A may be taken two times for credit.
1008.00

39AB Modern Dance (1-1)
Class hours: 2 studio.
Prerequisite: For 39B: 39A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Basic modern dance vocabulary and dance techniques.
1008.00

41AB Tap Dance I, II (1-1)
Class hours: 2 studio.
Prerequisite: For 41B: 41A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Basic tap dance technique and routines.
1008.00

43 Dance Production (2)
Class hours: 6 laboratory.
Prerequisite: Students must show nominal proficiency in dance.
Recommended preparation: Previous dance training experience.
Transfer Credit: CSU; UC.
Practical music comedy dance experience for students. May be taken four times for credit.
1008.00

45 Dance Workshop (3)
Class hours: 9 laboratory.
Prerequisite: Students must show nominal proficiency in dance.
Recommended preparation: Previous dance training and experience.
 Transfer Credit: CSU; UC.
Practical theatre dance experience for students. Requires participation in either a dancing or production role. May be taken four times for credit.
1008.00

47 Production Preparation (3)
Class hours: 3 lecture.
Recommended preparation: Previous dance training or experience.
Transfer Credit: CSU; UC.
Introduction to theatre dance with emphasis on a variety of musical comedy dance techniques and choreography. May be taken only four times for credit. No single-subject special-interest class may be repeated.
1008.00

49 Survey of Dance (3)
Class hours: 3 lecture.
Transfer Credit: CSU; UC.
Introduction to the rudiments of the dancer's craft with emphasis on ballet, modern, jazz, tap, folk, and square. Dance as an art form. History, techniques, combinations, and vocabulary.
1008.00

80 Dance Composition (3)
Class hours: 3 lecture.
Prerequisite: Theatre Arts Dance 35AB or Theatre Arts Dance 37AB or Theatre Arts Dance 39A or Theatre Arts Dance 41A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Fundamental theories of dance with practical experience in the creation, development, and performance of dance compositions.
1008.00

85AB Ballet II (3-3)
Class hours: 2 lecture; 2 studio.
Prerequisite: For 85B: 85A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Intermediate ballet technique and vocabulary.
1008.00

87AB Jazz Dance II (1-1)
Class hours: 2 studio.
Prerequisite: For 87B: 87A or equivalent with a minimum grade of C.
Transfer Credit: CSU; UC.
Intermediate jazz dance techniques and vocabulary.
1008.00
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M.A., Temple University
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M.A., California State University, Los Angeles
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Supervisor, Custodial
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M.A., University of Northern Colorado, Greeley
Richard Moses
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Janet Nix
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M.P.A., California State University, Northridge
Robert Olivera
Director, Athletics
B.A., M.A., LaVerne College
Ellen Peres
Controller
B.S., University of Redlands
Max Prieto
Supervisor, Lithography
David Ramirez
Sergeant, Public Safety
B.S., University of LaVerne
Joseph Revoier
Director, Maintenance and Operations
### Management

### Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Institution/University/Location</th>
<th>Degree/Program</th>
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<tbody>
<tr>
<td>Sharlene Smith</td>
<td>Director, Disabled Students Programs and Services</td>
<td>B.A., Andrews University</td>
<td>M.S., Butler University</td>
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<tr>
<td>Susan Stewart</td>
<td>Director, Student Activities</td>
<td>B.A., M.A., San Diego State University</td>
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<tr>
<td>Trudy Largent</td>
<td>Director, Employee Relations/Legal Affairs</td>
<td>A.A. Los Angeles City College</td>
<td>B.A., California State University, Los Angeles</td>
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<td>J.D., Western State University College of Law</td>
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<td>Eunice Trotter</td>
<td>Director, Auxiliary Services</td>
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<td>Anita Undercoff</td>
<td>Supervisor, Special Accounts</td>
<td>A.S., Chaffey College</td>
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<tr>
<td>Abbott, Anthony L.</td>
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<tr>
<td>Adams, Herbert, M., Jr.</td>
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<td>A.S., Pomona College</td>
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<tr>
<td>Alfaro, Felix L.</td>
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<td>Alger, Ardon H.</td>
<td>Professor, Photography</td>
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<td>Algozer, Sharon A.</td>
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<td>Ph.D., University of Michigan</td>
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<tr>
<td>Bixler, David</td>
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<td>Brookins, Dana L.</td>
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<td>Carlson, Robert A.</td>
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<tr>
<td>Carrick, William E.</td>
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<tr>
<td>Cheatle, Medina</td>
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<td>Clements, Richard J.</td>
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<td>Cobos, Rose A.</td>
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<td>Colondres, Donna</td>
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<td>M.A., University of New Hampshire</td>
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<td>Corse, Pauline C.</td>
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<td>Creasy, Dorothea E.</td>
<td>Professor, Counseling</td>
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<td>Davis, Deborah</td>
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<td>deDobay, Thomas R.</td>
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<td>De Villers, Linda</td>
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Adjunct Faculty

In addition to the regular full-time contract faculty, there are in each school qualified adjunct instructors who come from industry, business and other educational institutions to give Chaffey College a faculty with many talents to support a diversified program of offerings demanded and expected of a community college.

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Adkins, Lester
Chemistry

Alexander, Dana S.
Physics, Mathematics

Arner, Rodney D.
Mathematics

Bajcer, Libby
Industrial Sewing

Bartell, Donald E.
History, Social Science

Bartell, Mary N.
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Beardwood, George B.
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Benjamin, Beverly
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Blair, John W.
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Blanchard, William B.
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Boring, Eugene B., Jr.
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Boul, Mary
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Bowers, Miriam H.
Librarian

Brown, Margaret
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Colbath, George C.
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Contino, Sam
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Dickey, Marlin L.
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Finnie, Thomas S.
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Fleck, Robert J.
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Geisel, Joseph W.
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Superintendent-President

Mitchell, Eugene D.
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Mossman, Shirley Nash
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<th>Myers, Pauline</th>
<th>Counseling</th>
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<td>Noble, Erna Smith</td>
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<td>Olson, Betty M.</td>
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<td>Parratt, Lloyd P.</td>
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<td>Peaker, Allis B.</td>
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<td>History</td>
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<td>Smith, Robert</td>
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<td>Economics</td>
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<td>Strane, Ralph</td>
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<td>Swihart, Donald D.</td>
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<td>Walker, Lawrence H.</td>
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**Children’s Center**

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- **Wasson, Sharon**  
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