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**Schools and Student Services of the College**

**Office of Instruction**

*Linda Howdyshell, Vice President*

- Acute Care Technician
- Continuing Education
- Dental Assisting
- Economic Development
- CalWORKs
- Community Services
- Professional Development
- Contract Education
- Workforce Preparation

**Library**

*Frank Pinkerton, Associate Dean*

**School of Business and Applied Technology**

*Chris Willis, Dean*

- Accounting and Financial Services
- Administration of Justice
- Automotive Collision Repair Technology
- Automotive Technology
- Business Administration
- Business: Paralegal Studies
- Business and Office Technologies
- Computer Information Systems
- Computer Science
- Fire Technology
- Hotel and Food Service Management
- Management
- Nursing: Associate Degree Nursing (ADN)
- Nutrition and Food
- Real Estate

**School of Language Arts**

*Sherrie Guerrero, Dean*

- American Sign Language
- Arabic
- Chinese
- English
- English-as-a-Second Language
- French
- German
- Reading
- Spanish
- Summer School

**School of Mathematics and Science**

*Terrence Giugni, Dean*

- Astronomy
- Biology
- Chemistry
- Drafting
- Earth Science
- Engineering
- Geographic Information Systems
- Geography
- Geology
- Mathematics
- Physical Science
- Physics
- Science
- Statistics

**School of Social and Behavioral Sciences**

*Paul Parnell, Dean*

- Aeronautics (Aviation Maintenance Technology)
- Anthropology
- Child Development and Education
- Correctional Science
- Economics
- Gerontology
- History
- Humanities
- Philosophy
- Political Science
- Psychology
- Social Science
- Sociology
- Child Development Center
- Honors Program/Phi Theta Kappa (PTK)

**School of Visual, Performing, and Communication Arts**

*Vera Dunwoody, Interim Dean*

- Art
- Broadcasting
- Cinema
- Communication Studies
- Consumer Studies
- Dance
- Fashion Design and Merchandising
- Fine Arts
- Forensics
- Interior Design
- Music
- Photography
- Theatre Arts
- Journalism/Student Newspaper
- Museum Gallery
- Study Abroad Program

**Instructional Support**

*Vacant, Dean*

- College Catalog
- Coordinated Scheduling
- Fast Academic Success Track (F.A.S.T.)
- Fontana Campus
- Professional Development/Distance Education
- Schedule of Classes
- Weekend College
- Success Centers
  - Language Success Center
  - Math Success Center
  - Multidisciplinary/Reading Success Center
  - Multidisciplinary Success Centers (Chino and Fontana)
  - Writing Success Center

**Student Services**

*Ali Rahmani, Vice President*

- High School Relations
- Student Health Services
- Student Activities

*Karen L. Sanders, Assistant Dean*

- Admissions and Records
- Financial Aid
- Veterans Services

**Counseling and Matriculation**

*Lori Waite, Dean*

- Articulation/High School Tech Prep
- Cooperative Education
- Counseling
- Disability Programs and Services
- EOPS
- Guidance
- International Students
- Learning and Educational Development
- Matriculation
- Student Employment
- Transfer Center

**Athletics and Physical Education**

*Robert Olivera, Associate Dean*

**Institutional Services**

*Inge Pelzer, Executive Assistant to the Superintendent/President*

- 504/508 Coordination
- Accreditation
- Gateways to Teaching
- Grant Coordination
- Institutional Compliance
- Institutional Effectiveness
- Institutional Research
- Online to College
- Policy/Procedure Governance
- Student Equity
- Title V Grant

**Chino Campus**

*Robert Bell, Vice President/Chief Administrative Officer, Chino Campus*

*Teresa Hull, Dean, Chino Campus*

- CISCO
- Industrial Electrical Technology
- Nursing: Vocational Nursing (VN)
- Pharmacy Technician
On behalf of the Governing Board and all of the Chaffey College faculty and staff, we welcome you as a student to this college, one of the first to be established in California. Chaffey College was founded in 1883 as the vision of George and William Chaffey, who also founded the city of Ontario.

You are taking an important first step on the path to your future. Whether you are upgrading your work skills, seeking to transfer to a four-year college or university, or planning to earn an associate degree or occupational certificate, you will find caring and highly qualified faculty and staff to assist you.

Our mission is to provide a comprehensive, student-centered community college education. We are committed to equality by providing equal access to opportunity for our students, our faculty and staff, and the district we serve.

Best wishes in your educational endeavors.

Sincerely,

Henry D. Shannon, Ph.D.
Superintendent/President

Chaffey College Senior Management

Robert Bell
Vice President/Chief Administrative Officer, Chino Campus

Linda Howdyshell
Vice President of Instruction

Inge Pelzer
Executive Assistant to the Superintendent/President

Earl Davis
Vice President of Business Services

Stephen Menzel
Vice President of Administrative Services

Ali Rahmani
Vice President of Student Services

THE CHAFFEY COLLEGE MISSION AND COMMITMENT

Chaffey College improves lives within the diverse communities it serves through equal access to quality, learning-centered occupational, transfer, general education, and foundation programs.
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THE DISTRICT

The college district serves the population of the 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 Etiwanda), and Upland are located. Four districts serving high school students are contained within these communities. They are the Chaffey Joint Union High School District, the Chino Unified School District, the Fontana Unified School District, and the Upland Unified School District.

THE COLLEGE

ACREDITATION

Chaffey College is a two-year public community college and is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges (10 Commercial Blvd., Suite 204, Novato, CA 94949, (415) 506-0234), an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education. Chaffey is a member of the American Association of Community Colleges, the Community College League of California, Service Members Opportunity Colleges (SOC), the Consortium of Southern California Colleges and Universities, and is approved by the Office of Private Post-Secondary Education for Veterans Benefits.

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. On March 17, 1883, the cornerstone of the college was laid at Fourth Street and Euclid Avenue in Ontario. Due to meager financial resources, the college became an extension of the University of Southern California and then closed for a brief period in the early 1900’s. 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. Passage of Measure L ($230 million) in 2002 will enable the college to construct a new campus in Chino, construct several new buildings on the Rancho Cucamonga Campus, and upgrade many existing facilities in the coming years.

STUDENT EQUITY

The District, and each individual who represents the District, commit to actively pursuing equity for Chaffey College students without regard to national origin, religion, age, sex (gender), race, color, medical condition, ancestry, sexual orientation, marital status, physical or mental disability, or because he or she is perceived to have one of the foregoing characteristics through the implementation of the goals and objectives of the Student Equity Plan. Being sensitive to the personal, professional, and aesthetic 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.

ADMINISTRATION AND GOVERNING BOARD

The superintendent/presidential officer is the chief administrative officer, and is assisted by 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 five schools which provide an extensive range of the highest quality transfer and occupational courses: Business and Applied Technology; Language Arts; Mathematics and Science; Social and Behavioral Sciences; and Visual, Performing, and Communication Arts. Student Services provides additional instruction in physical education, athletics, cooperative education, disability programs, and guidance. The college also provides many excellent student support services including transfer counseling, career planning assistance, job placement, financial aid, health care, child care, and help in housing and transportation.

CURRICULUM

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 acquire or improve employment skills, and general education courses to provide all students with an awareness of the cultural diversity of our nation and the world.

Transfer programs are designed to meet the lower division requirements of four-year colleges and universities and to develop the skills essential to success in upper division courses. General education courses are articulated with comparable university courses to assist
students in meeting transfer requirements. These courses introduce students to a variety of academic disciplines and acquaint them with the assumptions and theoretical bases fundamental to each discipline.

Occupational programs are continually updated to reflect current industry requirements. Interaction with community leaders, advisory committees, and with business, industry and public service organizations ensures that students are kept apprised of developments in employment trends.

Finally, noncredit courses are provided for students wishing to learn English as a Second Language or to improve basic academic skills in language or to improve basic academic skills in math, English, and reading. Noncredit instruction is provided primarily through the six college Success Centers, which also serve as the college’s primary resource for supplemental instruction and learning assistance.

**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.

**COLLEGE YEAR**

Chaffey College is organized on the semester system. The academic year includes two 17-week semesters, Fall and Spring, which run from August through May, plus a summer session. Courses offered in the various terms are similar in scope and maintain equivalent standards. The academic calendar for the 2007-2008 college year appears in the back of this catalog.

In addition to the regularly scheduled 17-week classes, intensive short-term classes are offered. Some open-entry, open-exit classes allow for flexible scheduling, as does the growing number of online sections.

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 5:30 p.m. Monday through Friday. Some classes may meet on Saturday or Sunday. Field trips are scheduled outside the normal class meeting time and may include weekends.

**FACULTY**

The faculty is comprised of dynamic and committed professionals who have completed the rigorous educational requirements set forth by the State of California. Each faculty member has demonstrated subject matter competency, the ability to teach that subject matter, and a commitment to remain current in his/her field.

Special efforts have been made to recruit a faculty that is sensitive to and prepared to work with a diverse student population.

Faculty members come from all over the world. They make numerous contributions to the communities in which they reside and to the teaching profession. They are leaders of business, industry, and the arts; prize-winning scientists and writers, technical experts, scholars, and instructors. They have worked in every field from accounting to zoology at every level of education and share their rich experience with their students.

**FACILITIES**

Chaffey College rests at the base of the San Gabriel Mountains rambling over 200 hundred acres of man-made and natural vegetation. It is a college that provides excellent post secondary educational opportunities for a service area in excess of 700,000 residents.

An array of facilities support the academic mission of the college including science, engineering, modern language, and reading laboratories that meet the standards of occupational education. The Rex W. Wignall Art Museum and Gallery and the Chaffey College Theatre offer opportunities for both fine and performing arts. The gallery and theatre are unique resources for both the college and the community. The college also has facilities for broadcasting, drafting, photography, and graphic arts as well as a gymnasium, swimming pool, fields for competitive and recreational sports, a student center and lounge, cafeteria, bookstore, a network of student success centers, an online assessment center, and a Child Development Center where children of student-parents receive care. The college is also well served by a library/learning resources center.

Other facilities include off-campus centers that support the academic and services functions of the college. One such facility is the Learning Development Center, which provides vocational training and support programs and services for students with physical, developmental, or learning disabilities.

The district offers a strong program of community-based education that is delivered primarily through the Chaffey College Campuses in Chino and Fontana. Using the Chino and Fontana Campuses as a community base, students have access to a myriad of classes and services that are an extension of the college.

Passage of Measure L ($230 million) in 2002 is enabling the college to construct and renovate a number of buildings on the Rancho Cucamonga, Chino, and Fontana Campuses. Projects on the Rancho Cucamonga Campus include the Marie Kane Center for Student Services/Administration, Don Berz Excellence Building, Science Complex, Central Plant, Physical/Life/Health Science Renovation, Visual and Performing Arts Village, and the Gym Renovation Project. The Fontana Campus projects include the Ralph M. Lewis Fontana Center and construction of a third Fontana building. The new Chino Campus is currently under construction and will be a full-service campus offering general education classes. The campus is expected to open in the spring of 2008. It is also the home of the Robert Pile Information Technology Center which houses the Computer Information Systems, Industrial Electrical Technology, and Vocational Nursing programs.

There are also a number of landscaping projects currently under construction to beautify all of the campuses. We are especially looking forward to the completion of the Agricultural Demonstration Garden which will consist of a two acre vineyard and one acre citrus grove located at the southeast corner of Haven and Wilson Avenue; this project will be completed by early summer of 2007.
General Information

CHAFFEY COLLEGE CHINO CAMPUS
Educational Center
13106 Central Avenue, Chino

The Chino Campus opened its doors in Spring 2000 to better serve the residents of the southwestern portion of the district. The campus provides a full array of services including admissions and cashiering, academic counseling, and textbook sales. Students have access to a multidisciplinary student success center and an up-to-date computer lab. Students are offered instruction in a multitude of general education and occupational courses. For additional information, call (909) 652-7750.

CHAFFEY COLLEGE FONTANA CAMPUS
16855 Merrill Avenue, Fontana

The Fontana Campus opened its doors in September 1996 to better serve the residents of the eastern portion of the district. The campus provides a full array of services including admissions and cashiering, financial aid, academic counseling, and a full service bookstore. Students have access to a multidisciplinary student success center and two up-to-date multipurpose computer labs. Students are offered instruction in a multitude of general education and occupational courses. For additional information call (909) 652-7400.

ROBERT PILE INFORMATION TECHNOLOGY CENTER
13170 Seventh Street, Chino

The Robert Pile Information Technology Center was developed in partnership with the City of Chino Redevelopment Agency and industry partners Verizon, Enterasys, Cisco, and Gateway to provide Southern California the state-of-the-art training and education vital for its economic growth. The center is designed to meet the needs of the information technology industry by providing a well-trained and educated workforce. Classes offered include web development, hardware repair, networking, Cisco academies (CCNA, CCNP), and industrial electrical technology. The center also houses the Vocational Nursing program. For additional information call (909) 652-7650.

THE CHAFFEY COLLEGE FOUNDATION

The Chaffey Foundation, a non-profit [501(c) (3)] independent corporation, was organized and established in 1987 by friends and alumni to support the activities and programs of the College. It has become one of the most successful community college foundations in Southern California. The mission of the Foundation is to ensure that no individual that desires an education is denied due to a lack of financial resources. The Foundation coordinates various fundraising activities, receives all donations made to the College and the Foundation, and is in charge of Alumni Affairs. 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. Anyone interested in learning how to support the Foundation’s mission and Chaffey College’s students, please call (909) 941-2765.
ADMISSION, REGISTRATION, AND FINANCIAL AID

ADMISSION TO THE COLLEGE

All high school graduates, anyone who has a Certificate of Proficiency or a G.E.D., and anyone 18 years of age or older who can benefit from a course of study are eligible for admission.

High school students and residents of other states and foreign countries may apply under special regulations. See sections on High School Dual Enrollment or International Students for more information.

WHO MUST APPLY

Applicants who will attend Chaffey College for the first time (new students), or former students who have not attended for one or more terms (returning students) must complete an application for admission.

APPLICATION

Applications may be submitted online by visiting Chaffey’s website at www.chaffey.edu and clicking on the Application link. Online application is not available for International Students. International students must go to the International Student Office in WH-171 to begin the application process.

Official college transcripts must be submitted 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 and vocational nursing programs
4. Students needing to show completion of course prerequisites
5. Students who have earned an associates degree or higher for exemption from assessment, orientation, and counseling

Official high school transcripts must be submitted 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. All High School students

Release of Transcripts to Other Institutions:
Chaffey College is not permitted to make copies of or release transcripts from high schools or other colleges.

ASSESSMENT, ORIENTATION, COUNSELING

All new students are required to participate in assessment and orientation prior to registering for classes. These services include reading, writing, and mathematics testing, and a presentation on college programs and services. Students are required to meet with a counselor within their first six months at Chaffey College. With the assistance of a counselor, students develop an educational plan that includes required classes 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 Department for appointments and details.

PHOTO I.D. CARD

Chaffey College Photo ID cards are required for use of labs, library, and other services. Students are encouraged to secure their Photo ID card prior to the beginning of the term and must show proof of current enrollment to receive a Photo ID card.

SCHEDULES OF CLASSES

The schedule of classes is available prior to each registration period and contains detailed information concerning enrollment, registration, and related deadlines. Schedules are mailed to all residents within the Chaffey College district. All continuing students are mailed a schedule for use in registering for classes. Prospective students may also obtain schedules at most student service areas of the Rancho Cucamonga Campus and at the Chaffey College Chino and Fontana Campuses. Schedules are also provided to high schools and public libraries within the college district. In addition, schedules are posted on the Chaffey College website at www.chaffey.edu.

REGISTRATION

Registration takes place on or after the date listed on the student’s registration permit. New and returning students will receive their registration permit via e-mail after submitting their online application. Continuing students will receive their registration permits in the mail. Students may register using online or telephone registration on or after their assigned registration date. Students may also register during walk-in or late registration at the Rancho Cucamonga, Chino, or Fontana Campus. High School Dual Enrollment students are required to register in person.

REGISTRATION DATE ASSIGNMENT

Continuing students are assigned registration dates according to the total number of units completed up to 90 units. This includes transfer units from other academic institutions. The higher the number of units (up to 90 units), the earlier the assigned registration date. However, after the continuing student acquires 90 units, they drop in priority and are assigned the last day of registration for the continuing student category.

New, returning, and high school students receive registration dates after continuing students. Registration dates for students in these categories are based on the date the admission application was submitted.

PRIORITY REGISTRATION

Students with physical or health disabilities who are unable to attend regular registration or who need to have classes scheduled around disability related concerns must contact Disability Programs and Services, (909) 941-2379, 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 that meet specific requirements and who obtain appropriate authorization. Priority registration takes place prior to 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 is not available. Classes are filled on a first-come basis. A list of open classes is available throughout the registration period. The open class list is available on Chaffey’s website at www.chaffey.edu.
CLOSED CLASSES AND WAIT LISTS
If a desired class is closed, the student may register in an alternate class or request to be placed on the wait list. Wait lists are only available on specific dates and can be accessed via My ChaffeyVIEW online or Panther Line telephone registration systems. 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
Students may register for a maximum of 18 units during fall/spring terms and 7 units during summer term using online, telephone, or walk-in registration; exceptions must be approved by a counselor. During late registration, students can add an unlimited number of units.

LATE REGISTRATION
During the first week of late registration for the fall/spring terms, students may register for any open class, as well as any closed class with instructor signature on an Add/Drop Card. During the second and third weeks of late registration, students must have an instructor's signature to add any class. The late registration period for the summer term is addressed in the schedule of classes. Students are not permitted to add classes after the late registration deadline.

MULTIPLE ENROLLMENT
Students may not enroll in more than one section of any course that is not repeatable 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; however students may wait list for a class that overlaps another.

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.

PRECOLLEGIATE BASIC SKILLS LIMITATIONS
Chaffey College limits the number of units students can earn for precollegiate basic skills courses to 30 semester units. Precollegiate/basic skills courses are defined as those two or more levels below college level English and one or more levels below elementary algebra. English as a Second Language and students with disabilities are exempted from this limitation. The college may approve a waiver of the limitation on remedial course work with respect to any student who shows significant, measurable progress toward the development of skills appropriate to his or her enrollment in college-level courses. Waivers are only given for specified periods of time and for specified numbers of units. Contact the Mathematics, English, English as a Second Language, or Reading Departments or the Disability Programs and Services Office for more information.

PREREQUISITES AND ENFORCEMENT
When a course has a prerequisite, it means that a student must possess a certain body of knowledge to be successful in the course. The preexisting knowledge may be a skill, an ability, a placement preparation score, or successful completion of a course. Completion of a prerequisite course requires a grade of C or better or a grade of CR (credit).

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 who do not meet stated prerequisites may be unable to register for or may be dropped from the class.

The college's registration process allows for prerequisite checking by computer. Students attempting to enroll in the computer-checked courses will be blocked from registration if they do not meet the specified prerequisites. Prerequisites are listed in the course descriptions within the schedule of classes and the college catalog.

Assessment results from other colleges may not be used to meet prerequisites, so new students must arrange to take Chaffey’s assessment testing prior to registration. Students who have completed prerequisite courses at another college or in high school must bring a copy of their transcripts from that institution to the Counseling Department, and complete a Prerequisite Validation Form prior to registration. The Prerequisite Validation form is also available on our website. Please allow seven (7) days for processing the Prerequisite Validation Form. Students who are enrolled in the prerequisite course at Chaffey College at the time of their registration will be permitted to enroll in the subsequent course. Students who do not pass the prerequisite course with at least a grade of C or do not complete the prerequisite course will be dropped prior to the start of classes.

Prerequisite/Corequisite Challenge:
Prerequisites for courses will be enforced according to college policy. Students have the right to challenge prerequisites on the following grounds:
1. A prerequisite for a course necessary for graduation, transfer, or a certificate is not offered and the unavailability of that prerequisite poses a hardship.
2. The prerequisite has not been validated.
3. The student has the knowledge or ability to succeed in the course despite not meeting the prerequisite.
4. The prerequisite is discriminatory or being applied in a discriminatory manner.

The student must provide appropriate documentation when filing a challenge. Documentation may include, but is not limited to, high school or college transcripts, additional test results, work experience, or writing sample. Prior enrollment in the course does not exempt a student from the current prerequisite of that course.

Students challenging a prerequisite must submit a Prerequisite/Corequisite Challenge form. The form must be filed in the Counseling Department up to one week prior to the beginning of each term.

Prerequisite/Corequisite Challenge Process:
1. Complete the Prerequisite/Corequisite Challenge form and attach documentation to establish your right to challenge this prerequisite/corequisite request. Examples of documentation include official or unofficial high school and/or college transcripts, international transcripts, certificates, test scores, etc.
   a) Identify the course in which you wish to register and the prerequisite/corequisite you wish to challenge.
   b) If you are attempting to use high school coursework to meet a course prerequisite, attach a copy of your high school transcript to verify the coursework completed.
2. Meet with a counselor in the Counseling Department to assess whether you will benefit from the challenge process.
   a) The counselor will sign the form.
   b) The transcript evaluator in the Counseling Department will enter the prerequisite/corequisite course. This will allow you to register in the course.

LIMITATIONS ON ENROLLMENT
Chaffey College offers some courses which place limitations on enrollment. These limitations may include successful completion of courses, preparation scores for math and English, performance criteria or health and safety conditions. Students who do not meet the conditions imposed by these limitations may be unable to register for or may be dropped from class.
3. Register during the registration period.
4. The Counseling Department staff will submit the Prerequisite/Corequisite Challenge form with documentation to the referral area (school/department indicated on the form).
5. The department coordinator will resolve the challenge within three (3) working days.
6. You will be notified by phone and mail on a denied challenge decision.
7. On approved challenge decisions, you will be notified by mail. You will be allowed to stay in the class.

More information including the appropriate form for challenging a prerequisite is available through the Counseling Department and the Chaffey College website. Questions regarding the challenge process should be directed to the Counseling Department at (909) 652-6200.

MATRICULATION

Matriculation services at Chaffey College are intended to assist students in establishing appropriate educational goals and to provide support services to help them achieve these goals. Students will be provided an evaluation of foundation/basic skills, orientation, counseling, an educational plan, and follow-up services.

New students are required to complete assessment and orientation before their registration date. Students must see a counselor for an educational plan within their first six months at Chaffey. High School Dual Enrollment students must complete assessment, orientation, and counseling before they may register for classes.

COREQUISITE

When a course has a corequisite, it means that a student is required to take a course at the same time as another course. Knowing the information presented in the corequisite course is considered necessary for a student to be successful in the course.

If a student would like to challenge a corequisite, follow the same procedure as challenging a prerequisite.

LIMITATION ON ENROLLMENT

A limitation on enrollment is a non-course requirement for entry into a course or educational program, without which a student will not be permitted to remain in the selected course or program. These requirements are frequently (but not always) driven by health and safety regulations and/or mandates by outside accredit ing/licensing agencies.

ADVISORY

An advisory is defined in Title 5, section 55200 as: “A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.” Since an advisory is not required, students will not be blocked from enrolling in a class if they do not meet the conditions of the advisory.

ASSessment OF FOUNDATION/BASIC SKILLS

Assessment testing is required for placement into English, ESL, mathematics, and reading courses. Placement levels are based on a combination of test scores and other educational background information. Accommodations are available for individuals with disabilities. Chaffey uses multiple measures to place students into English, ESL, mathematics, and reading courses.

Testing facilities are available at all Chaffey sites; specific dates and times can be obtained from the schedule of classes or Counseling Department at (909) 652-6200.

RE-TESTING PROCEDURES

Students may take the assessment test no more than twice during their enrollment at Chaffey College. Students must wait three months after retaking the assessment test; being informed of any District investigations of complaints challenging matriculation regulations; being provided alternative services according to language or disability needs; and filing a complaint of unlawful discrimination if they feel the assessment, orientation, counseling or any other matriculation procedure is being applied in a discriminatory manner.

Matriculation requirements also include certain student responsibilities. Upon admission to the college, students must express a broad educational goal and provide transcripts from previous college work. They must complete assessment and orientation prior to registering for classes and must develop a Student Educational Plan (SEP) with a counselor within their first six months at Chaffey College. Students are responsible for attending class, completing their assignments and coursework, and maintaining progress toward their educational goal.

EXEMPTIONS AND REFUSAL

Students may be exempt from matriculation services if they:
Students have the right to refuse matriculation services and choose not to participate in assessment, orientation, and/or counseling. A student wishing to be exempt from these services based on one of the above criteria or wishing to decline participation must contact the Counseling Department to complete the necessary documentation. Students concurrently enrolled in high school and participating in the High School Dual Enrollment are not eligible for exemptions and cannot refuse matriculation services. Students who have previously chosen to refuse matriculation services may reconsider and participate at any time.

FEES

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

Fees are assessed each term. Fees can be paid via MyChaffeyVIEW online or Panther Line telephone registration systems, fax, in person, or by mail. All fees are due at the time of registration. These include enrollment fees, health fees, College Services fee (optional), materials fees, and if applicable, non-resident fees. Fees may be paid via cash, check, money order, VISA, Mastercard, or Discover. Stopping payment on a check or credit card does not constitute a payment. These fees must be returned to the Cashier’s Office within the appropriate timeframe for a parking fee credit to be awarded. No credit will be issued for an enrollment change made after ten percent of the class length has elapsed (see chart for timeframes).

CREDIT AND REFUND POLICY

Credits for Student Drops/Withdrawals: When a student officially drops or withdraws from a class before ten percent (10%) of the class length has elapsed (see chart for timeframes), they are eligible for a credit of the applicable enrollment, health, parking, materials, College Services, and non-resident tuition fees paid. Parking decals must be returned to the Cashier’s Office or before the refund deadline before a parking fee credit will be awarded. Refunds for cancelled classes must be requested through the Cashier’s Office.

Credits are subject to change. Consult the Schedule of Classes for the most current information.

ENROLLMENT FEE (Tuition)
$20.00 per unit for California residents.

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

Non-Resident Enrollment Fee (U.S. Citizen) $193.00 per unit ($173.00 per unit, plus $20.00 per unit enrollment fee)

Non-Resident Enrollment Fee (Non-U.S. Citizen) $213.00 per unit ($173.00 per unit, $20.00 capital outlay charge, plus $20.00 per unit enrollment fee)

HEALTH SERVICES FEE
$15.00 Fall and Spring; $12.00 Summer. This fee funds the Student Health Services Program. Certain laboratory tests and medications may require an additional fee.

Usual clinic hours are 7:30 a.m. to 4:30 p.m., Monday through Friday. Evening appointments may be available. Services of physicians, nurse practitioners, and counselors are available by appointment by calling (909) 941-2178.

COLLEGE SERVICES FEE (Optional)
$8.00 Fall and Spring; $5.00 Summer. This fee funds Associated Students of Chaffey College (ASCC) programs and activities throughout the academic term, including (but not limited to):
- $65,000 in annual scholarships (applications are available in the Office of Student Activities at the beginning of Spring semester)
- Lectures, special cultural events, and a variety of service projects for students and the community.
- Discount tickets to major attractions
- Opportunity drawings and giveaways
- $60,000 emergency book grants
- Campus improvements
- $40,000 in department grants

PARKING (required on the Rancho Cucamonga and Fontana Campuses)

- Auto Parking:
  - $40.00 Fall and Spring;
  - $20.00 Summer;
  - $20.00 Fee Waiver Students
- Motorcycle Parking: $15.00
- Daily Permits: $2.00

MATERIALS FEES
Most courses require a material/instructional usage fee. Charges vary and are subject to change. Students should consult the current Schedule of Classes for fee amounts, which are noted under the appropriate class description. Material fees are due at the time of registration and are not subject to waiver.

SUPPLEMENTAL

( this is not a complete list of fees; complete list is available from the Budgeting Services Office)

- Catalog: $3.00 purchased in Bookstore;
- $5.00 mailed; Send request to Catalog/Schedule Coordinator
- Library materials replacement: $25.00;
- Library materials rebinding: $15.00
- Replacement of diploma or certificate: $10.00
- Returned check fee and/or stop payment fee: $25.00
- Schedule of Classes: Free at the Rancho Cucamonga, Chino, and Fontana Campus, and at in-district public libraries; $2.00 mailed; Send request to Catalog/Schedule Coordinator.
but the summer term does not count against the two terms of allowable credit use, nor does skipping the summer term affect the student’s admission status. Students may use monetary credits to fund all fees associated with subsequent enrollment in Chaffey College classes, within the term limitations listed above.

Refunds: Refunds are repayment by the college to a student who has a credit balance arising from classes the college has cancelled, or from which the student has withdrawn within the prescribed timeframes (see chart). Refunds are not automatic in any case, are available only during specific periods of time within the term, and will not be issued for any student-initiated enrollment change made after ten percent of a class has elapsed. Refunds for cancelled classes must be requested on or before the end of the term in which the cancellation occurred. Students who are awarded a BOG waiver for a term which they have already paid fees may request a reimbursement of fees paid on or before the end of the term in which the BOG waiver was granted.

A once-per-term service fee of $10.00 is charged for processing any class drop or withdrawal that is not the result of a class cancellation. (California Code of Regulations, Title 5, Section 58508). The fee is charged even if only a portion of the student’s classes are dropped.

To receive a refund of a credit balance, students must fill out and submit a refund request form at the Cashier’s Office, no later than the close of business on the day corresponding to the point where ten percent of the course involved has elapsed. Refund forms are only available at the Cashier’s Office; they are not available for distribution or on the college website. If the student’s payment for the class(es) for which a refund is being requested was made by cash or check, a check will be mailed to the student’s home address of record within 45 working days of the refund request submission. If the payment was

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<th>Course Length</th>
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<tr>
<td>5 Week</td>
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<tr>
<td>6 Week</td>
<td>3 Business Days</td>
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<td>10 Week</td>
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<td>11 Week</td>
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<td>12 Week</td>
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<td>13 Week</td>
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<tr>
<td>18 Week</td>
<td>10 Business Days</td>
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FINANCIAL RESPONSIBILITY
Student grades, transcripts, enrollment and degree verifications, diplomas, and registration privileges will be withheld pending settlement of any outstanding obligation to the college. Past due fees must be paid by cash, money order, or cashier’s check only.

FINANCIAL AID
The Financial Aid Office administers a number of programs designed to help students with limited resources meet their educational expenses. Programs include grants, enrollment fee waivers, Federal Work Study, scholarships, and loans. Financial assistance is available to all eligible students attending Chaffey College.

To apply for Financial Aid, students should complete the Free Application for Federal Student Aid (FAFSA) at www.fafsa.ed.gov. The priority deadline for filing the FAFSA is March 2 of every year; however, students may apply after the priority deadline. Students filing after the priority deadline may lose eligibility for certain types of aid. The Financial Aid Office will receive the results of the FAFSA and award students who are eligible, unless the student is selected for the verification process.

Verification is a process where the federal government selects students randomly to have the Financial Aid Office verify the information entered on the FAFSA. This is a mandatory process required by the federal government and students must comply to receive financial aid. The Financial Aid Office will request a copy of your (and your parents if you are a dependent student) signed federal taxes to verify the information.

FINANCIAL AID

For federal grants, students must:
• be enrolled in a degree, certificate, or transfer program, and
• have a high school diploma or equivalent, or pass an Ability to Benefit test, and
• demonstrate financial need, and
• maintain satisfactory academic progress, and
• be a citizen or permanent resident of the United States.

The greatest source of grant funds is the Federal Pell grant, which is federal money awarded to students as an assistance for school purposes. Chaffey College will determine the amount of federal financial aid that a student has earned in accordance with federal law. Students who receive federal financial aid and do not attend any classes will be required to repay all of the funds they received. Students who withdraw from all classes prior to completing more than 60% of the semester will have their financial aid eligibility recalculated based on the percentage of the semester completed, and will be required to repay any unearned financial aid they received.
At Chaffey College, a student’s withdrawal date is:
- the date the student officially notified the Admissions and Records Office of his/her intent to withdraw, or
- the midpoint of the semester, for a student who leaves without notifying the college, or
- the student’s last date of attendance at a documented academically-related activity.

ENROLLMENT AND HEALTH FEE WAIVER (BOGW)
The Board of Governors Fee Waiver (BOGW) program is financial aid that does not have to be repaid. Students may be eligible for a fee waiver, even when not eligible for other types of financial aid. BOGW applicants do not have to be enrolled in a minimum number of courses. Whether students take 1 unit or 21 units, the enrollment fees may be waived. Applicants need only apply once to have fees waived for the entire academic year. Recipients also have health fees waived, and usually receive a discount on parking fees. Fee waivers do not apply to class materials fees or the College Services fees.

To apply, it is recommended that students fill out the FAFSA by the March 2 priority deadline. The Financial Aid Office will receive the results of the FAFSA and award the waiver automatically to students who are eligible. Students who received a fee waiver for a prior year must reapply for the current school year by completing the FAFSA.

Students who see the waiver on the award letter and are eligible for cash benefits from TANF/Cal Works, SSI/SSP, General Assistance, or a certified veteran dependent by California Department of Veteran Affairs need to come to the Financial Aid Office and bring one of the following pieces of documentation:
- Copy of current month’s subsidies check
- Copy of current Notice of Action
- Statement of current Supplementary Social Security Income
- Agency Certification Form (available at the Financial Aid Office)
- Letter of certification from the California Department of Veteran Affairs

FEDERAL WORK-STUDY
Students may be eligible for part-time employment through the Federal Work-Study (FWS) program. Students may work up to 20 hours per week on the Rancho Cucamonga, Chino, or Fontana Campus and receive a monthly paycheck. In order to receive FWS funds, a student must be enrolled in at least 6 units.

Eligibility for Federal Work Study is determined by the student’s financial need, which comes from the results of the FAFSA. When eligibility is determined, students will receive an award letter with a Federal Work Study award. Once the award letter is received, students have four weeks to confirm employment. Job listings are available in the Career Services Office.

To apply for Federal Work Study, students must fill out the FAFSA by the priority deadline, March 2. Federal Work Study is awarded on a first-come, first-serve basis.

Students who do not qualify for FWS may work on campus up to 19 hours per week under District employment. Employment is dependent upon availability of jobs. See Career Services for information.

SCHOLARSHIPS
Scholarships are usually, but not always, based on a combination of need and merit. Students are encouraged to apply via the Chaffey General Scholarship Application, available January 1st.

Available scholarships are posted year-round on the Scholarship Board located outside the Financial Aid Office. Students should also contact Student Activities or the Foundation for other available scholarships.

STAFFORD LOANS
Loans should be considered only when other sources of aid are unavailable or insufficient. Generally, other types of financial aid are sufficient to cover the costs of attendance.

Loans are only to be used for educational purposes; they must be repaid with interest, and are usually based strictly on need. Students who request loans may be denied. The recommended borrowing maximum for any program at Chaffey College is $9,625 (subsidized and unsubsidized combined). Students must meet Satisfactory Academic Progress (SAP).

To apply for a loan, students must do the following:
- Complete the FAFSA, preferably by March 2.
- Attend a Loan Workshop. Dates for loan workshops are posted at the Financial Aid Office. There are no makeup workshops.
- Fill out all documents given at the workshop and turn them into the Financial Aid Office within 48 hours of the date and start time of the session.

First disbursement of loan funds will be disbursed at least one month after completed paperwork has been turned in and the FAFSA has been processed by the Financial Aid Office. In order to receive a second disbursement, students must complete an online Exit Interview form, which will be discussed at the loan workshop.

FINANCIAL AID DISBURSEMENTS
All financial aid disbursements are made electronically. Through a joint agreement with Chaffey College and the Chaffey Federal Credit Union, financial aid disbursements are deposited electronically to a free ATM account set up for the student at the credit union. Students also have the option of having the funds disbursed to their existing bank account.

SPECIAL STUDENT CLASSIFICATIONS AND PROGRAMS

INTERNATIONAL STUDENTS
Chaffey College welcomes students from all over the world. Approximately 200 students from 51 countries are enrolled at Chaffey College and provide cultural enrichment to the college community. An international student is defined as a student who has entered the United States temporarily and solely for the purpose of study, and has a permanent residence in another country that he/she has no intention of abandoning. These individuals must go to the International Student Office in Wargin Hall 181 on the Rancho Cucamonga Campus before starting the registration process. Individuals on a B1/B2 Visitor’s Visa may not enroll in classes at Chaffey College, however, prospective students holding any type of Visa may obtain information from the International Student Office.

A variety of services are provided to international students, including guidance and assistance to maintain F-1 (student visa) status, information and assistance regarding change of status processes, academic guidance, career development, housing/homestay referrals, social and cultural activities and many other services geared to meet the specific needs of international students attending Chaffey College.

A mandatory medical insurance program requires all international students purchase a
medical plan. Medical insurance is included as a mandatory fee, requiring payment prior to registering for classes. Failure to obtain insurance will result in delays or holds for registration and the release of official records.

The International Student Office is located in Wargin Hall Room 181 on the Rancho Cucamonga Campus. Applications and information regarding admissions and services are available at the office and on Chaffey’s website: www.chaffey.edu/international.

**Usual Office Hours Are:**
Monday - Friday
7:30 a.m. to 4:30 p.m.

For appointments and information regarding the program, students may call the International Student Office at (909) 941-2147 or (909) 941-2352, or e-mail at intstudents@chaffey.edu.

**Transcript Evaluation for Foreign Students:**
Chaffey College accepts the following Transcript Evaluation Services for foreign students:
• Academic and Professional International Evaluation Services
• Institute for International Credentials Evaluation
• Educational Records Evaluation Service (IERF)
• Educational Credential Evaluators, Inc.
• American Education Research Corporation (AERC)
• Educational Credential Evaluators, Inc.
• Educational Records Evaluation Service
• Institute for International Credentials Evaluation at CSU Fresno
• International Education Research Foundation, Inc. (IERF)
• World Education Services, Inc. (WES)

Note: Credits from an evaluation service are counted as earned credits only. Grade point averages from foreign institutions are not counted as earned credits only. Grade point average to the graduation requirement must be met.

**SUMMER:** see Veteran’s officer in Admissions and Records for unit requirements.

All veterans and eligible dependents who wish to receive VA educational benefits while attending Chaffey College are required to meet with a counselor for a Veteran’s Program Check. Official transcripts of all previous college work must be available at the time of this meeting.

If the grade point average of a student who is receiving VA educational benefits is below the graduation requirement of 2.0, the student will not be certified for VA educational benefits until his or her academic status is restored to good standing. Students with GPAs less than 2.0 may be certified for one semester under probationary status. The student may be certified for up to two terms on probation, provided the student has shown marked improvement upon completion of the probationary term as defined in the Conditions for Improvement. If after the second probationary term the student’s cumulative grade point average does not meet the graduation requirement of 2.0, the student will not be certified until the Conditions of Re-entry for Students Receiving VA Educational Benefits have been met.

**Conditions for Improvement:** If the student’s probationary term grade point average is 2.0 or above, the student may be certified for an additional probationary term, even if the cumulative grade point average does not yet meet the graduation requirement of 2.0.

**Conditions of Re-entry for Students Receiving VA Educational Benefits:** The student will be granted re-entry for the purposes of VA educational benefits after the student has restored his or her grade point average to the graduation requirement of 2.0.

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

**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 toward 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 Admissions and Records Office to verify length of service and honorable discharge.

**FALL AND SPRING STATUS**

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</tr>
<tr>
<td>9-11 units</td>
<td>3/4 time Student</td>
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<tr>
<td>6-8 units</td>
<td>1/2 time Student</td>
</tr>
<tr>
<td>Less than 6 units</td>
<td>Less than half time</td>
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</tbody>
</table>

**ONLINE TO COLLEGE**
Chaffey College’s Online to College program is a collaboration among the Montclair Community Collaborative, City of Montclair, Ontario-Montclair School District, Chaffey College Foundation, Montclair businesses, and participating schools.

The program is designed to prepare and educate the community that attending college is a viable option for their youth. Beginning in 5th grade, students from Lehigh, Kingsley, and Monte Vista elementary schools are introduced to college through classroom presentations and Chaffey College campus tours. As students enter Vernon or Serrano Middle schools, age-appropriate curriculum is introduced to students and their parents to enhance their knowledge about college. When students enter Montclair High School, the Chaffey College Online to College team is ready to assist them with the transition into college through workshops, assessment testing, educational planning, after-school college courses and weekend programs. Since the introduction of the program, and having the first cohort graduate from high school in 2005-2006, the college-going rate for Montclair students has increased 24%. Over 3,100 students participate annually in the Online to College program.

For more information about the program, please contact the Online to College Coordinator, David Campio, at (909) 652-6463.

**PROJECT SECOND CHANCE**
Project Second Chance is a support program for individuals who did not graduate from high school and want to continue their education at Chaffey College. For more information, contact the Counseling Department at (909) 652-6200.

**PUENTE PROJECT**
An outgrowth of the Puente Project founded in 1981 at Chabot College in Hayward, the Puente Project is designed to provide individual assistance to students interested in transferring to four-year colleges and universities. Puente students are provided with intensive English instruction, focused personal counseling, intro-
dutory tours of UC and Cal State campuses, and helpful personal mentoring. Every element is an essential part of the Puente experience.

Prospective students must be eligible for English 450 at the time of application, and must write an essay describing their academic and career goals, and how participation in Puente would assist in their success. Applications and essays are evaluated by the Puente Program faculty, who select 30 students each year for participation in the program.

More information and application forms are available in the Counseling Department at the Rancho Cucamonga Campus. Puente Project contacts are Professors Laura Hope at (909) 652-6925 and Monica Molina at (909) 652-6208. Students may also visit www.chaffey.edu/puente and apply online.

GATEWAYS TO TEACHING PROGRAM
Gateways to Teaching provides support services and programs to help students prepare for a career as a K-12 teacher. Any Chaffey College student interested in teaching may apply to the program. Benefits of the program include free CBEST workshops, academic planning with a Gateways counselor, and newsletters that provide up-to-date information on special events, scholarships, transfer programs, and credentialing. Education courses provide students with an opportunity to develop a teaching portfolio and gain hands-on experience working with teachers in elementary and secondary school classrooms. For more information or to obtain an application, contact the Gateways to Teaching coordinator, Bonny Shapin, at (909) 652-6260 or visit the website at www.chaffey.edu/GTP.

HIGH SCHOOL DUAL ENROLLMENT
High school students may enroll at Chaffey College through dual enrollment to pursue advanced scholastic or vocational education (Education Code 48800(a)). Students must have completed the 10th grade and have a minimum cumulative GPA of 2.5 to be eligible for dual enrollment. New high school students (those who are attending Chaffey College for the first time) must submit an application, official transcripts, and High School/Emergency Certification form the first semester of attendance. Continuing high school students do not need to reapply each semester, but must submit a current High School/Emergency Certification form and official transcripts each semester of attendance. Applications are accepted online or in person.

The student’s registration date and student ID number will be included in their registration packet. Students will not be allowed to register until they have completed all of the steps in their registration packet, which includes a High School/Emergency Certificate form to be filled out by the student’s high school counselor or designee and must be signed by the student and the student’s parent(s) or legal guardian. High school students are also required to complete assessment, orientation, and counseling before registering for the first time. A current High School/Emergency Certification form and official transcripts must be submitted each semester of attendance. These steps must be completed by a deadline date which is listed in the student’s registration packet.

Home schooled students must have a signature of a school affiliate on their High School/Emergency form. Home schooled students who are not able to obtain a school affiliate signature must achieve the following scores in each area of the Chaffey College assessment test: Reading 55, English 60, Arithmetic 34. If the preceding scores are not achieved, the student may not retake the test until the following semester.

High school students are required to register in person at any of the Chaffey sites. Students may register on or after their assigned registration date and may register in up to eight units. Students may only register for classes recommended by their high school counselor on the High School/Emergency form and may not take courses for remediation purposes (courses numbered 500-599).

Enrollment, health, and college service fees are waived for high school students who reside in and/or attend a school within the Chaffey College District. Other fees such as materials fees, books, and parking must be paid by the student. High school students who reside in California, but outside of the Chaffey College District, must pay all fees, including resident enrollment, health, and college service fees. High school students classified as non-residents of California (for tuition purposes) and/or the United States must also pay out-of-state tuition fees.

All high school students participating in dual enrollment must attend the first day of class. For more information on high school dual enrollment, please contact the Admissions and Records Office at (909) 652-6600. For information on assessment, orientation, and counseling please contact the Counseling Office at (909) 652-6200.

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 are highly regarded by any accredited college or university. Chaffey College has articulated Honors Program agreements with UCI, UCLA, UCR, UCSC, San Diego State University, Occidental College, Pitzer College, Pomona College, Chapman College, 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 for Fulfillment 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).
Chaffey College offers a host of short-term and semester-long study abroad programs to destinations across the globe. From the classic academic program offering a selection of general education courses taught by Chaffey faculty at foreign institutions, to shorter focused travel programs in art, theatre, history, and language, Chaffey has a study abroad program for just about everyone.

All Chaffey College study abroad programs are designed for participants to receive academic credit. Whether they are offered as part of extended semester abroad or as shorter term programs, all courses are part of the Chaffey College curriculum and taught by Chaffey College faculty.

For more information, contact the Office of the Dean of Visual, Performing, and Communications Arts at (909) 477-8833.

ECONOMIC DEVELOPMENT

WORKFORCE PREPARATION PROGRAM

The Workforce Preparation Program provides short-term training programs that lead to employment. Supportive services offered through this program include: career and educational counseling, CalWORKs work study, job development, job placement, mentoring and internship opportunities, as well as child care services for students who are receiving CalWORKs. This program is specifically designed to assist students move from welfare to self-sufficiency through education and training. This program is also the campus contact for specially funded training programs including WIA (Workforce Investment Act), TRA (Trade Readjustment Act) and WIB (Workforce Investment Board) grants. Please call (909) 477-2943 for additional information.

COMMUNITY EDUCATION AND PROFESSIONAL DEVELOPMENT

Chaffey College endeavors to serve our community by providing continuing education opportunities as well as personal and professional development classes through our Community Education and Professional Development Program. These fee-based classes are designed to respond to community interests and to assist our region’s economic development by strengthening work-related skills. Current Community Education and Professional Development Schedule of Classes are available on the college’s website at www.chaffey.edu. For further information, please call (909) 477-2955.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESL)

LEARNING TO EARN PROGRAM

The VESL Learning to Earn Program is designed to help ESL students achieve fluency in English while they explore and pursue career paths. Our dedicated faculty and staff are committed to helping students build their vocabulary, reading ability, writing skills, computer skills, and pronunciation in the context of a chosen career path. In the first part of the program, VESL students take a Speaking and Listening course, a Reading course, a Writing course, a Computer course, and our innovative Learning to Earn course; students also build their knowledge of career paths and requirements through a series of workshops provided by a knowledgeable counselor. Students choose a career path of interest to them and pursue the chosen certificate or degree program with the support of dedicated ESL and VESL instructors and support staff. Targeted to CalWORKs recipients.

More information is available in the Community Education department at the Rancho Cucamonga campus. VESL Learning to Earn Program contacts are Jill Murphy, ESL faculty member, at (909) 477-8499, and Mariana Moreno, CalWORKs Transitional Liaison, at (909) 477-2943.

CONTRACT EDUCATION

Chaffey College is pleased to offer customized training to meet the needs of business and industry within the community. Contract Education services are in line with the California Community Colleges’ mission to advance economic growth, enhance employee performance and increase the return on investment for area business and industry, from large corporations to the small business entrepreneur. Instructors are experienced, with excellent credentials. Programs are low cost and are tailored to business needs. Training typically takes place at the business site and can be arranged around business schedules (all shifts; all days). Consulting services and needs assessments are also available. Please call (909) 941-2730 for further information.
ACADEMIC INFORMATION

DEFINITIONS

CATALOG RIGHTS/MATRICULATION
Requirements shown in this catalog apply to any student entering (matriculating) Chaffey College during the Fall 2007, Spring 2008, or Summer 2008 terms. Catalog rights apply only to the courses comprising the General Education requirements. Other requirements such as minimum grade point average for admission to a program, course prerequisites and corequisites, textbooks, course content, software, etc., may change over time at the discretion of the college.

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.

HOURS AND UNITS OF CREDIT

<table>
<thead>
<tr>
<th>Class</th>
<th>Unit of Credit</th>
<th>Hours per Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>1</td>
<td>16-18</td>
</tr>
<tr>
<td>Laboratory</td>
<td>1</td>
<td>48-54</td>
</tr>
<tr>
<td>(including self-paced and open-entry)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent Study</td>
<td>1</td>
<td>16-18</td>
</tr>
<tr>
<td>Studio</td>
<td>1</td>
<td>32-36</td>
</tr>
<tr>
<td>Work Experience</td>
<td>1</td>
<td>60(unpaid)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75(paid)</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.

ENGLISH COURSE LIMIT
A student may count only one English course below English 1A (i.e., one level below the first transfer level composition course) toward an A.A. or A.S. degree.

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>1.33</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>3.33</td>
</tr>
<tr>
<td>90*</td>
<td>60*</td>
</tr>
</tbody>
</table>

*Minimum 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. See “Limitations on Enrollment” section for more information on prerequisites.

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

LIMITATION ON ENROLLMENT
A non-course requirement for entry into a course or educational program. See “Limitations on Enrollment” section for more information.

ADVISORY
A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program (Title 5, Section 55200).

ATTENDANCE AND PARTICIPATION

GENERAL
Ideally, students are expected to attend every meeting of every class for which they are enrolled. In general, however, no universal requirement is made relative to the minimum number of classes which students must attend. There is, however, a universal expectation that students will make reasonable progress toward successful learning.

Instructors may develop specific policies and procedures related to attendance and participation 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.

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.

DISTANCE EDUCATION

Chaffey College offers an extensive course listing of Distance Education classes. Distance Education classes are online courses that allow a student to attend class anytime and anywhere, wherever the student has access to a computer with internet capabilities. Hybrid courses are a combination of on campus and online instruction. Students meet on campus on the designated days and times, as well as receive instruction online.

Distance Education courses are academically equivalent to on campus courses, taught by distinguished Chaffey faculty, and can fulfill general education, elective, and/or major requirements, with some classes transferable to four-year institutions.

For more information, contact the Chaffey College Distance Education office at (909) 652-6789, option 1; via e-mail at OnlineEd@chaffey.edu; or visit the Chaffey College website at www.chaffey.edu/onlineed.

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 or during finals week as published in the schedule of classes.
The established final examination schedule cannot be changed without approval from the Vice President of Instruction.

Students may petition to take a final examination at a non-scheduled time due to exceptional circumstances. Petition forms are available in each school office, and must include the instructor’s approval and signature.

### Honors

**Recognition**
Scholastic achievement, leadership, service, and character are recognized by Chaffey College through a variety of honors and awards. The majority of these are sponsored by college and campus organizations; however, a number are made possible by community organizations and interested citizens.

**Honor Lists**
Two scholastic honor lists are prepared each fall and spring semester.

- **Exemplary Achievement List:** Students who complete a standard semester with a 4.00 GPA in 12 or more degree applicable units.
- **Dean’s Honor List:** Students who complete a standard semester with a 3.50 GPA in 12 or more degree applicable units.

Students in each category receive a Certificate of Merit for their achievement from the Office of Student Activities.

**Student Honor Society**
Honors students may become members of Phi Theta Kappa and may graduate with honors.

**Honors at Graduation**
Students with a cumulative 3.50 GPA or above in degree applicable units will graduate with honors. GPA for Honors at Graduation (listed in commencement ceremony booklet) is computed after the Fall semester grades are recorded on the transcript.

**Valedictorian**
To be eligible for selection as valedictorian, students must have earned a cumulative 4.00 GPA in degree applicable units and have completed a minimum of 12 degree applicable units at Chaffey College each term, except the first term in college may be fewer than 12 units.

### 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 (AP) Examinations.
2. **Military-sponsored programs:**
   a. USAFI college-level courses (DANTES)
   b. Community College of the Air Force
3. **College-Level Examination Program (CLEP)**
   General examinations:
   a. English Composition
   b. Humanities
   c. Mathematics
   d. Natural Sciences
   e. Social Sciences
4. **College-level Examination Program (CLEP)**
   Subject examinations:
   a. International Colleges and Universities
   b. Religious coursework/sectarian

**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>College Entrance Examination Board (CEEB)</td>
<td>X</td>
<td>3.45</td>
<td>NO MAXIMUM</td>
</tr>
<tr>
<td>Advanced Placement (AP) Examinations*</td>
<td></td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Military-sponsored programs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. USAFI college-level courses (DANTES)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Community College of the Air Force</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit recommendations of the ACE Guide to Evaluation of Educational Experience in the Armed Services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Military Service</td>
<td>X</td>
<td>BY PETITION</td>
<td></td>
</tr>
<tr>
<td>b. Approved Academic Service Schools</td>
<td>X</td>
<td>BY PETITION</td>
<td></td>
</tr>
<tr>
<td>College-Level Examination Program (CLEP) general examinations:*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. English Composition</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Humanities</td>
<td>X</td>
<td>50</td>
<td>6 UNITS</td>
</tr>
<tr>
<td>c. Mathematics</td>
<td>X</td>
<td>50</td>
<td>6 UNITS</td>
</tr>
<tr>
<td>d. Natural Sciences</td>
<td>X</td>
<td>50</td>
<td>6 UNITS</td>
</tr>
<tr>
<td>e. Social Sciences</td>
<td>X</td>
<td>50</td>
<td>6 UNITS</td>
</tr>
<tr>
<td>College-level Examination Program (CLEP) subject examinations:* @</td>
<td>LIMITED</td>
<td>DETERMINED BY EVALUATION</td>
<td>NO MAXIMUM</td>
</tr>
<tr>
<td>International Colleges and Universities</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Evaluation by approved agency required]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colleges or Universities without Regional Accreditation</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious coursework/sectarian</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See counselor for specific subject examination credit
@See Counselor for credit for specific area general education requirement

**3. Chaffey College Testing**
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 the instructor in the appropriate administrative unit and after admissions eligibility criteria are met. A department (discipline area) may establish a limit on the number of courses that may be challenged for credit by examination. Contact the subject area Dean’s office for more information. Credit by examination is subject to the following regulations:

a) The Chaffey Community College District will grant credit to any student who satisfactorily passes an examination in accordance with the credit by examination policy and procedure. Such credit will be granted only to a student who is registered in the Chaffey Community College District; who has earned at least 12 units of credit from Chaffey College; who is in good standing (cumulative GPA 2.0); who has met all course prerequisites; who has not received a grade for the course; who is not currently enrolled in the course; and only for a course listed in the college catalog that specifies it may be challenged through the credit by examination policy.
b) Units earned through credit by examination shall not be counted toward the 18-unit residency requirement for graduation.

c) There is a $25 fee for credit by examination testing.

* Effective Fall 2006 the credit by examination [Cx] twelve unit course credit requirement is waived for high school students enrolled in articulated tech prep courses.

It is the policy of Chaffey College that only unit credit is granted upon successful completion of any of the four options offered above. A grade of CR will be issued, which is equivalent to a C or better grade. No letter grade is assigned; no grade points are assigned; thus, it is not computed in the grade point average.

**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 and completion of a Request for Unit Evaluation form in the Admissions and Records Office. Full unit credit normally will be granted. Further information regarding the following may be obtained from the Admissions and Records 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

**OFFICIAL EVALUATION OF CREDIT COMPLETED AT OTHER SCHOOLS**

Students who have completed course work at other institutions and wish to obtain a degree or certificate from Chaffey College or transfer to a CSU or UC, may request an official evaluation through the Counseling Department. The official evaluation will be completed once all official transcripts are received.

**AUDITING**

Pursuant to Education Code 76370, 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 is charged. Auditing may be requested after the late application period is over. Not all classes are auditable and there are specific requirements that must be met in order to audit a course. Additional information is available from the Admissions and Records Office.

**GRADE CHANGES**

**FINAL GRADES**

Grades given for any course are determined by the instructor, and in the absence of mistake, fraud, bad faith, error, or incompetency, are final. The student has two years, via a petition process, following the semester in which the grade was recorded to request a change of grade. After the two-year limit, the grade is no longer subject to change.

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

Withdraw/Unofficially/Withdrawal 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 (Withdraw) on the student's permanent record prior to the release of the transcript. No grade point average computation penalty is associated with the W grade.

**GRADES AND GRADE POINT AVERAGES**

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:

\[
\text{Grade Point Average (GPA)} = \frac{\text{Total grade points earned}}{\text{Total units attempted}}
\]

<table>
<thead>
<tr>
<th>Attempted</th>
<th>Completed</th>
<th>Grade</th>
<th>Multiply</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Units</td>
<td>5 Units</td>
<td>A+/A (4 points)</td>
<td>5 x 4 =</td>
<td>20.0</td>
</tr>
<tr>
<td>4 Units</td>
<td>4 Units</td>
<td>A- (3.7 points)</td>
<td>5 x 3.7 =</td>
<td>18.5</td>
</tr>
<tr>
<td>3 Units</td>
<td>3 Units</td>
<td>B+ (3.3 points)</td>
<td>4 x 3.3 =</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B (3 points)</td>
<td>4 x 3 =</td>
<td>12.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B- (2.7 points)</td>
<td>4 x 2.7 =</td>
<td>10.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C+ (2.3 points)</td>
<td>3 x 2.3 =</td>
<td>6.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C (2 points)</td>
<td>3 x 2 =</td>
<td>6.0</td>
</tr>
<tr>
<td>2 Units</td>
<td>2 Units</td>
<td>D+ (1.3 points)</td>
<td>2 x 1.3 =</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D (1 point)</td>
<td>2 x 1 =</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>D- (.7 points)</td>
<td>2 x .7 =</td>
<td>1.4</td>
</tr>
<tr>
<td>1 Unit</td>
<td>1 Unit</td>
<td>F (0 points)</td>
<td>0 x 0 =</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Example:**

\[
\text{Example:} \quad \frac{40 \text{ grade points earned}}{15 \text{ units attempted}} = 2.66 \text{ GPA}
\]

Grades earned in non-degree credit courses (numbered 500-599) are not included in the students' degree applicable grade point average.

**PROGRAM CHANGES**

**ADDS**

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

**DROPS OR WITHDRAWAL**

Drops or withdrawals must be done in the Admissions and Records Office. A student may drop or withdraw, or be dropped by an instructor, only before 75% completion of a class. Students may not drop or be dropped by an instructor after 75% completion of a class, and the instructor must issue a grade beyond this point.

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. However, the student is still responsible for payment of fees.

(continued on page 21)
## 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>Grade Points</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+, A</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>A-</td>
<td>3.70</td>
<td>Excellent</td>
</tr>
<tr>
<td>B+</td>
<td>3.30</td>
<td>Good</td>
</tr>
<tr>
<td>B</td>
<td>3.00</td>
<td>Good</td>
</tr>
<tr>
<td>B-</td>
<td>2.70</td>
<td>Good</td>
</tr>
<tr>
<td>C+</td>
<td>2.30</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>C</td>
<td>2.00</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>D+</td>
<td>1.30</td>
<td>Passing, less than satisfactory</td>
</tr>
<tr>
<td>D</td>
<td>1.00</td>
<td>Passing, less than satisfactory</td>
</tr>
<tr>
<td>D-</td>
<td>0.70</td>
<td>Passing, less than satisfactory</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>Failing</td>
</tr>
<tr>
<td>FW</td>
<td>0</td>
<td>Student has both ceased participating in the course some time after the last day to officially withdraw from the course without having achieved a final passing grade, and the student has not received district authorization to withdraw from the course under extenuating circumstances.</td>
</tr>
<tr>
<td>CR</td>
<td>N/A</td>
<td>Credit. At least satisfactory. CR grades are not used in calculating GPA. (<em>Only assigned for courses with CR/NC designation and credit by exam.</em>)</td>
</tr>
<tr>
<td>NC</td>
<td>N/A</td>
<td>No credit. Student did not fulfill academic requirements of course. NC grades are not used in calculating GPA. (<em>Only assigned for courses with CR/NC designation.</em>)</td>
</tr>
<tr>
<td>W</td>
<td>N/A</td>
<td>Withdrawal. Assigned for students who officially withdraw from a class after 30% and before 75% of the course has elapsed. “W” grades are not used in calculating GPA, but are used as factors in probation and dismissal procedures.</td>
</tr>
<tr>
<td>I</td>
<td>N/A</td>
<td>Incomplete academic work due to unforeseeable emergency and justifiable reason at the end of the term. Students do not re-enroll in the class but make arrangements with the instructor to complete coursework and receive a final grade. Coursework must be completed within one year or the I grade will default to an alternate grade indicated by the instructor (usually substandard). I grades are not used in calculating GPA or units attempted.</td>
</tr>
<tr>
<td>IP</td>
<td>N/A</td>
<td>In progress. Grade awaits completion of course work which extends beyond the end of the term. Students must re-enroll in the class the following semester. The IP may be assigned only one time for each class. Coursework must be completed the following semester or the IP grade will default to an alternate grade indicated by the instructor (usually substandard). IP grades are not used in calculating GPA.</td>
</tr>
<tr>
<td>RD</td>
<td>N/A</td>
<td>Report delayed. Grade can only be assigned by the registrar when there is a delay in reporting a student's grade. It is a temporary symbol, replaced by a permanent symbol as soon as possible and therefore is not used in calculating GPA.</td>
</tr>
<tr>
<td>MW</td>
<td>N/A</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>
</tr>
</tbody>
</table>
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 attendance or for “good cause” as defined in the Education Code, Article 3, Section 76033.

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) or FW (Unofficial Withdrawal) grade. Drops or withdrawals cannot be processed by mail.

### COURSE REPETITION

#### AUTHORIZATION FOR REPEATITION

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 two reasons:

1. Skills or proficiencies are enhanced by supervised repetition and practice within class periods;
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” grade. When the “I” grade is reconciled, the above policies are in effect. Coursework must be completed within one year, or the “I” grade will default to an alternate grade indicated by the instructor (usually substandard).

A student attempting to earn a satisfactory grade in a course for which he or she has received an “IP” (In Progress) grade must enroll for that course in the subsequent term (excluding summer). Coursework must be completed the following semester or the “IP” grade will default to an alternate grade indicated by the instructor (usually substandard). “IP” grades are most commonly issued for open-entry/open-exit courses, courses which are skills based and where a student making satisfactory progress has not yet mastered the required skills to complete the course requirement, or team-sports that have seasons that overlap semesters.

A student may petition to repeat a course that is not designated as repeatable in which he or she has received a satisfactory grade of A, A-, B+, B, B-, C+, C, or CR, when that student’s level of competency in that course has diminished over a period of time. The most recent grade will be considered an unofficial repeat, therefore, units and grade points earned in the latest repetition of the course will not be used in calculations of units earned or grade point average. Students may also repeat a course in which he or she earned a satisfactory grade when such repetition is necessary for the student to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. Each repeat under this designation will be considered an official repeat, therefore units and grade points earned will be used in calculations of units earned and grade point averages. Students must petition to retake a course prior to registration.

#### COURSE REPETITION FOR SUBSTANDARD GRADES

Students may repeat a course to remove a substandard grade from his or her grade point average computation at Chaffey College, whether that grade was received at Chaffey or at another accredited institution. A substandard grade is D+, D, D-, F, FW, or NC.

Students who have attempted a course two (2) times and have received a substandard grade for each attempt must petition to enroll in the course for any subsequent attempts. In addition, for five highly impacted biology classes (Biology 20, 22, 23, 23L, 424) any combination of two D, F, FW, or W grades will require a petition. Petitions are not automatically approved; they are evaluated on a case-by-case basis by the dean of the subject area. The petition must be approved prior to the student registering for the course in a subsequent attempt to earn a satisfactory grade. Students who enroll in the class without an approved petition may be excluded from the class. (Reference: Title 5, 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 flagged with an “R” coding on a student’s permanent record. The “R” coded 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 Certifying Official in the Admissions and Records Office before repeating any course.

### PROBATION AND 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 W, I, and/or NC grades reaches or exceeds fifty percent (50%) of all units in which the student has enrolled.

Students placed on either academic or progress probation may be subject to a block from registration.

#### 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 Department.

Students placed on academic or progress probation will be notified by mail.

#### ACADEMIC DISMISSAL

A student who is on academic probation shall be subject to academic dismissal if the student earns a cumulative grade point average of less than 2.00 in all units attempted in each of three consecutive semesters, excluding summer session.

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

#### Note to Veterans:

Special rules regarding academic probation and dismissal apply to VA students. Please see “Special Student Classifications” for more information.
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 Department.

A student readmitted after academic dismissal will remain on academic probation until the student’s grade point average reaches 2.00, or the percentage of units for which grades of W, I, or NC drops below 50%.

MISCELLANEOUS
For the purpose of this section on academic dismissal, semesters are considered consecutive on the basis of student enrollment.
• Dismissal is defined as the denial of the opportunity to attend college to a student.
• 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 and will be dismissed for the Spring 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, MW, I, IP, and RD 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.
IN ACCORDANCE WITH TITLE IX REGULATIONS, THE DISTRICT OFFERS EQUAL ACADEMIC, OCCUPATIONAL, AND EXTRACURRICULAR OPPORTUNITIES REGARDLESS OF THE SEX OF THE INDIVIDUAL. THE DISTRICT, AUTHORIZED UNDER FEDERAL LAW TO ENROLL NON-IMMIGRANT AND ALIEN STUDENTS, AND, IN ACCORDANCE WITH TITLE V REGULATIONS, AFFIRMS THAT THE LACK OF ENGLISH LANGUAGE SKILLS WILL NOT BE A BARRIER TO ADMISSION AND PARTICIPATION IN THE DISTRICT’S PROGRAMS.

PERSONS WHO SEEK INFORMATION AND/OR RESOLUTION OF ALLEGED ACTS OF UNLAWFUL DISCRIMINATION, RETALIATION, OR HARASSMENT ARE DIRECTED TO CONTACT THE DISTRICT’S COMPLIANCE OFFICER, LISA BAILEY, EXECUTIVE DIRECTOR OF HUMAN RESOURCES, CHAFFEY COLLEGE, 5885 HAVEN AVENUE, Rancho Cucamonga, CA 91737-3002; TELEPHONE (909) 652-6457.

SEXUAL HARASSMENT POLICY

It is the policy of the Chaffey Community College District to provide for all students and employees, an educational, employment, and business environment free of all forms of harassment, exploitation, intimidation, or unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct or communications of a sexual nature as defined and otherwise prohibited by the California Fair Employment and Housing Act, California Education Code, and State and Federal rules, regulations, statutes and laws prohibiting sexual harassment and retaliation.

The District is strongly opposed to sexual harassment and expressly forbids sexual harassment of its students and employees by faculty, managers, supervisors, employees, other students or members of the general public. The College will take whatever action may be needed to prevent, correct, and, if necessary, discipline inappropriate behavior. Where evidence of sexual harassment is found, appropriate personnel (faculty, non-faculty, or student worker) or student disciplinary action shall be taken, in accordance with the California Education Code.

Sexual harassment shall be immediately reported to the District’s Compliance Officer, Lisa Bailey, Executive Director of Human Resources, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; telephone (909) 652-6532, or to any dean, director, or manager for immediate reporting to the District’s Compliance Officer, or designee. Every effort will be made to ensure that confidentiality is maintained.

AMERICANS WITH DISABILITIES ACT OF 1990

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination against people with disabilities in employment, public services including public and private transportation, public accommodations, and telecommunications services.

Support services for students with a disability are provided through Disability Programs and Services. Anyone needing information about services for students with a disability should contact this office at (909) 941-2379 or TDD/TTY (909) 466-2829. The toll free numbers for the California Relay Service are 1-800-735-2929 or 1-877-735-2929 for TDD/TTY users. Employees (faculty, non-faculty, or student worker) requiring accommodations should contact the Executive Director of Human Resources, Lisa Bailey, at (909) 652-6532.

SECTION 504—REHABILITATION ACT

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 91737-3002; telephone (909) 652-6457.

DECLARACIÓN DE OPORTUNIDAD EQUITATIVA

Política de Hostigamiento y de Indiscriminación

El distrito del Colegio Comunitario Chaffey se compromete en proporcionar oportunidades equitativas de educación y empleo. El distrito afirma su compromiso con políticas que incluyen un justo y igual trato para estudiantes y empleados prohibiendo la discriminación en su admisión, acceso y trato en los programas y actividades del colegio basada en la raza, el color, el grupo étnico, el origen nacional, la ascendencia, la religión, el credo religioso, el género sexual, la inhabilitación física o mental, la condición médica (incluyendo el cáncer), la edad, el estado civil, la orientación sexual, o el estado como veterano da la guerra de Vietnam.

Basado en las regulaciones del título IX, el distrito ofrece oportunidades académicas, laborales y extracurriculares equitativas sin importar en género del individuo. El distrito, autorizado bajo las leyes federales para matricular a estudiantes extranjeros, y en concordancia con las regulaciones del título V, afirma que la falta de dominio de la lengua inglesa no será una barrera para la admisión y la participación en los programas del distrito.

Aquellas personas que necesiten información o quieran encontrar una solución a actos o hechos de discriminación, diríjase a Lisa Bailey, oficial encargada del distrito y directora de las oficinas de Recursos Humanos en Chaffey College, 5885 Haven Av., Rancho Cucamonga, CA 91737-3002; teléfono (909) 652-6532.
POLÍTICA DE HOSTIGAMIENTO SEXUAL
La política del distrito del Colegio Comunitario Chaffey es proveer a todos sus estudiantes y empleados de un ambiente laboral y educacional libre de todas las formas de acoso, explotación, intimidación o insinuaciones sexuales, requerimientos de favores sexuales o todo tipo de conducta verbal, visual o física como se define y prohíbe por el Acta de Empleo Justo de California, el Código Educativo de California, las regulaciones estatales o federales y las leyes específicas que prohíben el acoso sexual.

El distrito se opone rotundamente al acoso sexual y prohíbe que sus estudiantes y empleados sean hostigados por el profesorado, gerentes, supervisores, empleados, otros estudiantes o miembros del público en general. El colegio tomará cualquier acción para prevenir, corregir – y si es necesario – disciplinar la conducta inapropiada. Si se consigue evidencia del acoso sexual, al personal apropiado (profesorado, empleados o estudiantes) se le aplicará el rigor de la ley en acuerdo con el código educacional de California.

El acoso sexual debe ser denunciado inmediata-mente al oficial designado por el distrito, Lisa Bailey, directora de la oficina de Recursos Humanos en Chaffey College, 5885 Haven Av., Rancho Cucamonga, CA 91737-3002; teléfono (909) 652-6532. También puede contactar a cualquier decano, director o gerente para ser reportado en seguida al oficial designado por el distrito. Si tiene una pregunta o una queja, con-tacte al oficial mencionado en este párrafo. Se hará todo lo posible por guardar la más estricta confidencia del caso.

EL DECRETO DE 1990 PARA AMERICANOS CON INHABILIDADES
Este decreto prohíbe la discriminación contra aquellas personas que tienen una incapacidad cuando solicitan empleo o servicios públicos incluyendo transporte privado o público, y servicios de adaptación y telecomunicaciones.

Las oficinas del programa de inhabilitados (DPS) proveen servicios de apoyo para estudiantes con incapacidades. Si necesita informa-ción acerca de los servicios para estudiantes, contacte (909) 941-2379 o TDD/TTY (909) 466-2829. Los empleados (el profesorado o el perso-nal administrativo) que requieran adaptaciones especiales deben contactar la oficina del director de recursos humanos, Lisa Bailey (909) 652-6532.

SECCIÓN 504
En concordancia con la sección 504 del decreto de Rehabilitación, el colegio Chaffey se atiene a la regulación que “ningún individuo incapacita-do” deberá ser excluido de participar en los pro-

OPEN COURSES
It is the policy of this district that, unless specif-
ically 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 Col-
lege 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.

COMPUTER USE
Chaffey College owns and operates a network and a variety of computer systems for use by its faculty, students, and staff. Chaffey College encourages the use of its network and comput-
er systems for education, academic develop-
ment, and other approved purposes. When using the Chaffey College network and comput-
er systems, all users are required to abide by the policy established by the Governing Board and the associated procedures and to use the system in an ethical and lawful manner.

Chaffey College does not currently block access to the Internet. Therefore, all students under the age of 18 years must have written parental con-
sent to utilize the Chaffey College computer net-
work and/or enroll in any course requiring computer usage. Chaffey College reserves the right to employ filters and/or software to limit access to undesirable sites and/or unsolicited materials.
**Behavior Code**

All members of the Chaffey College community are expected to behave in an ethical and moral fashion, respecting the human dignity of all members of our community and resisting behavior that may cause danger or harm to others which shall include, but not limited to, violence, theft, or bigotry. All members of the Chaffey College community are expected to observe established standards of scholarship and academic freedom by respecting the intellectual property of others and by honoring the right of all students to pursue their education in an environment free from harassment and intimidation. The entire policy is printed in the Student Handbook and can be obtained in the Office of the Assistant Dean of Student Services (909) 652-6506.

**Disciplinary and Grievance Appeal Procedures**

Smoking of any form of tobacco or non-tobacco products is prohibited inside of any building, including restrooms and corridors; within 20 feet of a main exit, entrance, or operable window of any college-owned, leased, or operated buildings; and in any college-owned, leased, or operated vehicles.

**Smoking Policy**

Smoking of any form of tobacco or non-tobacco products is prohibited inside of any building, including restrooms and corridors; within 20 feet of a main exit, entrance, or operable window of any college-owned, leased, or operated buildings; and in any college-owned, leased, or operated vehicles.

**Traffic and Parking Regulations**

Any motor vehicle classified as such under California State law and parked on the Rancho Cucamonga or Fontana Campuses between the hours of 7 a.m. to 11 p.m. Monday through Friday and 7 a.m. to 3 p.m. on Saturday must display a valid parking decal or parking permit. Permits are not required on Sunday. Vehicles parked in general parking at the Chino Campus are not required to display a parking decal or daily parking permit at any time.

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**Regulations and Student Compliance**

Civil law and district policies give the college student a number of rights on campus that non-students 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.

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

Students are responsible for compliance with the regulations published in this catalog, in the Schedule of Classes, in the Student Handbook, and departmental rules and regulations. Student clubs are responsible for compliance with the Club Handbook.

**Academic Integrity (Cheating)**

Integrity is an essential component of the student academic experience. The academic evaluation a student receives for a course becomes a permanent college record and it is critical that such records be accurate and consistent. The integrity students learn and exhibit at the college will be a model for the professional integrity they practice when they complete the college work. Accordingly, Chaffey College has classified academic dishonesty into the following categories:

- Cheating
- Plagiarism
- Unauthorized Collaboration
- Facilitating Academic Dishonesty
- Interference Or Sabotage
- Fabrication
- Retaliation

The entire policy is printed in the Student Handbook and can be obtained in the Office of the Assistant Dean of Student Services (909) 652-6506.
Parking decals may be purchased at the Rancho Cucamonga or Fontana Campuses. Daily parking permits are purchased at dispensers located in parking lots throughout the campus. Vehicles not displaying a valid parking decal or daily parking permit 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.

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/Campus Police 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, lawn, patio or court areas except by special permission of the Chaffey College Department of Public Safety (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 only in spaces specifically marked, and is prohibited in loading zones, posted areas, or along red curbs. Areas that are not clearly marked for parking are designated as “No Parking” areas.

Backings 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.

Students with physical disabilities must purchase and display a campus parking decal for their vehicle. They may park in specially marked locations, identified by blue ground markings and/or a blue sign. If parked in these locations, they must also display either the DMV handicapped placard, or a permit obtained from the Disability Programs and Services Office. Visitor parking spaces may be used by those who secure a guest parking pass from the College Bookstore, the Student Programs Office, Campus Police Office, 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 and are marked with a green curb. Metered stalls are $0.25 for every 15 minutes with a limit of one hour. Any person parked in a metered stall must pay the correct fee, even with a valid parking decal.

Violators of the above regulations with regard to traffic and parking are subject to a citation payable at the Campus Police Office. Continued violations of the above traffic regulations 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 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 or glass 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

Rental of campus facilities provides for the maximum use of college facilities by students, employees, other educational entities, citizens, and citizen groups. The use of district facilities may not interfere with the normal educational activities of the college.

Facility rental procedures and fees may be obtained from the Facility Rentals Office at (909) 652-6182.

COLLECTION & 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.

STUDENT RIGHT-TO-KNOW

In accordance with the Code of Federal Regulations, Title 34, Part 668, Sections 668.41 through 668.46 (the “Student Right to Know” Act), institutions participating in any Title IV, HEA program shall make available to current and prospective students, and high school counselors, the completion and transfer-out rates of first-time, full-time, degree-seeking students who entered the institution on or after July 1, 1996. This information will be posted in all Chaffey College Student Service Offices, and is currently available at: http://srkt.cccco.edu/index.asp.
STUDENT PRIVACY RIGHTS AND ACCESS TO RECORDS

In accordance with the Family Educational Rights and Privacy Act (FERPA), Chaffey College does not release student record information without the written consent of the student or under judicial order, except:

A. To officials and employees of the District who have a legitimate educational need to inspect the record.
B. To a member of the college’s Governing Board.
C. To a person employed by, or under contract to, the District to perform a special task, such as an attorney or auditor.

The law allows the College to release student directory information, except when students have specifically requested that directory information be kept confidential. Directory information may be released by exception upon determination of the Superintendent/President, the Vice President of Student Services, or the Director of Admissions and Records that such release is appropriate and not likely to put students at risk.

Chaffey College designates the following as directory information: name, address, phone number, dates of attendance, major field of study, awards and degrees received, most recent institution attended, participation in official college activities and sports, weight and height (for members of athletic teams), and part-time and/or full-time enrollment status. Students must specifically request non-release of their directory information by submitting a Student Update Form. Student Update Forms are available on the Chaffey website at www.chaffey.edu or in the Admissions and Records Office. Requested actions will be effective within 5 working days.

SUBJECT TO CHANGE

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

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. Services for students include the publication of a Student Handbook, the Dean’s Honor List, graduation, annual spring scholarships, numerous cultural events, ticket sales, emergency book grants, lecture series, information on student organizations, student government, community service projects, and a housing bulletin board.

The Office of Student Activities is located in Campus Center East (CCE) on the Rancho Cucamonga Campus. Office hours for fall/spring semesters are:

Monday - Thursday
8:00 a.m. to 6:00 p.m.
Friday: 8:00 a.m. to 4:00 p.m.

Students may contact the Office of Student Activities at (909) 652-6589.

ASSOCIATED STUDENTS

Every currently enrolled credit-class student belongs to the Associated Students of Chaffey College (ASCC), which is governed by the Campus Council. With a membership composed of fifteen (15) representative Chaffey students, the Campus Council is comprised of two bodies: an Executive body and the Senate. The President of the ASCC serves in the dual role of Student Trustee who serves as liaison between the Chaffey College Governing Board and the student population. The Campus Council holds weekly meetings throughout the academic year. The ASCC campus-wide activities and the Inter-Club Council are supported through the College Services Fee.

CLUBS AND ORGANIZATIONS

The Office of Student Activities and the Inter-Club Council oversee the activities of all clubs and organizations which have renewed their charters for the current school year, via the submission of annually required forms. Organizations are professional or vocational while others are recreational, cultural, religious, or service-oriented. All student organizations are administered by students for the benefit of students with the assistance of the Office of Student Activities. Each organization is required to have a full-time faculty/staff advisor to be chartered by the Chaffey Community College District. Clubs and organizations that have been chartered are:

- Anime
- Associated Press
- Associated Students of Chaffey College
- Ceramics Club
- Chaffey Art History Association
- Chaffey Cinema Society
- Chaffey Engineering Club
- Chemistry Club
- Democratic Club
- Economics Club
- Future Teachers Club
- Kappa Sigma Nu
- Latter Day Saint Student Association
- Math Club
- Minorities in Politics
- Movimiento Estudiantil Latino (M.E.L.A.)
- Muslim Students Association
- Native American Club
- One Over One Christian Club
- P.O.E.T.
- Puente Club
- Spanish Club
- Soc-Psych Club
- Together Plus
- Vocational Nursing (VN) Club
- World Rhythms
SCHOLARSHIPS
ASCC/Student Activities administers a $70,000 scholarship program each year. Inquire in the Office of Student Activities at the beginning of the Spring semester for details about application forms. ASCC scholarships are awarded at an Annual Awards program held in May. All scholarships are funded by the College Services fee.

Students are also encouraged to inquire about additional scholarship opportunities through the Chaffey College Foundation.

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.

The Student Handbook, available at no charge, and other publications including information about the programs and services of the college are also available in the Office of Student Activities.

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, track & field, swimming, soccer, and water polo. The women’s athletic program includes competition in basketball, softball, track & field, swimming, water polo, soccer, 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 (C.O.A.).

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 counselor or coach to determine athletic eligibility and to complete a student educational plan.

ATHLETIC FACILITIES
The Earl Sicosky Gymnasium has a seating capacity of 715. The upper level provides bleachers and a dance 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 two classrooms are located on the east side.

Adjacent to the gymnasium are eight tennis courts, Grigsby Field (4,200-seat stadium with football field and track), Lowder Field (baseball, handball courts, a state-of-the-art softball facility, a strength and conditioning lab, the George Colbath Fitness Lab, and two additional fields for physical education and athletic activities. A swimming pool is 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 Campus Center East maintains a bulletin board with listings 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. There is no charge for listing housing notices.

STUDENT SERVICES
ADMISSIONS AND RECORDS OFFICE
The Admissions and Records office 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, and drop from classes through this office. Transcripts, credit by examination, and enrollment verifications are all issued via this office. Transcript requests can be made in person, via mail, or through Chaffey’s website at www.chaffey.edu. Enrollment verification requests can be made in person or through Chaffey’s website. For more information on transcript and enrollment verification requests including fees, please visit our website at www.chaffey.edu or see the schedule of classes. For information on credit by examination, please see “Credit by Examination”.

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. Textbooks can be ordered on our website http://books.chaffey.edu. Chaffey cloth-
ing, gifts, novelties, and other items of interest are also available. The bookstore provides several services for students. These include fax service, UPS mailing service, Omni bus passes, special book order service, postal stamp service, and ATM service.

CAFETERIA
The Cafeteria in Campus Center West is located across from the bookstore. There are a variety of food and drink choices available. You may order from the grill, Taco Bell Express, or create your own salad from the salad bar. Throughout the year the cafeteria is open Monday through Friday.

CAMPUS CENTER
The Campus Center is at the heart of the Rancho Cucamonga Campus. It houses many student service areas, as well as providing a location where students and college staff may meet, relax, and enjoy a variety of activities.

The center is divided into east (CCE) and west (CCW) areas, separated by an open quadrangle containing tables, benches, phones, and attractive planters. The Free Speech Area, the raised platform at the north end of this open area, provides a location for open dialogue, student speeches, rallies, guest presentations, and other activities.

Services/offices available in the Campus Center are:

**East**
- Associated Students of Chaffey College (ASCC) Office
- Bookstore
- Campus Police
- Student Activities
- Student Employment/Work Experience
- Student Lounge (within Student Activities)

**West**
- Cafeteria
- Culinary Arts Program lab
- Disability Programs and Services
- EOPS
- Health Services Office
- Learning Center

CHILD DEVELOPMENT CENTER
The Chaffey College Child Development Center located at the northwestern corner of the Rancho Cucamonga Campus provides high quality child care and educational experiences for children ages two through Kindergarten. The curriculum is developmentally appropriate and follows the guidelines and regulations of the State Department of Education. The Center provides child care services for students, staff, faculty, or community families and is typically open Monday through Friday, 7am-5pm.

The mission of the Child Development Center is to provide:
- High quality care and educational experiences for children
- Access to higher education by providing a service to student parents so that they can pursue their educational goals and achieve self-sufficiency
- Learning opportunities for students enrolled in courses related to children and their development

The center is licensed by the State of California Title 22, and provides subsidized childcare services through the State Department of Education, Child Development Division Title V funding. To receive free or reduced child care services, parents must meet eligibility criteria as required by the State Department of Education. A sliding fee scale will be charged based on income and family size. Parents in excess of state fee schedules will be charged the full cost for service.

All children are welcome to the Child Development Center, regardless of sex, race, religion, ethnicity, national origin, or ability. All children must be in good health. The ratio of preschool age children to adults is eight to one. The maximum group size for preschool classrooms is 24 children. The ratio of toddlers to adults is four to one. The maximum group size for toddlers is 12 children. Parents utilizing the center are expected to enroll in a non-credit course entitled Parent-Child Relations (CDE 680) which entails two hours of monthly parent participation in the center classrooms.

The Chaffey College Child Development Center offers employment opportunities for child development majors through the apprentice program. The apprentice program helps students gain work experience and to obtain their child development permits that are required for employment in state and federal funded programs. Job applications are available in the front office of the Child Development Center.

Students in various Child Development courses may complete their assignments in the Child Development Center program. Pediatric Nursing, Psychology, and Food Service Management courses utilize the Child Development Center as a field of placement site. For information on fees, enrollment procedures, or job openings please call (909) 941-2687.

COUNSELING DEPARTMENT
The Counseling Department offers 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 or university, evaluation of course work taken at other colleges, applications for graduation and for certificates, processing of waivers and petitions and referrals to other agencies on campus and in the community. The Counseling Department offers 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 Department. Evaluation of interests, aptitudes, values, individualized resume writing and job interview techniques are services provided to assist students in reaching career goals. Computerized career search systems, such as Choices CT and Eureka, are available for use by students.

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

Career testing for aptitude, personality, values, and interests is available through the Counseling Department to help students identify careers of interest. Contact the Counseling Department, (909) 652-6200 for details.

The Chaffey College Chino and Fontana Campuses are staffed with counselors who provide educational, career, and personal counseling. For more information contact the Chino Campus at (909) 652-7750 or the Fontana Campus at (909) 652-7400.

ACT AND SAT
Students interested in transferring to four-year colleges or universities before completing 60 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. Information on the ACT and SAT is available in the Counseling Department.

DISABILITY PROGRAMS AND SERVICES (DPS)
Chaffey College maintains a strong commitment to serving people with all types of disabilities who desire postsecondary education. The goal of DPS is to provide equal access to education for all students with disabilities. DPS emphasizes independence and self reliance, while encouraging the students to become active members of the college community; this active role will foster successful integration into four
year colleges/universities and career employment. Participation in DPS is voluntary, and conducted with strict confidentiality. Students are expected to make measurable progress toward their educational goals in order to remain in the program. The array of supported services includes, but is not limited to:

• Educational evaluations
• Individual educational planning
• Prescriptive learning planning
• Academic/vocational counseling
• Verification of measurable progress
• On-campus transportation
• Adapted parking spaces
• Campus orientation
• Priority registration and book buy
• Course substitution/waiver assistance
• Adaptive equipment
• Print enlargement
• Alternative media
• Test-taking facilitation
• Reader and peer note taking services
• Liaison and referral services
• Counseling
• Testing for possible inclusion in Learning Disabilities Program

DPS makes alternate formats of instructional text and video available to qualified students. Formats available are Braille, Electronic Text (E-Text), and Closed Captioning. Students needing an alternate format text or video that is required for a course in which they are or will be enrolled, should contact the DPS Alternate Media Access Coordinator at (909) 477-8531, as soon as the need is known, as specific requirements and lengthy acquisition timelines apply.

In accordance with Section 508 of the Rehabilitation Act of 1973, as amended 29 U.S.C § 792(d), closed captioning of DVDs/videos is available whenever a student has a need and a captioned version cannot be purchased through the publisher. After permission has been granted by the publisher, one captioned copy of the video will be made in accordance with the appropriate protocols for video captioning and made available to the instructor of the course. The closed captioned instructional videocassettes in the Chaffey College Library video collection have been identified with closed captioning labels on the slipcase. There is a closed captioning note in the bibliographic record for every title; these records appear in the library catalog and the catalog is accessible online at www.chaffey.edu.

DPS also offers specialized classes to meet the specific needs of students with disabilities. Courses are based on individual student need and may include the following:
• Cognitive retraining
• Guidance
• Advocacy
• Adaptive Physical Education (available through the Physical Education department)
• Study Skills

The DPS Center is located in Campus Center West (CCW -21) at the Rancho Cucamonga Campus. Usual hours are:

Monday through Friday
7:30 a.m. - 4:30 p.m.

The DPS department may be contacted at (909) 941-2379 or TDD/TTY (909) 466-2829. The toll free numbers for the California Relay Service are 1-800-735-2929 or (909) 466-2829 for TDD/TTY users. For more information, visit the DPS website at www.chaffey.edu/dps.

In addition to the above facilities and services, Chaffey College offers an alternative program for students with disabilities located off-campus at the Learning Development Center. The goal of this program is to provide an academic and transitional work program for students with disabilities leading to competitive employment. The academic component focuses on, but is not limited to, the following subjects:

• Vocational skills training
• Career exploration and preparation
• Job-seeking skills
• Employment applications
• Resumé writing
• Interview techniques
• Work attitudes
• Job placement
• Job retention
• 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) 652-7675 or visit the facility located at 9375 Ninth Street, Rancho Cucamonga, CA 91730.

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 and assistance 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 fourteen years of age and receiving public assistance.

Further information and eligibility requirements may be obtained by calling the EOPS office at (909) 941-2340.

LEARNING AND EDUCATIONAL DEVELOPMENT
The Learning and Educational Development (LED) program is a state-funded initiative with the goal of assisting non-credit students transitioning into credit courses. The purpose of this academic support is to encourage students to complete a certificate program, an associate degree, and/or transfer to a four-year university. LED is a student support service working in conjunction with the Chaffey College Success Centers.
Students may contact the program office at (909) 652-6203 for further information, location, hours of operation, and appointments.

LIBRARY
The Library provides services and resources to maintain effective learning programs and to empower the diverse student population to persist toward successful goal achievement. The Library provides reference assistance and navigation to information location and retrieval through book, periodical, video, and electronic resources; these resources are carefully chosen to meet the educational and cultural needs of the Chaffey College student. The goal of the program is for student learners to leave the library with the information literacy and critical thinking skills they will use as they transfer to upper division university programs or to the pursuit of careers throughout their working lives.

The Library provides the following resources and services to students, faculty, and staff:
- Research/reference center with access to the Internet, electronic indexes, and full text services
- An information access/instruction center for bibliographic instruction sessions and workshops
- Assistance from reference librarians in the use of library resources in all formats
- An interactive learning center with study tables
- A quiet study/reading room with individual carrels and group study rooms
- A print collection of books, magazines, and journals
- An instructional video collection
- A reserve book collection
- An online reserve collection
- Photocopiers
- Access 24 hours a day, 7 days a week to online databases
- Access to the Library Monday–Saturday

Also in the Library is an interdisciplinary writing center for tutoring and mini-classes in writing skills.

STUDENT EMPLOYMENT
The Student Employment Office provides job referral, internship referral, cooperative education referral, and personnel services to current and former Chaffey College students.

1. Job Referral Services
This office cultivates and maintains extensive on-campus, local, out-of-state, and international job listings. To further assist Chaffey students, this office arranges for recruiters from various companies, organizations, and institutions to hold open recruiting sessions on-campus. Student Employment is always available to answer résumé and interview technique questions.

2. Internship Referral Services
Student Employment offers assistance in securing paid and non-paid internships. Internships are the best way to obtain in-the-field experience required by the majority of today's employers. Those wishing to work an internship must also be registered for the appropriate Cooperative Education class. Over 80% of interns receive job offers as a result of their internship.

3. Cooperative Education
Student Employment and Cooperative Education together form the Career Services Office. The Cooperative Education program makes it possible for existing jobs and/or internships to work for the student by earning elective units. This is the best way to bridge the gap between classroom and workplace!

4. Personnel Services
Student Employment is the personnel office for all on-campus student positions. All new student employees must complete their personnel documents and submit them to this office prior to their first day of work. This office is also happy to assist in providing employment verifications and in addressing any personnel concerns that might arise.

The Student Employment Office is located in Campus Center East (CCE) on the Rancho Cucamonga campus, co-located with the Cooperative Education Office within Student Activities. Usual office hours are:

Monday - Thursday
8:00 a.m. - 5:00 p.m.
Friday
8:00 a.m. - 4:30 p.m.
Evenings by appointment

Students may contact the Student Employment Office at (909) 652-6187 to schedule an appointment or to confirm office hours.

STUDENT HEALTH SERVICES
Student Health Services is dedicated to assisting students achieve and maintain optimum physical, mental, and emotional health. We are committed to providing quality health care at a reasonable cost.

The Student Health Services team is made up of medical doctors, nurse practitioners, registered nurses, counselors, secretaries, student educators, and student assistants who are trained to assist you with medical information and problems in a professional and confidential manner. Services 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 psychological counseling, and video cassettes and handouts on numerous topics.

Student Health Services is supported by the health fee paid at the time of registration. There is no charge to consult/visit the office staff including the medical doctors and nurse practitioners. There are, however, minimal fees for additional services, such as lab tests, immunizations, and prescription medications.
Your medical records and all discussions with the student health services staff are completely confidential. Records are only released with written consent of the student, unless required by law.

Students are encouraged to visit the office, located in Campus Center West (CCW) at the Rancho Cucamonga Campus. Usual clinic hours are:

- **Monday - Thursday**
  - 7:30 a.m. to 4:30 p.m.
- **Friday**
  - 7:30 a.m. to 4:30 p.m.

For more information or to schedule appointments, call (909) 941-2178.

**STUDENT SUCCESS CENTERS**

As part of the Basic Skills Transformation initiative, Chaffey College created Student Success Centers. The Centers offer tutorials, workshops, learning groups, and computer access to assist students in their academic development and success.

Discipline-specific centers, located on the Rancho Cucamonga Campus, are designed to help students with particular subject area courses and skills. Multidisciplinary Centers are located at all Chaffey sites and are set up to serve students in all subject disciplines. Hours for each Success Center are listed in the schedule of classes. Students may also contact the Success Centers by visiting or calling. The location and telephone number for the Success Centers are listed below.

**MATH SUCCESS CENTER**
- Room PS-12 • (909) 652-6452

**LANGUAGE SUCCESS CENTER**
- EEC Building, 1st Floor • (909) 652-6906

**MULTIDISCIPLINARY/READING SUCCESS CENTER**
- EEC Building, 1st Floor • (909) 652-6932

**WRITING SUCCESS CENTER**
- Library • (909) 652-6820

**Chino Success Center**
- CHCC-218 • (909) 652-7766

**Fontana Success Center**
- FNFC-107 • (909) 652-7408

**TRANSFER CENTER**

The Transfer Center provides information and resources to help students continue their education after Chaffey College. The center maintains a library of college catalogs and reference materials, provides access to the internet and specialized software programs for college research and applications, hosts college representatives for individual appointments with students, sponsors transfer-related workshops, and schedules campus visits and college fairs. All services are free and available to any Chaffey student.

The Transfer Center staff welcomes the opportunity to assist students considering transfer to four-year colleges. The center is located in the Student Services/Administration Building, Room 120 on the Rancho Cucamonga Campus. Usual office hours are 8:00 a.m. to 7:00 p.m. Monday through Thursday and 8:00 a.m. to 4:30 p.m. on Fridays. More information can be obtained by calling (909) 652-6233 or visiting the Transfer Center on Chaffey’s website www.chaffey.edu.

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**Chaffey College Celebrates 125th Year Anniversary**

In the late 1800s, brothers and local landowners, George and William Chaffey, had a vision of opening a college to educate the residents of the Inland Valley. In 1883, that vision became a reality, the Chaffey College School of Agriculture of the University of Southern California, located in downtown Ontario. The Chaffeys were pioneers in higher education, offering both vocational training and academics. The school's first graduating class consisted of two graduates; both were women.

The Rancho Campus has also experienced significant change in recent years. In 2007 alone, six new buildings opened: four new science facilities, the educational excellence center, and the center for student services and administration. Today, Chaffey College has a total enrollment of almost 18,000 students.

Chaffey College is proud to be one of the oldest institutions of higher learning in California. Over the past 125 years, hundreds of thousands of Inland Empire residents have studied here, leaving with not only knowledge and degrees, but also stories of their experiences and memories of the people they met along the way.

**Join us this year as we celebrate Chaffey College’s 125 year anniversary.**
PHILOSOPHY AND CRITERIA FOR ASSOCIATE DEGREE AND GENERAL EDUCATION

The philosophy and criteria for the Associate Degree and general education should address the considerations contained in Title 5, Section 55805 and Accreditation Standard II.A.3. These include, but are not limited to:

- The programs of the District are consistent with the institutional mission, purposes, demographics and economics of its community.
- The philosophy and criteria regarding the Associate Degree references the policy of the Board of Governors that the Associate Degree symbolizes a successful student’s journey through patterns of learning experiences designed to develop certain competences and insights, including:
  - integrate critical thinking skills with effective written and oral exposition and argument;
  - employ practical applications for problem solving using mathematical principles;
  - investigate various modes of scientific research and methodology;
  - develop an awareness of the role of arts in contemporary society;
  - develop a sensitivity to diversity and a respect for differences among individuals;
  - gain perspective of various view points relative to historical developments;
  - develop ethical and moral frameworks to interpret contemporary society;
  - develop self-understanding.

- The philosophy and criteria regarding general education references the policy of the Board of Governors that general education should lead to better self-understanding, including:
  - introducing students to the variety of means through which people comprehend the modern world;
  - introducing the content and methodology of the major areas of knowledge and provides an opportunity for students to develop intellectual skills, information technology facility, affective and creative capabilities, social attitudes, and an appreciation for cultural diversity.

— 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)
All courses must be completed with a minimum grade of C, and 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 3 units: see list of approved courses)

IV. PHYSICAL EDUCATION, RECREATION, AND WELLNESS (minimum 2 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, any 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, 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 through assessment testing (may be taken only one time) or by passing, with a minimum grade of C, any one of the following courses:

- Mathematics 410, 411, 420, 421, 430, 4, 25 or higher level
- 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, any one of the following:
   - Art 63, 82
   - Computer Information Systems (CIS): Core 1, 15, 68
   - CIS: Programming 3, 403, 430
   - CIS: Internet & Web Development 70
   - Computer Science 1, 21
   - Drafting 20, 41, 43, 53
   - Geographic Information Systems 1, 1A, 1B, 401
   - Health Science 405
   - ID 427
   - Music 12
   - Photography 9
   - Social Science 11
   - Theatre Arts 30, 427

2. Pass, with a minimum grade of B, an appropriately 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 schedule of classes for application deadline dates.

IV. CONTINUOUS ATTENDANCE
The preceding graduation requirements apply to students during the 2007-2008 school year. Students who enrolled prior to Fall 2007 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)

ENGLISH COMPOSITION (one course with a grade of C)
Business & Office Technologies 88
English 450, 1A
English as a Second Language 450

COMMUNICATION AND ANALYTICAL THINKING (one course)
Communication Studies 2, 4, 6, 8, 72
Computer Information Systems 1
Computer Science 1
English 1B
Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81, 85, 410, 420, 430
Philosophy 76
Social Science 10
Statistics 10

B NATURAL SCIENCES (one laboratory science course)
Anthropology 1 & 1L
Astronomy 35, 36
Biology 1, 2, 3, 4, 5, 10 & 10L, 20, 22, 23 & 23L, 50, 424 & 424L
Chemistry 7, 9, 10, 21 & 21L1 & 21L2
Earth Science 1 & 1L, 5 & 5L
Geography 4 & 5
Geology 1, 2
Physical Science 10
Physics 5 & 6, 20A, 30A, 44, 45

C HUMANITIES (minimum 4 units)
At least two courses required, one from each of the following categories

C1 ARTS (one course)
Art 1, 3, 5, 6, 8, 9, 10, 11, 12, 14, 16, 18, 20, 62A, 63, 64, 82
Broadcasting 3
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45, 421
Fine Arts 30
Interior Design 11, 12, 13
Music 1, 2A, 2B, 3A, 4, 12, 21, 22, 26, 32, 33, 60, 62, 67
Photography 1, 7, 9, 10, 13
Theatre Arts 1, 4, 5, 10, 12, 64

C2. HUMANITIES (one course)
American Sign Language 1, 2, 3, 4, 16
Arabic 1
Chinese 1, 2
Economics 8
English 1C, 7A, 7B, 7D, 7E, 30, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 79, 80A, 80B, 81
French 1, 2, 3, 4
German 1, 2
History 1, 2, 5, 6, 7, 9, 10
Humanities 5, 6, 20
Philosophy 70, 72, 77, 78, 80, 81, 82
Social Science 25
Spanish 1, 1A, 1B, 1SS, 2, 2A, 2B, 2SS, 3, 4, 7, 8, 13

D SOCIAL AND BEHAVIORAL SCIENCES (minimum 4 units)
At least two courses required, one from each of the following categories

D1 AMERICAN INSTITUTIONS (one course)
Consumer Studies 11
Economics 1, 2, 4

D2. BEHAVIORAL SCIENCES (one course)
Anthropology 2, 3
Child Development and Education 2, 4
Communication Studies 12, 74, 76
Correctional Science 8
Geography 1, 3, 11
Gerontology 11, 18, 21
History 4
Psychology 1, 21, 25, 41, 65
Sociology 10, 15, 18

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

MULTICULTURAL/GENDER STUDIES (minimum 3 units)
May also meet other Associate Degree course requirements
American Sign Language 16
Anthropology 3
Art 1, 6, 9, 11
Biology 11, 12
Business 61
Child Development and Education 6
Communication Studies 74, 76
Correctional Science 8, 409
Education 12
English 70A, 70B, 74, 76, 79
Fashion Design 421
Geography 1, 10, 11
Gerontology 18, 22, 404
Health Science 404
History 4, 7, 9, 10, 16, 25, 50, 51, 70, 71
Humanities 20
Interior Design 13
Music 26, 67
Nutrition and Food 25
Philosophy 80, 81, 82
Political Science 21, 25
Social Science 22, 25
Sociology 10, 14, 15, 18

PHYSICAL EDUCATION, RECREATION AND WELLNESS* (minimum 2 units)
May also meet other Associate Degree course requirements
Biology 12, 13, 14
Child Development and Education 5
Consumer Studies 40
Dance 4A, 4B, 6A, 6B, 10A, 10B, 20A, 20B, 30A, 30B, 50A, 50B, 60A, 60B
Gerontology 11, 22, 31, 404
Guidance 3
Health Science 404
Nutrition and Food 5, 15, 21
Physical Education Activity (all one-half and one-unit activity classes)
Physical Education Adaptive (all adaptive classes)
Physical Education Lecture 14, 15, 16, 18, 31, 32, 33, 413, 422
Physical Education Team (all team sports)
Psychology 5, 430
Social Science 17, 22
Sociology 16

*Graduates from the ADN and LVN programs meet this requirement.
### Degree and Certificate Programs

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<tr>
<th>Programs</th>
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<tbody>
<tr>
<td>Accounting</td>
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<tr>
<td>Government and Not-for-Profit Organizations</td>
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<td>Accounting Paraprofessional</td>
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<td>Accounting &amp; Financial Planning</td>
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<td>Financial Planning</td>
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<td>Payroll and Income Tax Preparer</td>
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<td>Administration of Justice</td>
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<td>Ceramics Studio</td>
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<td>New Media</td>
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<td>Computer Graphic Design for Print Media</td>
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<td>Design for Multimedia</td>
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<td>✓</td>
</tr>
<tr>
<td>Biology</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Broadcasting &amp; Cinema</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business Administration:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Marketing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Small Business Entrepreneur, Levels I and II</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business: Paralegal Studies</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Business and Office Technologies:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Data Entry</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General Office Assistant: Levels I and II</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Medical Insurance Billing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft Office Excel Applications</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft Office Specialist and Expert</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft Word Specialist</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Office Management</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Professional Administrative Assistant:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Executive, Executive - Bilingual, and Medical</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Transcriptionists:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General, Medical</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chemistry</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Child Development and Education</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Communication Studies</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Computer Information Systems</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cisco CCNA Exam Preparation, Levels I - IV</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cisco CCNP Exam Preparation, Levels V - VIII</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Computer Foundations</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Computer Game Development</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Computer Support Technician (A+)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Database Specialist Level I</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dreamweaver Web Developer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Electronic Commerce Generalist</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Flash Game Developer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Flash Web Developer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Internet Programmer Level I</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Internet Support Specialist (I-Net+)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft Access Programmer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MS Certified Desktop Support Technician (MCDST)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft FrontPage Web Developer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Microsoft Network Specialist (MCSA)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Network Administrator (Network +)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Project Management</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Visual Basic Programmer</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Web Page Developer: Levels I and II</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Consumer Services Representative</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Correctional Science</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dance</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dental Assisting</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dietetic Service Supervisor</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Dietetic Technician</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Drafting:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Architectural</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mechanical</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Earth Science</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Economics</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Education Paraprofessional, Levels I and II</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Engineering</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>English</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fashion Design</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Costume Design</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Custom Dressmaking</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Industrial Sewing</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Patternmaking for Apparel</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fashion Merchandising</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fine Arts: Music, Theatre</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fire Technology: Professional Firefighter</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>General Education</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Geographic Information Systems</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Geography</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Geology:</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Basic Geology, Prereq Professional Geology</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Gerontology</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Community Caregiver</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

A = Associate in Arts or Associate in Science  C = Certificate

Programs are subject to change. Please check with a counselor.
Accounting

The Accounting program is designed to: (1) 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) prepare transfer accounting students with appropriate background for upper division courses; and (3) 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ACCTG 1B</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>ACCTG 70</td>
<td>Cost Accounting</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel - Comprehensive</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
</tr>
<tr>
<td>STAT 10</td>
<td>Elementary Statistics</td>
</tr>
</tbody>
</table>

Total units for the major: 24-25

Requirements for the Accounting Certificate:

Same as the major requirements for the A.S. Degree plus:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 430*</td>
<td>Accounting for Governmental and for Not-for-Profit Organizations</td>
</tr>
</tbody>
</table>

Nine units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 435</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>ACCTG 450</td>
<td>Federal Tax Principles I</td>
</tr>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 461</td>
<td>Advanced Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 462</td>
<td>Advanced Techniques in Accounting Software Programs</td>
</tr>
<tr>
<td>ACCTGFS 453*</td>
<td>U.S. and California Income Tax Preparation</td>
</tr>
<tr>
<td>ACCTGFS 454</td>
<td>Introduction to the Taxation of Corporations and Partnerships</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
</tr>
</tbody>
</table>

Total units for the certificate: 33-34

*ACCTG 430 and ACCTGFS 453 may not be counted twice

Accounting for Government and Not-For-Profit Organizations

This program is intended for individuals desiring employment in government or not-for-profit organizations. Upon the successful completion of this certificate, candidates will be proficient in fund and not-for-profit accounting and possess the ability to perform basic accounting functions.

Requirements for the Government and Not-For-Profit Organizations Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ACCTG 430</td>
<td>Accounting for Governmental and Not-For-Profit Organizations</td>
</tr>
<tr>
<td>ACCTG 435</td>
<td>Payroll Accounting</td>
</tr>
</tbody>
</table>

and:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 462</td>
<td>Advanced Techniques in Accounting Software Programs</td>
</tr>
</tbody>
</table>

or:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
</tr>
</tbody>
</table>

Total units for the certificate: 14

Accounting Paraprofessional

(Computer Software Emphasis)

This program is designed to develop the skills and concepts necessary to obtain entry-level positions in small businesses which use computerized accounting systems.

Requirements for the Accounting Paraprofessional Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 1A</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ACCTG 1B</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUSOT 60A</td>
<td>Microsoft Office Word - Specialist</td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel - Comprehensive</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
</tr>
</tbody>
</table>

Plus six units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 430</td>
<td>Accounting for Governmental and for Not-for-Profit Organizations</td>
</tr>
<tr>
<td>ACCTG 435</td>
<td>Payroll Accounting</td>
</tr>
<tr>
<td>ACCTG 450</td>
<td>Federal Tax Principles I</td>
</tr>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 461</td>
<td>Advanced Commercial Accounting Software</td>
</tr>
<tr>
<td>ACCTG 462</td>
<td>Advanced Techniques in Accounting Software Programs</td>
</tr>
<tr>
<td>ACCTGFS 453</td>
<td>U.S. and California Income Tax Preparation</td>
</tr>
</tbody>
</table>

Total units for the certificate: 26
ACCOUNTING AND FINANCIAL PLANNING

Financial Planning

The Financial Planning certificate provides students with basic accounting skills combined with training in financial planning. Students completing this certificate can assist individuals and companies within the areas of budgeting, taxes, and financial planning. This certificate also serves as an excellent foundation for students wishing to take the National Association of Securities Dealers series 6 and 7 examinations.

Requirements for the Financial Planning Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 440</td>
<td>Introduction to Financial Planning</td>
<td>3</td>
</tr>
<tr>
<td>ACCTGFS 442</td>
<td>Fundamentals of Finance and Investing</td>
<td>3</td>
</tr>
<tr>
<td>ACCTGFS 453</td>
<td>U.S. and California Income Tax Preparation</td>
<td>4</td>
</tr>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus three units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
<td>3</td>
</tr>
<tr>
<td>ACCTGFS 450</td>
<td>Advanced Techniques in Accounting Software Programs</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 16-17

Payroll and Income Tax Preparer

This program is intended for individuals desiring to enter the tax preparation and/or payroll field with a minimum of course requirements. Upon successful completion of this Chaffey certificate, candidates will possess the knowledge and analytical tools necessary to use accounting data effectively. Additionally, by completing the tax class they will be recognized by the State of California as a Registered Tax Preparer.

Requirements for the Payroll and Income Tax Preparer Certificate:

<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>ACCTG 435</td>
<td>Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTGFS 453</td>
<td>U.S. and California Income Tax Preparation</td>
<td>4</td>
</tr>
</tbody>
</table>

and:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTG 462</td>
<td>Advanced Techniques in Accounting Software Programs</td>
<td>1.5</td>
</tr>
</tbody>
</table>

or:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 460</td>
<td>Commercial Accounting Software</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 14

ADMINISTRATION OF JUSTICE

The Administration of Justice major prepares students for a career in law enforcement. Courses within the program acquaint students with the American Justice system, crime causes, the role of law enforcement, roles of administration of justice practitioners, evidence procedures, juvenile procedures, and misdemeanor and felony violations of criminal law.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 1  Administration of Justice System</td>
</tr>
<tr>
<td>AJ 2  Concepts of Criminal Law</td>
</tr>
<tr>
<td>AJ 3  Principles and Procedures of the Justice System</td>
</tr>
<tr>
<td>AJ 4  Community Relations</td>
</tr>
<tr>
<td>AJ 5  Legal Aspects of Evidence</td>
</tr>
<tr>
<td>AJ 406 Juvenile Procedures</td>
</tr>
<tr>
<td>AJ 407 Substantive Law</td>
</tr>
</tbody>
</table>

Plus one course from the following:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 408 Patrol Operations</td>
</tr>
<tr>
<td>AJ 409 Criminal Investigation</td>
</tr>
<tr>
<td>AJ 410 Narcotics and Vice Investigation</td>
</tr>
<tr>
<td>AJ 411 Traffic Control, Enforcement, and Accident Investigation</td>
</tr>
<tr>
<td>AJ 412 Police Report Writing</td>
</tr>
<tr>
<td>AJ 413 Police Supervision</td>
</tr>
<tr>
<td>AJ 414 Criminology</td>
</tr>
<tr>
<td>AJ 415 Principles and Practices of Interviewing and Investigation</td>
</tr>
<tr>
<td>AJ 416 Crime Scene Sketching and Notetaking</td>
</tr>
</tbody>
</table>

Total units for the major: 22.5-24

Requirements for the Administration of Justice Certificate:

Same as the major requirements for the A.S. Degree.

Total units for the certificate: 22.5-24

AERONAUTICS (AVIATION MAINTENANCE TECHNOLOGY)

This program provides the training needed to become an Aviation Maintenance Technician. Students who successfully complete the program will have the experience required by the Federal Aviation Administration for certification as an Airframe or Powerplant Mechanic. Airframe and Powerplant technicians are in demand by airlines and aviation maintenance providers. The Aeronautics program at Chaffey College is fully approved by the Federal Aviation Administration (FAA) to provide the 1900 hours of experience required to become an Airframe or Powerplant technician. Students may earn an Associate degree and/or separate college certificates in Airframe or Powerplant.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 10 Materials, Processes, and Inspections</td>
</tr>
<tr>
<td>AERO 11 Aero Science and FAA Regulations</td>
</tr>
<tr>
<td>AERO 13AB General Aeronautics Laboratory</td>
</tr>
<tr>
<td>AERO 14ABCD General Aeronautics Laboratory</td>
</tr>
</tbody>
</table>

Plus completion of one of the following emphases:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AERO 30 Airframe Structures</td>
</tr>
<tr>
<td>AERO 31 Airframe Primary Structures</td>
</tr>
<tr>
<td>AERO 32 Airframe Auxiliary Systems</td>
</tr>
<tr>
<td>AERO 33ABC Airframe Laboratory</td>
</tr>
<tr>
<td>AERO 34ABCDEF Airframe Laboratory</td>
</tr>
</tbody>
</table>

Total units for the major: 40
Graduation Requirements and Programs of Study

Requirements for the Airframe Certificate:

Same as the major requirements for the Airframe A.S. Degree (core + emphasis)

Total units for the certificate 40

Powerplant

Same as the major requirements for the Powerplant A.S. Degree (core + emphasis)

Total units for the major 40

Requirements for the Powerplant Certificate:

Same as the major requirements for the Powerplant A.S. Degree (core + emphasis)

Total units for the certificate 40

ANTHROPOLOGY

Anthropology is the study of people, ranging from the origin and biological evolution of our species to tracing the prehistory and history of cultures to defining group behavior in non-western and western cultures. Thus, anthropology is considered to be the most holistic of the social sciences. The goal of anthropology is to answer the question, “What is humankind?” from a biological, prehistoric, and behavioral perspective. The integrative approach to the discipline links anthropology with the life and social sciences, 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 as well as offering specific insights to others in more specialized disciplines. The study of anthropology offers 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:

Core requirements:

- ANTHRO 1 Introduction to Physical Anthropology 3
- ANTHRO 1L Laboratory for Physical Anthropology 1
- ANTHRO 2 Introduction to Archaeology 3
- ANTHRO 3 Introduction to Social and Cultural Anthropology 3

Plus one course from the following:

- SCSCI 10 Statistics for Social Science 4
- STAT 10 Elementary Statistics 4

Plus three units from the following:

- Communication Studies 2, 12, 72, 74, 76
- Fine Arts 50

Total units for the major 24

NOTE: A modern 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/digital media, 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:

Core requirements:

- ART 10 Fundamentals of Design in Two Dimensions 4
- ART 12 Fundamentals of Design in Three Dimensions 4
- ART 14 Introduction to Drawing 3
- ART 480 Portfolio and Presentation 3

(Take ART 480 near the end of program.)

Plus completion of one of the following emphases:

Art Emphasis

Core requirements, plus:

- ART 16 Introduction to Painting 3
- ART 18 Introduction to Ceramics 3

- PHOTO 10 Beginning Photography 4

- (or ART 20, Ceramic Sculpture, 4)

- (or PHOTO 7, Introduction to Digital Photography)

- ART 1 Contempory Art: 1950-Present 3
- ART 3 Art History of Western World: Ancient - 1400 3
- ART 5 Art History of Western World: 1400 - Contemporary 3
- ART 6 Women Artists in History 3
- ART 8 Contemporary Media, Art and Visual Language 3
- ART 11 Asian Art History 3
- ART 407 History of Design 3

Total units for the major 30-32

Recommended Courses: ART 3 & 5 (above), ART 44
Ceramics Studio Emphasis

[ART/4777/1002.30] Units

Core requirements, plus:

ART 1 Contemporary Art: 1950 - Present 3
ART 18 Introduction to Ceramics 3
ART 20 Ceramic Sculpture 4
ART 35 Intermediate Ceramics 3
ART 44 Mixed-Media Studio and Theory 3

Total units for the major 30

Note: Approved special topics (ART 92A-H) with emphasis in ceramics may be substituted for one ceramics course with prior approval from the school dean or designee.

Recommended Courses: ART 9, 16, 40, 410, 412

Drawing/Painting Studio Emphasis

[ART/030/10366/1002.10] Units

Core requirements, plus:

ART 1 Contemporary Art: 1950 - Present 3
ART 16 Introduction to Painting 3
ART 30 Figure Drawing 3
ART 32 Intermediate Drawing 4
ART 34 Intermediate Painting 4

Total units for the major 31

Recommended Courses: ART 8, 44, 62A, PHOTO 7, 9, 10

New Media Emphasis

[ART/040/10367/1002.00] Units

The New Media Emphasis demonstrates the diverse experiences and theories of the new genres associated with mixed media, multimedia, mass media, performance, and installation. Courses in this emphasis advance inquiry into contemporary uses of photography, video, film, and computer-oriented digital media. Students are encouraged to create and develop expressive and critical abilities within the interrelated disciplines.

Core requirements, plus:

ART 1 Contemporary Art: 1950-Present 3
ART 8 Contemporary Media, Art and Visual Language 3
ART 44 Mixed-Media Studio and Theory 3
ART 63 Introduction to Graphic Design 4

Total units for the major 27

Recommended Courses: ART 6, 82; BRDCAST 3; CINEMA 25; COMSTD 12; MUSIC 4; PHOTO 1, 7, 9, 10; THEATRE 1, 10

ART/DIGITAL MEDIA

The Digital Media program is a cross-discipline program designed to prepare students for employment in the fields of Web Design, Graphic Design, Motion Graphics, Sound Design, and Interactive Multimedia. Both degrees and certificates are offered in three separate digital media career field emphases.

Major requirements for the Associate in Arts Degree: Units

Core requirements:

ART 10 Fundamentals of Design in Two Dimensions 4
ART 63 Introduction to Graphic Design 4
ART 82 Introduction to Multimedia 4
ART 480 Portfolio and Presentation 3
(Take ART 480 near the end of program.)

Plus completion of one of the following emphases:

Computer Graphic Design for Print Media Emphasis

[ART/045/12210/0614.60] Units

Core requirements, plus:

ART 1 Contemporary Art: 1950 - Present 3
ART 14 Introduction to Drawing 3
ART 73 Typography and Layout 4
ART 83 Internet and Web Design 4
ART 407 History of Design 3
ART 474 Identity System Design 4
PHOTO 10 Beginning Photography 4
(or PHOTO 7, Introduction to Digital Photography)

Total units for the major 40

Requirements for the Computer Graphic Design for Print Media Certificate:

[ART/046/12210/0614.60] Units

Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate 40

Recommended Courses: ART 5, 8, 12; PHOTO 9, 410

Design for Multimedia Emphasis

[ART/046/12211/0614.10] Units

Core requirements, plus:

ART 1 Contemporary Art: 1950 - Present 3
ART 14 Introduction to Drawing 3
ART 83 Internet and Web Design 4
ART 482 Editing Digital Media 4
ART 484 2D Motion Graphic Animation 4

Plus one of the following:

ART 8 Contemporary Media, Art and Visual Language 3
ART 400 Fundamentals of Animation 4
CINEMA 25 Survey of World Cinema 3
PHOTO 10 Beginning Photography 4
(or PHOTO 7, Introduction to Digital Photography)

Total units for the major 36-37

Requirements for the Design for Multimedia Certificate:

[ART/047/12211/0614.10] Units

Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate 36-37

Recommended Courses: ART 5, 12, 407; CINEMA 26

Web Design Emphasis

[ART/048/12213/0614.30] Units

Core requirements, plus:

ART 1 Contemporary Art: 1950 - Present 3
ART 73 Typography and Layout 4
ART 83 Internet and Web Design 4

Total units for the major 26

Requirements for the Web Design Certificate:

[ART/049/12213/0614.30] Units

Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate 26

Recommended Courses: ART 407, 484; PHOTO 9
**ART / VISUAL COMMUNICATION:**

**ILLUSTRATION**

The Illustration program develops student’s ability to express concepts and ideas in varied visual forms. Primary emphasis is on concepts and skill development to facilitate student preparation of a portfolio for use in conjunction with employment interviews and/or transfer to a four-year institution.

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

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ART 8 Contemporary Media, Art and Visual Language 3</td>
</tr>
<tr>
<td>ART 14</td>
<td>Introduction to Drawing 3</td>
</tr>
<tr>
<td>ART 30</td>
<td>Figure Drawing 3</td>
</tr>
<tr>
<td>ART 62A</td>
<td>Illustration I 3</td>
</tr>
<tr>
<td>ART 63</td>
<td>Introduction to Graphic Design 4</td>
</tr>
<tr>
<td>ART 73</td>
<td>Typography and Layout 4</td>
</tr>
<tr>
<td>ART 480</td>
<td>Portfolio and Presentation 3</td>
</tr>
</tbody>
</table>

(Take ART 480 near the end of program)

**Plus one course from the following:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ART 1 Contemporary Art: 1950 – Present 3</td>
</tr>
<tr>
<td></td>
<td>ART 5 Art History of Western World: 1400 – Contemporary 3</td>
</tr>
<tr>
<td></td>
<td>ART 6 Women Artists in History 3</td>
</tr>
<tr>
<td>ART 12</td>
<td>Fundamentals of Design in Three Dimensions 4</td>
</tr>
<tr>
<td>ART 16</td>
<td>Introduction to Painting 3</td>
</tr>
<tr>
<td>ART 32</td>
<td>Intermediate Drawing 4</td>
</tr>
<tr>
<td>ART 34</td>
<td>Intermediate Painting 4</td>
</tr>
<tr>
<td>ART 62B</td>
<td>Illustration II 3</td>
</tr>
<tr>
<td>ART 407</td>
<td>History of Design 3</td>
</tr>
<tr>
<td>ART 478</td>
<td>History on the Computer 3</td>
</tr>
</tbody>
</table>

Total units for the major 26-27

**Required General Education course:**

ART 10 Fundamentals of Design in Two Dimensions 4

**Requirements for the Illustration Certificate:**

Same as the major requirements for the A.S. Degree 30-31 and general education requirements above, plus:

ART 12, 16, and one additional course from above list 10-11

Total units for the certificate 40-42

**ART HISTORY**

The Art History program prepares students for transfer to four-year colleges and universities and for careers in education, museums, research, and related fields. Students learn the major theories and artistic movements in Art and Architecture from the ancient to the modern world, and evaluate the influences that social, political, and religious institutions have in the creation of art. The program addresses the dynamic fields of both Western and Non-Western Art and Architecture, as well as the critical roles that Photography, Contemporary Art, and Graphic Design have in shaping our society. Students should consult with the intended transfer institution to determine the appropriate courses to complete at Chaffey.

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

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ART 1 Contemporary Art: 1950 - Present 3</td>
</tr>
<tr>
<td></td>
<td>ART 3 Art History of the Western World: Ancient - 1400 3</td>
</tr>
<tr>
<td></td>
<td>ART 5 Art History of the Western World: 1400 - Contemporary</td>
</tr>
</tbody>
</table>

**Plus one Studio course:** ART 10, 12, 14, 18; PHOTO 7, 10 3-4

**ART HISTORY**

**Automotive Collision Repair Technology**

Automotive collision 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 Automotive Collision Repair includes all repair phases of damaged bodies and fenders, including painting. This program prepares students for employment in the industry.

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

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACRT 400 Basic Automotive Collision Repair 5</td>
</tr>
<tr>
<td></td>
<td>ACRT 410 Advanced Automotive Collision Repair 5</td>
</tr>
<tr>
<td></td>
<td>ACRT 420 Basic Automotive Collision Refinishing 5</td>
</tr>
<tr>
<td></td>
<td>ACRT 430 Advanced Automotive Collision Refinishing 5</td>
</tr>
<tr>
<td></td>
<td>ACRT 450 Pinstriping, Flame, and Graphics 2</td>
</tr>
<tr>
<td></td>
<td>AUTOTEC 426A Basic Automotive Air Conditioning Systems 2</td>
</tr>
</tbody>
</table>

Total units for the major 24

**Requirements for the Automotive Collision Repair Technology Certificate:**

Same as the major requirements for the A.S. Degree.

Total units for the certificate 24
AUTOMOTIVE TECHNOLOGY

The Automotive Technology curriculum is designed to provide students with the skills and knowledge necessary to succeed as technicians in the automotive service industry. The Automotive Technology program at Chaffey College is certified by the National Automotive Technician Education Foundation (NATEF). Students who successfully complete the requirements for the Master Automotive Technician Associate of Science Degree or Certificate will be qualified to take the examinations required for certification as an Automotive Master Technician and will receive credit for one year of related work experience towards certification.

Master Automotive Technician

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>AUTOTEC 10</td>
<td>Service and Repair</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 15</td>
<td>Automotive Electricity and Electronics</td>
<td>2</td>
</tr>
<tr>
<td>AUTOTEC 28</td>
<td>Automotive Electrical Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 417</td>
<td>Brakes</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 418</td>
<td>Suspension and Steering Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 419</td>
<td>Manual Drive Trains</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 422</td>
<td>Fuel, Ignition and Emission Control Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 423</td>
<td>Engine Management Systems and Drivability</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 425</td>
<td>Automatic Transmissions and Transaxes</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 426A</td>
<td>Basic Automotive Air Conditioning Systems</td>
<td>2</td>
</tr>
<tr>
<td>AUTOTEC 426B</td>
<td>Advanced Automotive Air Conditioning and Climate Control Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 427</td>
<td>Engine Operation and Service</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units for the major: 48

Requirements for the Master Automotive Technician Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOTEC 10</td>
<td>Service and Repair</td>
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<td>Automotive Electricity and Electronics</td>
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<td>AUTOTEC 28</td>
<td>Automotive Electrical Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 417</td>
<td>Brakes</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 418</td>
<td>Suspension and Steering Systems</td>
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<td>AUTOTEC 419</td>
<td>Manual Drive Trains</td>
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<td>Fuel, Ignition and Emission Control Systems</td>
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<td>AUTOTEC 423</td>
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<td>Basic Automotive Air Conditioning Systems</td>
<td>2</td>
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<tr>
<td>AUTOTEC 426B</td>
<td>Advanced Automotive Air Conditioning and Climate Control Systems</td>
<td>4</td>
</tr>
</tbody>
</table>

Total units for the certificate: 48

Automotive Electrical Systems

The Automotive Electrical Systems Certificate prepares the student for employment as an automotive electrical systems specialist. Students with the certificate are qualified to take Automotive Service Excellence (ASE) examination for certification in Electricity/Electronics and Air Conditioning.

Requirements for the Automotive Electrical Systems Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOTEC 10</td>
<td>Service and Repair</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 15</td>
<td>Automotive Electricity and Electronics</td>
<td>2</td>
</tr>
<tr>
<td>AUTOTEC 28</td>
<td>Automotive Electrical Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 426A</td>
<td>Basic Automotive Air Conditioning Systems</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the certificate: 17

Engine Performance (Smog Check) Technician

The Engine Performance (Smog Check) Technician Certificate provides the training required by the California Smog Check program and qualifies the student to take the Smog Check Technician license examination.

Requirements for the Engine Performance (Smog Check) Technician Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOTEC 10</td>
<td>Service and Repair</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 15</td>
<td>Automotive Electricity and Electronics</td>
<td>2</td>
</tr>
<tr>
<td>AUTOTEC 28</td>
<td>Automotive Electrical Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 422</td>
<td>Fuel, Ignition and Emission Control Systems</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 423</td>
<td>Engine Management Systems and Drivability</td>
<td>4</td>
</tr>
<tr>
<td>AUTOTEC 443</td>
<td>Clean Air Emission Control</td>
<td>4</td>
</tr>
</tbody>
</table>

Total units for the certificate: 24

Engine Rebuilding

The Engine Rebuilding Certificate prepares students for employment as an automotive machinist.

Requirements for the Engine Rebuilding Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOTEC 430</td>
<td>Engine Rebuilding - Upper Engine</td>
<td>5</td>
</tr>
<tr>
<td>AUTOTEC 431</td>
<td>Engine Rebuilding - Lower Engine</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units for the certificate: 10

General Automotive Service Technician

This program prepares students for entry level employment as automotive service and repair technicians. Basic automotive maintenance and service operations are stressed to allow students to be immediately productive on the job. Safety and environmental protection are also stressed. Consumer protection and professional ethics are covered in depth.

Requirements for the General Automotive Service Technician Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTOTEC 450</td>
<td>General Automotive Technician A</td>
<td>12</td>
</tr>
<tr>
<td>AUTOTEC 455</td>
<td>General Automotive Technician B</td>
<td>12</td>
</tr>
</tbody>
</table>

Total units for the certificate: 24
High Performance Engines Building and Blueprinting

The High Performance Engines Building and Blueprinting Certificate signifies that the student has developed skills in advanced engine machining and modification for improved performance. Students build on the skills developed in engine rebuilding courses to learn how to build and blueprint engines that exceed the manufacturer’s original horsepower and torque ratings.

Requirements for the High Performance Engines Certificate:  

<table>
<thead>
<tr>
<th>Units</th>
<th>AUTOTEC 430</th>
<th>Engine Rebuilding – Upper Engine</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AUTOTEC 431</td>
<td>Engine Rebuilding – Lower Engine</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>AUTOTEC 435</td>
<td>High Performance Engine Building and Blueprinting</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(or AUTOTEC 435A, High Performance Engine Blueprinting – Cylinder Heads, 2.5 and AUTOTEC 435B, High Performance Engine Rebuilding and Blueprinting – Cylinder Block, 2.5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total units for the certificate 15

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 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 labs, bacteriological areas of industry, prerequisites for allied health programs, physical therapy, undergraduate preparation for medicine, dentistry, veterinary medicine, landscape design, graduate programs leading to teaching and research, and natural resource management including game warden, Bureau of Land Management, wildlife control, wilderness rescue, fisheries, forestry, park ranger, wildlife and land management, and natural resources.

Major requirements for the Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Units</th>
<th>BIOL 52</th>
<th>General Botany</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BIOL 55</td>
<td>Vertebrate Zoology</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>BIOL 63</td>
<td>Population Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 5</td>
<td>Introduction to Cell and Molecular Biology</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 11</td>
<td>Evolution, Sex, and Behavior</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 23</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BIOL 23L</td>
<td>General Microbiology Laboratory</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>BIOL 56</td>
<td>Invertebrate Zoology</td>
<td>4</td>
</tr>
</tbody>
</table>

Total units for the major 21

Required General Education Course:  

| Units | BIOL 50 | Core Biology | 4 |

Broadcasting and Cinema

The Broadcasting and Cinema degree program is a challenging and technology driven learning environment designed for students who want to enhance, refine, and polish their storytelling creations. Courses of study follow the traditional modes of the production process while providing students with a dynamic and innovative learning environment. Students may arrange their own program of courses in broadcasting and cinema production, including cinema studies, producing, broadcast audio, television and radio announcing, radio production, scriptwriting, post-production editing, TV production, cinema, and HDTV production.

The Broadcasting and Cinema certificate program is for students to learn and apply the processes involved in the creative, collaborative business of producing radio, motion picture, and television productions. Focus is on how to craft ideas into storytelling materials, put them together, and manage the process through completion. This certificate prepares students for various career opportunities in screenwriting, directing, producing, announcing, audio recording, cinematography, camera operation, and other vocations in the motion picture, radio, television, and broadcast industries.

Major requirements for the Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Units</th>
<th>BRDCAST 3</th>
<th>Survey of Broadcasting and Electronic Media</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BRDCAST 474</td>
<td>High Definition Television Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CINEMA 20</td>
<td>Scriptwriting</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CINEMA 25</td>
<td>Survey of World Cinema</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CINEMA 30</td>
<td>Cinema Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CINEMA 80</td>
<td>Producing for Broadcast and Cinema</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>FINART 50</td>
<td>Introduction to Fine Arts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 30

Requirements for the Broadcasting and Cinema Certificate:  

<table>
<thead>
<tr>
<th>Units</th>
<th>BRDCAST 3</th>
<th>Survey of Broadcasting and Electronic Media</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BRDCAST 60</td>
<td>Television Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>BRDCAST 65</td>
<td>Radio Production</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>CINEMA 20</td>
<td>Scriptwriting</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 17
BUSINESS ADMINISTRATION

The Business Administration Associate in Science Degree is designed for the student transferring to a four-year institution. Students are advised to consult with a counselor for transfer requirements to specific universities. In addition, the Associate Degree/Certificate is intended for the student interested in entering the field of business upon completion of the Certificate and/or the Associate Degree.

Major requirements for the Associate in Science Degree: Units

<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>ACCTG 1B</td>
<td>Principles of Accounting II</td>
<td>4</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>ECON 2</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>(or ECON 4, Principles of Microeconomics)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>(or BUSOT 88, Written Communication for Business)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 23

Requirements for the Business Administration Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</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>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 435</td>
<td>Marketing and the Law</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 32

BUSINESS ADMINISTRATION/MARKETING

The Marketing Certificate prepares students for marketing and management training positions that require a working knowledge of marketing, advertising, and sales.

Requirements for the Business Administration/Marketing Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 13</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 55</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 55</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 460</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 15

BUSINESS ADMINISTRATION/SMALL BUSINESS ENTREPRENEUR

According to a Dun and Bradstreet report of small businesses, inadequate management is a major contributor to business failures. The purpose of this curriculum is to enhance the success rate of entrepreneurs by providing managerial techniques and information that will be useful to anyone who wants to start a business or improve conditions in an established business.

Major requirements for the Associate in Science Degree: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTGFS 450</td>
<td>Tax Preparation for Small Business</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major</td>
<td>3</td>
</tr>
<tr>
<td>(or ACCTG 1A, Principles of Accounting I, 4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 10</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 402</td>
<td>Introduction to Import/Export</td>
<td>3</td>
</tr>
<tr>
<td>BUS 430</td>
<td>Business Plan Preparation</td>
<td>1.5</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 31.5-32.5

Requirements for the Small Business Entrepreneur Level I Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 450</td>
<td>Tax Preparation for Small Business</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 430</td>
<td>Business Plan Preparation</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 15

Requirements for the Small Business Entrepreneur Level II Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 13</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 55</td>
<td>Advertising</td>
<td>3</td>
</tr>
<tr>
<td>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 31.5-32.5

Please provide the data for CATALOG 2007-2008.
BUSINESS, MERCHANDISING
(See Fashion Merchandising and Management)

PROPOSED PROGRAM
This new certificate has been submitted to the State Chancellor’s Office for approval. As approval had not been received at press time, this certificate is considered a proposed program for the 2007-2008 catalog. Certificate cannot be awarded until approval is received by the State Chancellor’s Office.

BUSINESS: PARALEGAL STUDIES
The Paralegal Studies certificate program is intended to prepare students for employment as paralegals in various legal sectors. The American Bar Association (ABA) By-Laws, Section 21.12 uses the terms ‘paralegal’ and ‘legal assistant’ interchangeably referring to persons who, although not members of the legal profession, are qualified through education, training, or work experience, and are employed or retained by a lawyer, law office, governmental agency, or other entity in a capacity or function which involves the performance under the direction and supervision of an attorney, of specifically delegated substantive legal work.

The Paralegal Studies certificate program emphasizes practical application and the development of up-to-date paralegal related job skills in addition to teaching legal theory. The program is designed to enhance the ability of students to reason, understand and apply correct principles of law by teaching analytical and critical thinking skills. Graduates of the program will possess skills to enter the paralegal profession. It also allows those already in the paralegal line of work to improve their understanding of the paralegal profession.

California State statute requires all paralegals to be certified by an accredited educational institution. Chaffey College’s Paralegal Studies certificate program meets and exceeds such mandates because Chaffey College is approved by the California Department of Education and the Western Association for Schools and Colleges, and the certificate is awarded to students who have successfully completed 27 semester units in law-related courses. Chaffey College’s Paralegal Studies certificate program also exceeds the American Bar Association’s guideline for paralegal educational requirement.

Requirements for the Paralegal Studies Certificate:

- **Units**
- [L400/00000/1402.00]
- **Units**
- **Total units for the major** 27

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>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B Computer Keyboarding: Speed and Accuracy Development</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 60A Microsoft Office Word - Specialist</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 63A Microsoft Office Excel - Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 64A Microsoft Office Access – Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 444 Concepts and Techniques of Data Entry</td>
<td>2</td>
</tr>
<tr>
<td>BUSOT 452 Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total units for the certificate</strong></td>
<td>14-15.5</td>
</tr>
</tbody>
</table>

Recommended:

- BUSOT 496ABCD Internships in Business and Office Technologies 1-4

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

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.

Requirements for the General Office Assistant Certificate:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 29 Fundamentals of Computer Keyboarding</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 30 Fundamentals of Microsoft Word</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 50 Filing and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 400 Job Search and Interviewing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 452 Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455 Fundamentals of English for Business</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total units for the certificate</strong></td>
<td>13.5-15</td>
</tr>
</tbody>
</table>

Recommended:

- BUSOT 496ABCD Internships in Business and Office Technologies 1-4

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, educational advancement, 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.
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 physical coding for insurance billing.

Requirements for the Medical Insurance Billing Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 30</td>
<td>Beginning Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 60A</td>
<td>Microsoft Office Word - Specialist</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 475</td>
<td>Medical Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>BUSOTMD 410</td>
<td>Basic CPT4 Coding</td>
<td>3</td>
</tr>
<tr>
<td>BUSOTMD 420</td>
<td>Basic ICD-9 CM Coding</td>
<td>3</td>
</tr>
<tr>
<td>BUSOTMD 430</td>
<td>Intermediate Level ICD-9 CM/CPT4 Coding</td>
<td>3</td>
</tr>
<tr>
<td>BUSOTMD 440</td>
<td>Medical Billing, Reimbursement and Compliance</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus three units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 50</td>
<td>Filing and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 61</td>
<td>Microsoft Office PowerPoint</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 62</td>
<td>Microsoft Office Outlook</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 63A</td>
<td>Microsoft Office Excel - Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 63, Microsoft Office Excel - Comprehensive, 3)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 64A</td>
<td>Microsoft Office Access - Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 471</td>
<td>Administrative Office Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSOTMD 496ABC</td>
<td>Internships in Business and Office Technologies</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(only one unit will be applied to the certificate)</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the certificate 30

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

Medical Transcribing

(See Transcriptionist)

Microsoft Office Excel Applications

The Microsoft Office Excel Applications Certificate offers in-depth competency in utilizing current business spreadsheet software to organize, manipulate, and graph numeric data. This program will prepare students for positions requiring expertise in the use of Microsoft Excel.

Requirements for the Microsoft Office Excel Applications Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40A</td>
<td>Beginning Computer Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 29, Fundamentals of Computer Keyboarding, 1.5)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel – Comprehensive</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 63A, Microsoft Office Excel – Specialist, 1.5 and BUSOT 63B, Microsoft Office Excel – Expert, 1.5)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or ACCTG 1A, Principles of Accounting I, 4)</td>
<td></td>
</tr>
</tbody>
</table>

Plus three units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 60A</td>
<td>Microsoft Office Word – Specialist</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 61</td>
<td>Microsoft Office PowerPoint</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 64A</td>
<td>Microsoft Office Access – Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 444</td>
<td>Concepts and Techniques of Data Entry</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the certificate 10.5-13

Microsoft Office Specialist

The Microsoft Office Specialist certificate program is designed to provide students with core-level competency in the Microsoft Office Suite, the most commonly found business software applications program in the current electronic workplace. Students with this certificate possess competencies in the basic functions and features of word processing, spreadsheet applications, database management, presentations, and desktop publishing programs within the Microsoft Office Suite.

Requirements for the Microsoft Office Specialist Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Speed and Accuracy Development</td>
<td></td>
</tr>
<tr>
<td>BUSOT 60A</td>
<td>Microsoft Office Word – Specialist</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 61</td>
<td>Microsoft Office PowerPoint</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 63A</td>
<td>Microsoft Office Excel - Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 63, Microsoft Office Excel – Comprehensive, 3)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 64A</td>
<td>Microsoft Office Access - Specialist</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 400</td>
<td>Job Search and Interviewing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 410A</td>
<td>Microsoft Office Publisher – Specialist</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 13.5-15

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

Microsoft Office Expert

The Microsoft Office Expert certificate program is designed to provide students with expert-level competency in the Microsoft Office Suite, the most commonly found business software applications program in the current electronic workplace. Students with this certificate possess expert competencies in the advanced functions and features of word processing, spreadsheet applications, database management, presentations, and desktop publishing programs within the Microsoft Office Suite.

Requirements for the Microsoft Office Expert Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Computer Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Speed and Accuracy Development</td>
<td></td>
</tr>
<tr>
<td>BUSOT 60A</td>
<td>Microsoft Office Word – Expert</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 62</td>
<td>Microsoft Office Outlook</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 63B</td>
<td>Microsoft Office Excel – Expert</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 63, Microsoft Office Excel – Comprehensive, 3)</td>
<td></td>
</tr>
<tr>
<td>BUSOT 64B</td>
<td>Microsoft Office Access – Expert</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 410B</td>
<td>Microsoft Office Publisher – Expert</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 22.5

Recommended:

- BUSOT 496ABCD Internships in Business and Office Technologies 1-4

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

Graduation Requirements and Programs of Study
**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>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 60A</td>
<td>Microsoft Office Word - Specialist</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 60B</td>
<td>Microsoft Office Word - Expert</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 12

**Recommended:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 496ABCD</td>
<td>Internships in Business and Office Technologies</td>
</tr>
</tbody>
</table>

1-4

**Office Management**

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

**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>BUSOT 40B</td>
<td>Computer Keyboarding: Speed and Accuracy Development</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 50</td>
<td>Filing and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 60B</td>
<td>Microsoft Office Word - Expert</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel – Comprehensive</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 400</td>
<td>Job Search and Interviewing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 460</td>
<td>Proofreading: Text-Editing Skills</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 462A</td>
<td>Beginning Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 470**</td>
<td>Electronic Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus units from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 30</td>
<td>Beginning Medical Terminology</td>
</tr>
<tr>
<td>BUSOT 61*</td>
<td>Microsoft Office Powerpoint</td>
</tr>
<tr>
<td>BUSOT 62*</td>
<td>Microsoft Office Outlook</td>
</tr>
<tr>
<td>BUSOT 64A*</td>
<td>Microsoft Office Access – Specialist</td>
</tr>
<tr>
<td>BUSOT 64B*</td>
<td>Microsoft Office Access – Expert</td>
</tr>
<tr>
<td>BUSOT 465A</td>
<td>Beginning Speedwriting and Notetaking</td>
</tr>
<tr>
<td>BUSOT 471</td>
<td>Administrative Office Management</td>
</tr>
<tr>
<td>BUSOT 496ABCD</td>
<td>Internships in Business and Office Technologies</td>
</tr>
</tbody>
</table>

*Courses may not be counted twice.

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

**Plus specialization for completion in one of the following areas:**

**Executive**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
</tr>
<tr>
<td>BUSOT 61</td>
<td>Microsoft Office PowerPoint</td>
</tr>
<tr>
<td>BUSOT 62</td>
<td>Microsoft Office Outlook</td>
</tr>
<tr>
<td>BUSOT 64A</td>
<td>Microsoft Office Access – Specialist</td>
</tr>
<tr>
<td>BUSOT 64B</td>
<td>Microsoft Office Access – Expert</td>
</tr>
<tr>
<td>BUSOT 465A</td>
<td>Beginning Speedwriting and Notetaking</td>
</tr>
<tr>
<td>BUSOT 496ABCD</td>
<td>Internships in Business and Office Technologies</td>
</tr>
</tbody>
</table>

**Total units for the major** 33-35.5

*BUSOT 64A may not be counted twice

**Requirements for the Office Management Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
</table>

Same as the major requirements for the A.S. Degree.

**Total units for the certificate** 33-35.5

**Professional Administrative Assistant**

The Professional Administrative Assistant program is an Associate in Science degree which prepares students for careers in the executive, executive-bilingual, and medical fields. Professional administrative assistants perform a full range of secretarial and administrative duties. Students must specialize within a field of interest: executive, executive-bilingual, 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 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 50</td>
<td>Filing and Records Management</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 66B</td>
<td>Microsoft Office Word - Expert</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel – Comprehensive</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 400</td>
<td>Job Search and Interviewing Techniques</td>
<td>1.5</td>
</tr>
<tr>
<td>BUSOT 452</td>
<td>Office Financial Recordkeeping</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 460</td>
<td>Proofreading: Text-Editing Skills</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 462A</td>
<td>Beginning Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 470**</td>
<td>Electronic Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus three units from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 30</td>
<td>Beginning Medical Terminology</td>
</tr>
<tr>
<td>BUSOT 61*</td>
<td>Microsoft Office Powerpoint</td>
</tr>
<tr>
<td>BUSOT 62*</td>
<td>Microsoft Office Outlook</td>
</tr>
<tr>
<td>BUSOT 64A*</td>
<td>Microsoft Office Access – Specialist</td>
</tr>
<tr>
<td>BUSOT 64B*</td>
<td>Microsoft Office Access – Expert</td>
</tr>
<tr>
<td>BUSOT 465A</td>
<td>Beginning Speedwriting and Notetaking</td>
</tr>
<tr>
<td>BUSOT 471</td>
<td>Administrative Office Management</td>
</tr>
<tr>
<td>BUSOT 496ABCD</td>
<td>Internships in Business and Office Technologies</td>
</tr>
</tbody>
</table>

*Only one unit will be applied to the certificate*

**Plus specialization for completion in one of the following areas:**

**Executive**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Advanced Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 470**</td>
<td>Electronic Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Executive - Bilingual**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 40B</td>
<td>Advanced Machine Transcription</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 470**</td>
<td>Electronic Office Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

and

One intermediate-level course and one conversational course in a modern language.

(Or documented fluency in a modern language, as validated by the coordinator of modern languages)

** **BUSOT 470 may not be counted twice
Graduation Requirements and Programs of Study

Medical
[S319/10353/0514.20]
Biol 424 Anatomy and Physiology 3
BUSOT 475 Medical Office Procedures 3
BUSOTMD 410 Basic CPT4 Coding 3

Total units for the major 39-46.5

Requirements for the Professional Administrative Assistant Certificate:
[Executive-L325/07372/0514.00; Executive-Bilingual-L517/10351/0514.00; Medical-L319/10353/0514.20]
Same as the major requirements for the A.S. Degree.

Total units for the certificate 39-46.5

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 or medical offices.

Requirements for the General Transcriptionist Certificate:
[L332/07375/0514.00]
BUSOT 40B Computer Keyboarding: Speed and Accuracy Development 3
BUSOT 60B Microsoft Office Word - Expert 3
BUSOT 88 Written Communication for Business 3
BUSOT 455 Fundamentals of English for Business 3
BUSOT 460 Proofreading: Text-Editing Skills 3
BUSOT 462B* Advanced Machine Transcription 3

Plus three units from the following:
BIOL 424 Anatomy and Physiology 3
BUS 28A Business Law I 3
BUSOT 61 Microsoft Office PowerPoint 1.5
BUSOT 62 Microsoft Office Outlook 1.5
BUSOT 63A Microsoft Office Excel - Specialist 1.5
(or BUSOT 63, Microsoft Office Excel – Comprehensive, 3)
BUSOT 64A Microsoft Office Access - Specialist 1.5
BUSOT 470 Electronic Office Procedures 3
BUSOT 496ABCD Internships in Business and Office Technologies 1

Total units for the certificate 21

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

Specialization for the Medical Transcriptionist Certificate:
[L335/07377/0514.20]
Same as requirements for General Transcriptionist (less BUSOT 462B), plus:
BIOL 30 Beginning Medical Terminology 3
BUSOT 462B* Advanced Machine Transcription 3
(Medical Emphasis)
BUSOT 475 Medical Office Procedures 3

Total units for the certificate 27

*Students must take BUSOT 462B with the specific emphasis (general or medical) for each desired certificate, and must complete specialty courses before enrolling in BUSOT 462B.

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.

Major requirements for the Associate in Science Degree:
[S085/04808/1905.00]
CHEM 22 General Chemistry 3
CHEM 22L1 General Chemistry Lab II 1
CHEM 22L2 General Chemistry Lab II 1
CHEM 70 Quantitative Analysis 4
CHEM 75A Organic Chemistry 5
CHEM 75B Organic Chemistry 5
MATH 65B Calculus II 4
PHYS 45 Physics for Scientists and Engineers I 5
PHYS 46 Physics for Scientists and Engineers II 5

Total units for the major 33

Required General Education courses:
CHEM 21 General Chemistry 3
CHEM 21L1 General Chemistry Lab I 1
CHEM 21L2 General Chemistry Lab I 1
MATH 65A Calculus I 4

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

The Child Development and Education program provides students with competencies needed for employment as teacher assistants in public child development classrooms, and 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDE 1</td>
<td>Introduction to Principles and Practices in Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CDE 2</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>CDE 3</td>
<td>Child Study and Observation</td>
<td>3</td>
</tr>
<tr>
<td>CDE 4</td>
<td>Child, Family and Community</td>
<td>3</td>
</tr>
<tr>
<td>CDE 5</td>
<td>Health and Safety of the Young Child</td>
<td>3</td>
</tr>
<tr>
<td>CDE 6</td>
<td>The Child in a Multicultural Society</td>
<td>3</td>
</tr>
<tr>
<td>CDE 23</td>
<td>Introduction to Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>CDE 24</td>
<td>Curriculum Theory I: Principles and Practices</td>
<td>2</td>
</tr>
<tr>
<td>CDE 24W</td>
<td>Supervised Occupational Work Experience Practicum</td>
<td>1</td>
</tr>
<tr>
<td>CDE 25</td>
<td>Curriculum Theory II: Advanced Principles and Practices</td>
<td>2</td>
</tr>
<tr>
<td>CDE 26</td>
<td>Community Internship Seminar: Child Development and Education</td>
<td>2</td>
</tr>
<tr>
<td>CDE 415</td>
<td>Dynamics of Play</td>
<td>3</td>
</tr>
<tr>
<td>CDE 416</td>
<td>Brain Research and Implications for Classroom Teaching</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major** 35

**Recommended Courses:** ENGL 450, MATH 410

Child Development Permits (Assistant, Associate, Teacher, Master Teacher, Site Supervisor, and Program Director) are issued by the State Commission on Teacher Credentialing. Please consult with the department for the requirements.

**COMMUNICATION STUDIES**

An interdisciplinary area of inquiry with a foundation in traditional 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 their daily life and in the fabric of 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>Logic and Argumentation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus three 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>
</tbody>
</table>

**Total units for the major** 21

**Recommended Courses:** ANTHRO 3; BRDCAST 3; SOC 10, 11, 14; THEATRE 1

**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>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 15</td>
<td>Microsoft Access Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Introduction to Computer Networks (or CIS 50A, Introduction to Computer Networks I, 1.5, and CIS 50B, Introduction to Computer Networks II, 1.5)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISPROG 1</td>
<td>Introduction to Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 3</td>
<td>Fundamentals of Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Plus a minimum of 11.5 units from the following:**

<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 30A</td>
<td>Introduction to Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 431</td>
<td>Project Management for Information Technology</td>
<td>3</td>
</tr>
<tr>
<td>CIS 435</td>
<td>Fundamentals of Microsoft Visio</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 470</td>
<td>Electronic Commerce</td>
<td>1.5</td>
</tr>
<tr>
<td>CISHDSP 401</td>
<td>Microcomputer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 11</td>
<td>Microsoft Network Server</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 430</td>
<td>Fundamentals of Linux</td>
<td>1.5</td>
</tr>
<tr>
<td>CISNTWK 440</td>
<td>Introduction to Network Security Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 403</td>
<td>Advanced Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 416</td>
<td>Microsoft Access VBA Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major** 31
**Computer Information Systems Certificate Programs**

**Cisco CCNA Examination Preparation, Levels I-IV**

The Cisco CCNA Examination Preparation Certificates, Levels I-IV, confirm that the student possesses the industry-recognized knowledge and skills required for completion of each level in a four-course sequence. In completing the sequence, the student is qualified to take the Cisco CCNA examination, which is administered by an outside agency.

**Requirements for the Cisco CCNA Examination Preparation Level I Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems 3</td>
</tr>
<tr>
<td>CISCO 1</td>
<td>Cisco Internetworking I 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 7

**Requirements for the Cisco CCNA Examination Preparation Level II Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I Certificate, or CISCO 1 or equivalent, plus:</td>
<td>0-7</td>
</tr>
<tr>
<td>CISCO 2</td>
<td>Cisco Internetworking II 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-11

**Requirements for the Cisco CCNA Examination Preparation Level III Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level II Certificate, or CISCO 2 or equivalent, plus:</td>
<td>0-11</td>
</tr>
<tr>
<td>CISCO 3</td>
<td>Cisco Internetworking III 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-15

**Requirements for the Cisco CCNA Examination Preparation Level IV Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level III Certificate, or CISCO 3 or equivalent, plus:</td>
<td>0-15</td>
</tr>
<tr>
<td>CISCO 4</td>
<td>Cisco Internetworking IV 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-19

**Cisco CCNP Examination Preparation, Levels V-VIII**

Cisco professionals design, build, and maintain computer networks that use Cisco software and hardware to form the networking and Internet foundations for business and government agencies worldwide. The Cisco Certified Network Professional (CCNP) Examination Preparation Certificates Levels V-VIII confirms that the student possesses the industry-recognized knowledge and skills required for each of the CCNP components. Upon successful completion of all four levels (taken in any sequence), the student is qualified to take the Cisco CCNP examination which is administered by an outside agency.

**Requirements for the Cisco CCNP Examination Preparation Level V Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 4 or equivalent, or passing the Cisco CCNA examination, plus:</td>
<td>0-19</td>
</tr>
<tr>
<td>CISCO 415</td>
<td>CISCO Internetworking V 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-23

**Requirements for the Cisco CCNP Examination Preparation Level VI Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 4 or equivalent, or passing the Cisco CCNA examination plus:</td>
<td>0-23</td>
</tr>
<tr>
<td>CISCO 416</td>
<td>CISCO Internetworking VI 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-27

**Requirements for the Cisco CCNP Examination Preparation Level VII Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 4 or equivalent, or passing the Cisco CCNA examination, plus:</td>
<td>0-27</td>
</tr>
<tr>
<td>CISCO 417</td>
<td>CISCO Internetworking VII 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-31

**Requirements for the Cisco CCNP Examination Preparation Level VIII Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISCO 4 or equivalent, or passing the Cisco CCNA examination, plus:</td>
<td>0-31</td>
</tr>
<tr>
<td>CISCO 418</td>
<td>CISCO Internetworking VIII 4</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 4-35

**Computer Foundations**

The Computer Foundations certificate provides students with the basic hardware, software, operating system, Internet, and networking skills demanded for entry level positions in virtually any organization.

**Requirements for the Computer Foundations Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems 3</td>
</tr>
<tr>
<td>CIS 4</td>
<td>Fundamentals of Microsoft Windows 1.5</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet 1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics 1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Maintenance for the Home and Small Business User (or CIS 420, Microcomputer Hardware, 3) 1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Installing a Home and/or Small Business Network (or CIS 50, Introduction to Computer Networks, 3, or CIS 50A, Introduction to Computer Networks I, 1.5, and CIS 50B, Introduction to Computer Networks II, 1.5) 1.5</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 10.5-13.5

**Computer Game Development**

The Computer Game Development Certificate sets the foundation for a career in game development with the introduction of the programming and graphic elements of the field.

**Requirements for the Computer Game Development Certificate:**

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems 3</td>
</tr>
<tr>
<td>CISGAME 401</td>
<td>Fundamentals of Game Development 1.5</td>
</tr>
<tr>
<td>CISGAME 402</td>
<td>Fundamentals of Game Development II 3</td>
</tr>
<tr>
<td>CISGAME 403</td>
<td>Fundamentals of Game Programming 3</td>
</tr>
</tbody>
</table>

**Total units for the certificate**: 10.5
## Computer Information Systems

### Requirements for the Computer Information Systems Certificate:

<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 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 15</td>
<td>Microsoft Access Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or CIS 50A, Introduction to Computer Networks I, 1.5 and CIS 50B, Introduction to Computer Networks II, 1.5)</td>
<td></td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISPROG 1</td>
<td>Introduction to Computer Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 3</td>
<td>Fundamentals of Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 31

### Database Specialist Level I

The Database Specialist Level I certificate prepares students for entry level positions involving the design and development of database systems in an organization.

### Requirements for the Database Specialist Level I Certificate:

<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 15</td>
<td>Microsoft Access Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics</td>
<td>1.5</td>
</tr>
<tr>
<td>CISWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISWEB 436A</td>
<td>Web Development: PHP Programming I</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 12

### Dreamweaver Web Developer

The Dreamweaver Web Developer Certificate prepares students for positions using Macromedia Dreamweaver to develop Internet and Intranet Web sites.

### Requirements for the Dreamweaver Web Developer Certificate:

<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 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISWEB 423</td>
<td>Web Development: Dreamweaver</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or CISWEB 423A, Web Development Dreamweaver I, 1.5 and CISWEB 423B, Web Development Dreamweaver II, 1.5)</td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 12

### Computer Support Technician (A+)

The Computer Support Technician Certificate prepares the student for positions in industry supporting microcomputer users in hardware and software areas as well as to prepare for the Comp TIA A+ examination. The examination is administered by an outside agency.

### Requirements for the Computer Support Technician Certificate (A+ Certification Preparation):

<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 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or CIS 50A, Introduction to Computer Networks I, 1.5 and CIS 50B, Introduction to Computer Networks II, 1.5)</td>
<td></td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISHDSP 401</td>
<td>Microcomputer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 440</td>
<td>Introduction to Network Security Administration</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 403</td>
<td>Advanced Visual Basic Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 416</td>
<td>Microsoft Access VBA Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 16.5

### Electronic Commerce Generalist

The Electronic Commerce Generalist certificate prepares students to start or manage a business on the Internet, or to be employed by an Internet-based business.

### Requirements for the Electronic Commerce Generalist Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 459</td>
<td>Simplified Commercial Accounting Software</td>
<td>1.5</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 45</td>
<td>Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 470</td>
<td>Electronic Commerce</td>
<td>1.5</td>
</tr>
<tr>
<td>CISWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 16.5
Flash Game Developer

The Flash Game Developer certificate prepares students for a career in developing computer games with the Flash programming language.

Requirements for the Flash Game Developer Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 58</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISGAME 401</td>
<td>Fundamentals of Game Development</td>
<td>1.5</td>
</tr>
<tr>
<td>CISGAME 420</td>
<td>Game Development Using Flash</td>
<td>3</td>
</tr>
<tr>
<td>CISIWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 420A</td>
<td>Web Development: Flash</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 13.5

Flash Web Developer

The Flash Web Developer certificate prepares students for positions using Macromedia Flash to develop Internet and Intranet Web sites.

Requirements for the Flash Web Developer Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 420A</td>
<td>Web Development: Flash</td>
<td>3</td>
</tr>
<tr>
<td>CISIWEB 420B</td>
<td>Web Development: Flash ActionScript Programming</td>
<td>3</td>
</tr>
<tr>
<td>CISIWEB 423</td>
<td>Web Development: Dreamweaver</td>
<td>3</td>
</tr>
<tr>
<td>(or CISIWEB 423A, Web Development: Dreamweaver I, 1.5, and CISIWEB 423B, Web Development: Dreamweaver II, 1.5)</td>
<td></td>
<td></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>CISIWEB 410</td>
<td>WebMaster Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 434</td>
<td>Web Development: Cascading Style Sheets</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 16.5

Internet Programmer Level I

The Internet Programmer Level I certificate prepares students for positions developing Internet sites requiring client and server-side programming.

Requirements for the Internet Programmer Level I Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 414</td>
<td>JavaScript Programming</td>
<td>3</td>
</tr>
<tr>
<td>(or CISIWEB 414A, JavaScript Programming I, 1.5, and CISIWEB 414B, JavaScript Programming II, 1.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CISIWEB 430A</td>
<td>Web Development: CGI/Perl Programming I</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 432A</td>
<td>Web Development: Active Server Pages I</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 436A</td>
<td>Web Development: PHP Programming I</td>
<td>1.5</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>CISIWEB 410</td>
<td>WebMaster Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 434</td>
<td>Web Development: Cascading Style Sheets</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 15

Internet Support Specialist (I-Net+)

The Internet Support Specialist certificate prepares the student to serve as a resource for any size organization in maintaining its Internet service or Web presence, as well as to prepare for the Comp TIA I-Net+ certification examination. The examination is administered by an outside agency.

Requirements for the Internet Support Specialist Certificate (I-Net+ Certification Preparation): Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 50</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>(or CIS 50A, Introduction to Computer Networks I, 1.5, and CIS 50B, Introduction to Computer Networks II, 1.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 470</td>
<td>Electronic Commerce</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 70</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</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>CISIWEB 410</td>
<td>WebMaster Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 434</td>
<td>Web Development: Cascading Style Sheets</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate 13.5

Microsoft Access Programmer

The Microsoft Access Programmer designs, develops and maintains database systems that can be used by any size organization or Internet-based business.

Requirements for the Microsoft Access Programmer Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 15</td>
<td>Microsoft Access Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 420</td>
<td>Computer Security Basics</td>
<td>1.5</td>
</tr>
<tr>
<td>CISP 416</td>
<td>Microsoft Access VBA Programming</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 13.5

Microsoft Certified Desktop Support Technician (MCDST)

The Microsoft Certified Desktop Support Technician certificate prepares students for positions troubleshooting desktop environments running on the Microsoft Windows operating system in all size organizations. The certificate also helps students prepare for the MCDST certification examination. The examination is administered by an outside agency.

Requirements for the Microsoft Certified Desktop Support Technician Certificate: Units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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 4</td>
<td>Fundamentals of Microsoft Windows</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 50</td>
<td>Introduction to Computer Networks</td>
<td>3</td>
</tr>
<tr>
<td>(or CIS 50A, Introduction to Computer Networks I, 1.5, and CIS 50B, Introduction to Computer Networks II, 1.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISHDSP 401</td>
<td>Microcomputer Hardware</td>
<td>3</td>
</tr>
<tr>
<td>CISHDSP 410</td>
<td>Desktop Support Certification Preparation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 15
## Microsoft FrontPage Web Developer

The Microsoft FrontPage Web Developer Certificate prepares students for positions using FrontPage to develop Internet and Intranet Web sites.

**Requirements for the Microsoft FrontPage Developer Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 4</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 68</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 70</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 412A</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 412B</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Plus one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISIWEB 410</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB 434</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate: 12

## Microsoft Network Specialist (MCSA)

The demand for networking professionals to administer and support computer networks far exceeds the supply and will continue to do so well into the twenty-first century. The Microsoft Network Specialist Certificate enables the student to specialize in Microsoft networking as well as to prepare for the Microsoft Certification exams. The examinations are administered by an outside agency.

**Requirements for the Microsoft Network Specialist Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 4</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 50</td>
<td>3</td>
</tr>
<tr>
<td>CISHDSP 401</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 11</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 440</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 22.5

## Network Administrator (Network +)

The demand for networking professionals to administer and support computer networks far exceeds the supply and will continue to do so well into the twenty-first century. The Networking Administrator Certificate enables the student to acquire networking skills as well as to prepare for the CompTIA Network+ and Server+ examinations. The examinations are administered by an outside agency.

**Requirements for the Network Administrator Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 50</td>
<td>3</td>
</tr>
<tr>
<td>CISHDSP 401</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 11</td>
<td>3</td>
</tr>
<tr>
<td>CISNTWK 440</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 15

Recommended:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISNTWK 401</td>
<td>0.5</td>
</tr>
</tbody>
</table>

## Project Management

The Project Management certificate prepares students for positions requiring the efficient management of information technology projects in organizations with respect to software, planning, time, costs, and other factors.

**Requirements for the Project Management Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS 431</td>
<td>3</td>
</tr>
<tr>
<td>CIS 435</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the certificate: 9

## Visual Basic Programmer

The Visual Basic Programmer develops and maintains applications that can be used by any size organization or Internet-based business.

**Requirements for the Visual Basic Programmer Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>CIS 15</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>1.5</td>
</tr>
<tr>
<td>CISPROG 1</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 3</td>
<td>3</td>
</tr>
<tr>
<td>CISPROG 403</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 16.5
Web Page Developer

**Level One:** The Web Page Developer Level One Certificate prepares students for positions developing Internet and Intranet Web pages.

**Requirements for the Web Page Developer Level One Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CISIWEB</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB</td>
<td>Creating Web Pages with HTML</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB</td>
<td>WebMaster Tools</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB</td>
<td>Web Development: Microsoft FrontPage</td>
<td>1.5</td>
</tr>
<tr>
<td>CISIWEB</td>
<td>Web Development: Cascading Style Sheets</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 10.5

**Level Two:** The Web Page Developer Level Two Certificate prepares students for advanced positions developing Internet and Intranet Web pages, and for those applications requiring programming skills, such as electronic commerce.

**Requirements for the Web Page Developer Level Two Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CISIWEB</td>
<td>JavaScript Programming</td>
<td>3</td>
</tr>
<tr>
<td>(or CISIWEB</td>
<td>JavaScript Programming I, 1.5, and</td>
<td></td>
</tr>
<tr>
<td>414A,</td>
<td>JavaScript Programming II, 1.5)</td>
<td></td>
</tr>
<tr>
<td>CISIWEB</td>
<td>Web Development: Dreamweaver</td>
<td>3</td>
</tr>
<tr>
<td>423A,</td>
<td>Web Development: Dreamweaver I, 1.5, and</td>
<td></td>
</tr>
<tr>
<td>423B,</td>
<td>Web Development: Dreamweaver II, 1.5)</td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the certificate** 16.5

**CONSUMER SERVICES REPRESENTATIVE**

The Consumer Services Representative major provides occupational training for those who seek immediate employment as a Consumer Affairs Representative in business, government, education, or non-profit agencies. Positions include but are not limited to: customer service call centers, loan counselors, account representative, manager-customer service, complaint administrator, and workforce analyst.

**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>BUSOT</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT</td>
<td>Electronic Office Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM</td>
<td>Life Management</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM</td>
<td>Consumer Economics</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM</td>
<td>Internship in Consumer Studies</td>
<td>1</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>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 11</td>
<td>Housing and Environment</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 1</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td>(or SPAN 1A, Elementary Spanish, 2 and SPAN 1B, Elementary Spanish, 2)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the major** 19-20

**Requirements for the Consumer Services Representative Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[L251/04796/1301.10] Same as the major requirements for the A.S. Degree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the certificate** 19-20

**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 Code</th>
<th>Course 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 three courses from the following or from approved special topics:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ 1</td>
<td>Administration of Justice System</td>
<td>3</td>
</tr>
<tr>
<td>AJ 2</td>
<td>Concepts of Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>AJ 3</td>
<td>Principles and Procedures of the Justice System</td>
<td>3</td>
</tr>
<tr>
<td>AJ 4</td>
<td>Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>AJ 5</td>
<td>Legal Aspects of Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 4</td>
<td>Public Relations and Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 7</td>
<td>Probation and Parole</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 10</td>
<td>Violence in America</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 409</td>
<td>The Female Victim/Offender</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 410</td>
<td>Street Gangs and Subcultures</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 411</td>
<td>Juvenile Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CRSCI 450</td>
<td>Correctional Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major** 27

**Requirements for the Correctional Science Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[L105/04811/2105.10] Same as the major requirements for the A.S. Degree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the certificate** 27

**CULINARY ARTS**

(See also Hotel and Food Service Management)

The Culinary Arts Certificate is an entry-level program that prepares students for employment opportunities in the food service industry. The program emphasizes basic preparation, production, and sanitation standards involved in food production.

**Requirements for the Culinary Arts Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHTS 10</td>
<td>Introduction to Hospitality Management</td>
<td>3</td>
</tr>
<tr>
<td>HHTS 16</td>
<td>Principles of Food Preparation</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 16L</td>
<td>Principles of Food Preparation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HHTS 18</td>
<td>Sanitation, Safety and Equipment Management</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 20</td>
<td>Purchasing, Cost Controls, and Menu Planning</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 424</td>
<td>Dining Systems and Restaurant Operations</td>
<td>3</td>
</tr>
<tr>
<td>HHTS 432</td>
<td>Hospitality and Healthcare Law</td>
<td>3</td>
</tr>
<tr>
<td>HHTS 434</td>
<td>Catering and Banquet Organization</td>
<td>3</td>
</tr>
<tr>
<td>HHTS 436A</td>
<td>Culinary Arts I</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 436B</td>
<td>Culinary Arts II</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 436C</td>
<td>Culinary Arts III</td>
<td>2</td>
</tr>
<tr>
<td>HHTS 496B</td>
<td>Work Experience</td>
<td>2</td>
</tr>
<tr>
<td>NF 11</td>
<td>Food Service Management Supervision</td>
<td>3</td>
</tr>
<tr>
<td>NF 15</td>
<td>Nutrition I: The Science of Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>(or NF 5, Nutrition for Life, or NF 25, Culture and Nutrition)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total units for the certificate** 33
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>DANCE 1</td>
<td>Survey of Dance</td>
<td>3</td>
</tr>
<tr>
<td>DANCE 2</td>
<td>Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>DANCE 3</td>
<td>Tap Dance I</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 4</td>
<td>Ballet IA</td>
<td>1.5</td>
</tr>
<tr>
<td>DANCE 5</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>DANCE 6</td>
<td>Ballet II</td>
<td>1.5</td>
</tr>
<tr>
<td>DANCE 7</td>
<td>Modern Dance</td>
<td>1-1</td>
</tr>
<tr>
<td>DANCE 8</td>
<td>Jazz Dance I</td>
<td>1-1</td>
</tr>
<tr>
<td>DANCE 9</td>
<td>Tap Dance I</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 10</td>
<td>Beginner Guitar</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 11</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td>DANCE 40</td>
<td>Hip Hop Dance</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 40</td>
<td>Beginning Guitar</td>
<td>1</td>
</tr>
<tr>
<td>MUSIC 51A</td>
<td>Beginning Class Piano</td>
<td>1</td>
</tr>
<tr>
<td>THEATRE 10</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 50</td>
<td>Main Stage Production Workshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major:** 27-29

Dental Assisting

The Dental Assisting Program is accredited by the Commission on Dental Accreditation and Dental Board of the State of California Committee on Dental Auxiliary. The program features both full-time and part-time schedules. The full-time schedule can be completed within one year. The part-time schedule must be completed within three years of continuous enrollment.

Students receive a comprehensive education including dental sciences, hands-on practice laboratory, radiation safety certificate (x-ray license), clinical experience in a community dental practice, state-of-the-art technology, dental business management preparation and familiarity with dental specialty practices.

Students completing the program are eligible to take the Dental Assisting National Board Examination (Certified Dental Assistant) as well as the Registered Dental Assistant Examination (ROA).

Graduates are eligible for employment in private dental practices, clinics, and hospitals as assistants, technicians, and front office receptionists.

**Notes:**

1. High school graduation, pass the GED test, or pass the High School Proficiency examination, or have associates degree or higher. International transcripts must have AERC, IERF or approved agency evaluation.
2. All courses required for the certificate must be completed with a minimum grade of C.

3. 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.
4. The college does not provide transportation to clinical facilities.
5. Courses taken to meet Dental Hygiene transfer program prerequisites may satisfy certain Dental Assisting course work. Consult with your counselor or the Dental Assisting Program Coordinator.
6. Part-time Dental Assisting program may be taken while meeting Dental Hygiene transfer program prerequisites.
7. Some courses may be taken during the student’s senior year in high school. Consult with your counselor or the Dental Assisting Program Coordinator.
8. The Dental Assisting Program must be completed within a three year period.
9. Applicants with a record of any felony are subject to review by the Dental Board of California before becoming licensed by the state of California.

**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>DA 401</td>
<td>Dental Anatomy</td>
<td>2</td>
</tr>
<tr>
<td>DA 402</td>
<td>Occupational Health and Safety</td>
<td>1</td>
</tr>
<tr>
<td>DA 403</td>
<td>Dental Materials</td>
<td>1</td>
</tr>
<tr>
<td>DA 403L</td>
<td>Dental Materials Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>DA 404</td>
<td>Chairside Procedures</td>
<td>4</td>
</tr>
<tr>
<td>DA 404L</td>
<td>Chairside Procedures Lab</td>
<td>2</td>
</tr>
<tr>
<td>DA 405</td>
<td>The Professional Dental Assistant</td>
<td>1</td>
</tr>
<tr>
<td>DA 405L</td>
<td>The Professional Dental Assistant Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>DA 407</td>
<td>Dental Radiology I</td>
<td>1</td>
</tr>
<tr>
<td>DA 407L</td>
<td>Dental Radiology I Lab</td>
<td>1</td>
</tr>
<tr>
<td>DA 411</td>
<td>Biomedical Sciences</td>
<td>2</td>
</tr>
<tr>
<td>DA 412</td>
<td>Dental Office Procedures</td>
<td>1</td>
</tr>
<tr>
<td>DA 412L</td>
<td>Dental Office Procedures Lab</td>
<td>1</td>
</tr>
<tr>
<td>DA 413</td>
<td>Oral Pathology and Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>DA 414</td>
<td>Dental Radiology II</td>
<td>1</td>
</tr>
<tr>
<td>DA 414L</td>
<td>Dental Radiology II Lab</td>
<td>1</td>
</tr>
<tr>
<td>DA 418</td>
<td>Registered Dental Assistant (RDA) Functions and Specialty Practice</td>
<td>2</td>
</tr>
<tr>
<td>DA 418L</td>
<td>Registered Dental Assistant (RDA) Functions and Specialty Practice Lab</td>
<td>1.5</td>
</tr>
<tr>
<td>DA 419</td>
<td>Supervised Clinical Experience</td>
<td>5.5</td>
</tr>
<tr>
<td>HS 405</td>
<td>Computer Applications for Health Science</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total units for the major:** 31

**Requirements for the Dental Assisting Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA 487</td>
<td>Advanced Clinical Applied Technology</td>
<td>1</td>
</tr>
<tr>
<td>DA 496ABCD</td>
<td>Occupational Work Experience: Dental Assisting</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total units for the certificate:** 31

**Recommended courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Graduation Requirements and Programs of Study**
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, including entry levels of supervision. This program fulfills the federal and state training regulations for positions in general acute-care hospitals, acute psychiatric hospitals, skilled nursing facilities, and intermediate/residential-care facilities.

Requirements for the Dietetic Service Supervisor Certificate:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>Principles of Food Preparation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>Sanitation, Safety and Equipment Management</td>
<td>2</td>
</tr>
<tr>
<td>NF 11</td>
<td>Nutrition I: Food Service Management</td>
<td>3</td>
</tr>
<tr>
<td>NF 15</td>
<td>Nutrition II: Modified Diets</td>
<td>3</td>
</tr>
<tr>
<td>NF 470</td>
<td>Dietetic Service Supervisor (take twice)</td>
<td>1-1</td>
</tr>
<tr>
<td>NF 470L</td>
<td>Dietetic Service Supervisor: Supervised Laboratory (take twice)</td>
<td>1-1</td>
</tr>
</tbody>
</table>

Total units for the certificate 21

DIETETIC TECHNICIAN

Currently approved by the Commission on Accreditation for Dietetics Education of the American Dietetic Association (ADA, 120 S. Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 800/877-1600), the Dietetic Technician program prepares students to take the ADA Registration Examination for Dietetic Technicians administered by that agency. Dietetic technicians are employed as managers in a designated unit or department in health care, community care, school food service, county health, and community directed programs of nutrition services for elderly, infants, or children. Dietetic technicians find themselves in the enviable position of encountering high employment opportunities for those 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the-Non-Accounting Major</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 424</td>
<td>Anatomy and Physiology</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</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>Principles of Food Preparation Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>Sanitation, Safety and Equipment Management</td>
<td>2</td>
</tr>
<tr>
<td>NF 11</td>
<td>Nutrition I: Food Service Management</td>
<td>3</td>
</tr>
<tr>
<td>NF 15</td>
<td>Nutrition II: Modified Diets</td>
<td>3</td>
</tr>
<tr>
<td>NF 421</td>
<td>Nutrition III: Nutrition Care</td>
<td>2</td>
</tr>
<tr>
<td>NF 423</td>
<td>Nutrition IV: Advanced Nutrition Care</td>
<td>2</td>
</tr>
<tr>
<td>NF 470</td>
<td>Dietetic Service Supervisor (take twice)</td>
<td>1-1</td>
</tr>
<tr>
<td>NF 470L</td>
<td>Dietetic Service Supervisor: Supervised Laboratory (take twice)</td>
<td>1-1</td>
</tr>
<tr>
<td>NF 480</td>
<td>Dietetic Technician Seminar (take twice)</td>
<td>2-2</td>
</tr>
<tr>
<td>NF 480L</td>
<td>Dietetic Technician: Supervised</td>
<td>2-2</td>
</tr>
</tbody>
</table>

Total units for the major 43-44

Note: 450 hours of clinical field experience must be completed to meet the American Dietetic Association/Commission on Accreditation for Dietetic Education (CARE) internship requirement. Students who complete all Dietetic Technician requirements are eligible to take the ADA registration examination.

DRAFTING

The drafting program degrees and certificates provide the basic knowledge and skills in drafting, mathematics, art, and related scientific and engineering areas to prepare students for employment in the manufacturing and architectural industries. Each program focuses on the skills necessary to be successful and gain employment in related fields. Computer-aided drafting (CAD) will be used to complete the required work in most of the classes.

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 curriculum prepares students for employment as entry level architectural drafting aids, building designer of residences, detailer, designer, and CAD operators. Graduates of the program may find work in offices of architects, structural engineers, mechanical engineers, and other related industries.

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>DRAFT 20</td>
<td>Computer-Aided Drafting and Design</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 21</td>
<td>Mechanical Design I</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 50</td>
<td>Architectural Design I</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 51</td>
<td>Architectural Design II</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 53</td>
<td>Architectural Applications of CAD</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 452</td>
<td>Light Commercial Construction Design</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 26</td>
<td>Engineering Graphics and CAD</td>
<td>3</td>
</tr>
<tr>
<td>ID 12</td>
<td>History of Western Architecture and Interiors II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 26

Required General Education courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 12</td>
<td>Fundamentals of Design in Three Dimensions</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 5</td>
<td>The Ideas of Physics</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 6</td>
<td>The Ideas of Physics Laboratory</td>
<td>1</td>
</tr>
</tbody>
</table>

(or any advanced course in physics with a laboratory)

Requirements for Drafting Technician: Architectural Certificate:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOPE 96ABC</td>
<td>Cooperative Education: Career Field Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

Same as the major requirements for the A.S. Degree and general education requirements. plus: 34

Total units for the certificate 37
Drafting Technician: Mechanical

The mechanical drafting technician program provides the fundamental knowledge and skills in drafting. The curriculum is designed for students to seek employment in the following fields: aerospace, civil, electronics, mechanical, structural steel, technical illustration, tool design, piping, sheet metal layout, and other related industries.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRAFT 20 Computer-Aided Drafting and Design</td>
<td>4</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 41 Computer-Aided Drafting and Design: Mechanical</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 43 Three-Dimensional Computer Modeling and Solids Modeling</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 78 Advanced Design Applications</td>
<td>4</td>
</tr>
<tr>
<td>ENGIN 26 Engineering Graphics and CAD</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</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</td>
<td>1</td>
</tr>
</tbody>
</table>

**Requirements for Drafting Technician: Mechanical Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COOPED 96ABC Cooperative Education: Career Field Studies (any combination to equal 3 units)</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the certificate**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
</tr>
</tbody>
</table>

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, planetology, 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 environmental 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 35 Planets and the Solar System with Lab</td>
<td>4</td>
</tr>
<tr>
<td>(or ASTRON 26, Stars and Galaxies, 3)</td>
<td></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 Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ESC 8 Meteorology</td>
<td>3</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>

**Plus one course from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1 General Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3 California Natural History</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 50 Core Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 56 Invertebrate Zoology</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total units for the major**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>27-28</td>
</tr>
</tbody>
</table>

Economics

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. Economics also addresses the impact of decisions upon equity (fairness), particularly as measured by the distribution of wealth and income.

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 four units from the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 8 History of Economic Ideas</td>
<td>3</td>
</tr>
<tr>
<td>ECON 90A Economics Honors Seminar (maximum of 4 times)</td>
<td>1-1-1-1</td>
</tr>
<tr>
<td>ECON 92 Special Topics (maximum of 3 times)</td>
<td>1-1-1</td>
</tr>
</tbody>
</table>

**Total units for the major**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
</tr>
</tbody>
</table>

**Plus a minimum of 15 units from the following, including courses from at least three different disciplines:**

Accounting 1A
Accounting and Financial Services 465
Anthropology 3
Business 10, 28A, 49, 61, 408, 410
Communication Studies 72
Computer Information Systems 1
Computer Science 1
Economics 1, 8, 90A, or 92 (if not used from above group)
Geography 10
History 2, 6, 17, 18, 20
Mathematics 65A
Philosophy 70
Political Science 1, 2, 7, 10
Psychology 65
Real Estate 60
Social Science 10 (or Statistics 10)
Sociology 10
**Education Paraprofessional**

The Education Paraprofessional program prepares students for employment as instructional aides/paraprofessionals in grades K – 12. The degree certifies that an individual is “highly qualified” in this field, as required by current federal legislation, and provides a venue for currently employed aides to achieve “highly qualified” status in response to the legislative deadline of 2006. It also prepares students to continue their studies in preparation for transfer to four-year colleges and universities by incorporating articulated and/or recommended courses.

**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>CDE 2</td>
<td>Child Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 2</td>
<td>Fundamentals of Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or COMSTD 4, Fundamentals of Interpersonal Communication)</td>
<td></td>
</tr>
<tr>
<td>ED 10</td>
<td>Introduction to Education and Teaching</td>
<td>3</td>
</tr>
<tr>
<td>ED 12</td>
<td>Introduction to Education and Teaching II</td>
<td>3</td>
</tr>
<tr>
<td>ED 400</td>
<td>Exploring Careers in Education</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>MATH 410</td>
<td>Elementary Algebra</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(or higher level math course)</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major: 22

**Required General Education courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHSCI 10</td>
<td>Survey of Chemistry and Physics</td>
</tr>
<tr>
<td></td>
<td>(or BIOL 1, General Biology)</td>
</tr>
</tbody>
</table>

The Education Paraprofessional Level I certificate introduces the educational field to students interested in careers in education and/or child development. The certificate is the first component of the “ladder” concept by which students may gain employment and/or continue their education.

**Requirements for the Education Paraprofessional Level I Certificate:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDE 2</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td>ED 10</td>
<td>Introduction to Education and Teaching</td>
</tr>
<tr>
<td>ED 400</td>
<td>Exploring Careers in Education</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
</tr>
</tbody>
</table>

Total units for the certificate: 12

**Requirements for the Education Paraprofessional Level II Certificate:**

Same as the major requirements for the A.S. Degree and general education requirement above

Total units for the certificate: 26

**Electricity**

*(See Industrial Electrical Technology)*

**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:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 21, 21L1, 21L2</td>
<td>General Chemistry and Labs, Materials of Engineering, 3</td>
<td>3, 1, 1</td>
</tr>
<tr>
<td>DRAFT 20</td>
<td>Computer-Aided Drafting and Design I</td>
<td>4</td>
</tr>
<tr>
<td>DRAFT 43</td>
<td>Three-Dimensional Computer Modeling and Solids Modeling</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 10</td>
<td>Introduction to Engineering</td>
<td>1</td>
</tr>
<tr>
<td>ENGIN 30</td>
<td>Engineering Application of Digital Computation</td>
<td>3</td>
</tr>
<tr>
<td>ENGIN 50</td>
<td>Engineering Statics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 65B</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 46</td>
<td>Physics for Scientists and Engineers II</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units for the major: 29-32

**Required General Education courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
</tr>
<tr>
<td>PHYS 45</td>
<td>Physics for Scientists and Engineers I</td>
</tr>
</tbody>
</table>

**Strongly recommended:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 22</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>CHEM 22L1</td>
<td>General Chemistry Lab II</td>
</tr>
<tr>
<td>CHEM 22L2</td>
<td>General Chemistry Lab II</td>
</tr>
<tr>
<td>PHYS 44</td>
<td>Introduction to Motion</td>
</tr>
<tr>
<td>PHYS 47</td>
<td>Physics for Scientists and Engineers III</td>
</tr>
</tbody>
</table>

**English**

The English major gives students an appreciation of literature and increased skills in written communication. 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 to use English is necessary 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 Code</th>
<th>Course 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 12 units from the following or from approved special topics:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 7A, 7B, 7D, 7E</td>
<td>Advanced Composition and Critical Thinking, 3</td>
</tr>
<tr>
<td>ENGL 7A, 7B, 7D, 7E, 30, 32, 33, 35, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 79, 81, 98</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major: 24

**Required General Education course:**

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

**Catalog 2007-2008**

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**Chaffey College**
FASHION DESIGN

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

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>BUSOT 63</td>
<td>Microsoft Office Excel – Comprehensive</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or BUSOT 63A, Microsoft Office Excel – Specialist, 1.5 and BUSOT 63B, Microsoft Office Excel – Expert, 1.5)</td>
<td></td>
</tr>
<tr>
<td>FASHD 20</td>
<td>History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 40</td>
<td>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 45</td>
<td>Basic Design and Creativity</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 61</td>
<td>Basic Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 65</td>
<td>Fashion Illustration</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 428</td>
<td>Computer-Aided Fashion and Costume Design</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 442</td>
<td>Industrial Sewing</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 470</td>
<td>Apparel Production</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 471</td>
<td>Advanced Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 472</td>
<td>Computer-Aided Patternmaking</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 480</td>
<td>Design Collection</td>
<td>2</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>

Total units for the major: 37

Requirements for the Fashion Design Certificate:

Same as the major requirements for the A.S. Degree.

Total units for the certificate: 37

Recommended Courses for both Degree and Certificate: BUS 45, FASHD 42, 72, 415, plus AMM 410 & 410A, which are Cal Poly Pomona courses available through cross-enrollment. See counselor.

Costume Design

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, as well as freelance design and construction at the local level for community theatre and performing arts.

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>FASHD 16</td>
<td>Principles of Costume Design and Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(also available as THEATRE 16)</td>
<td></td>
</tr>
<tr>
<td>FASHD 20</td>
<td>History of Fashion</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 40</td>
<td>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 45</td>
<td>Basic Design and Creativity</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 61</td>
<td>Basic Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 65</td>
<td>Fashion Illustration</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 428</td>
<td>Computer-Aided Fashion and Costume Design</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 442</td>
<td>Industrial Sewing</td>
<td>2</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 1</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 32</td>
<td>Theatre Design – Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 40</td>
<td>Stage Costuming(take twice)</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 42</td>
<td>Theatrical Makeup</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: 38

Requirements for the Costume Design Certificate:

Same as the major requirements for the A.S. Degree.

Total units for the certificate: 38

Strongly recommended courses for degree and certificate:

FASHD 42 and 72

Custom Dressmaking

The Custom Dressmaking certificate prepares the student for small business ownership in couture and custom work, as well as the highly demanded alterations field. Skills acquired also enable the student to apply for sample making in the apparel manufacturing field and costume construction in theatre and performing arts.

Requirements for the Custom Dressmaking Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASHD 40</td>
<td>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 42</td>
<td>Advanced Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 61</td>
<td>Basic Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 72</td>
<td>Fashion Draping</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 442</td>
<td>Industrial Sewing</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 445</td>
<td>Fitting and Alterations of Patterns and Apparel</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 471</td>
<td>Advanced Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 480</td>
<td>Design Collection</td>
<td>2</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>

Total units for the certificate: 38

Recommended Courses: BUS 45, FASHD 45, FASHD 415.

Industrial Sewing

An Industrial Sewing Certificate prepares the student for apparel construction based on industry methods and the utilization of power sewing equipment. Employment opportunities: commercial sewing machine operator or apparel industry sample maker.

Requirements for the Industrial Sewing Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASHD 40</td>
<td>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 42</td>
<td>Advanced Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 442</td>
<td>Industrial Sewing</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the certificate: 6
Patternmaking for Apparel

The Patternmaking for Apparel certificate prepares the student for employment in the apparel industry as a first patternmaker. Technical skills assist with employment in related areas including apparel production and costume design.

Requirements for the Patternmaking for Apparel Certificate:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</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>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 61</td>
<td>Basic Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 72</td>
<td>Fashion Draping</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 445</td>
<td>Fitting and Alterations of Patterns and Apparel</td>
<td>2</td>
</tr>
<tr>
<td>FASHD 470</td>
<td>Apparel Production</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 471</td>
<td>Advanced Patternmaking</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 472</td>
<td>Computer-Aided Pattern Making</td>
<td>2</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>

Total units for the certificate  27

Recommended Courses:

BUS 45, plus AMM 410 & 410A which are Cal Poly Pomona courses available through cross-enrollment. See counselor.

Fashion Merchandising

Fashion Merchandising prepares students for employment in all aspects of retailing related to apparel and accessory merchandise buying and management. Other career avenues are sales representatives for manufacturers, visual display, distribution, importing and exporting, and sales promotions.

Major requirements for the Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 13</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 63</td>
<td>Microsoft Office Excel - Comprehensive (or BUSOT 63A, 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microsoft Office Excel - Specialist, 1.5, and BUSOT 63B,3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microsoft Office Excel - Expert, 1.5)</td>
<td></td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 40</td>
<td>Beginning Clothing Construction</td>
<td>2</td>
</tr>
<tr>
<td>FASHM 11</td>
<td>Retail Merchandising and Management (also available as MGMT 11)</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 12</td>
<td>Visual Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 482</td>
<td>Industry Internships: Fashion Merchandising</td>
<td>1</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus a minimum two courses from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 45</td>
<td>Basic Design and Creativity</td>
<td>3</td>
</tr>
<tr>
<td>FASHD 428</td>
<td>Computer-Aided Fashion and Costume Design</td>
<td>2</td>
</tr>
<tr>
<td>FASHM 15</td>
<td>Image and Fashion Selection</td>
<td>3</td>
</tr>
<tr>
<td>FASHM 492A-H</td>
<td>Special Topics: Fashion Merchandising</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major  32-33

Requirements for the Fashion Merchandising Certificate:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[L185/04822/1303.20]</td>
<td>Same as the major requirements for the A.S. Degree.</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the certificate  32-33

Fine Arts

The Fine Arts major provides fundamental training in music and theatre arts.

Major requirements for the Associate in Arts Degree:  

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

Music Emphasis

Music [A192/10363/1001.00]  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</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>
<tr>
<td>MUSIC 3A</td>
<td>Musicanship</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Plus nine additional units of music courses</td>
<td>9</td>
</tr>
</tbody>
</table>

Theatre Arts Emphasis

[194/10365/1001.00]  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATRE 1</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 4</td>
<td>Development of the Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 5</td>
<td>Development of the Theatre II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Plus nine additional units selected from the following:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THEATRE 2, 10, 12, 14, 16, 18, 20, 21, 30, 32, 34, 40,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>42, 50, 51, 54, 56, 60, 64, 92A-H, 92LA-H, 98LABC, 427</td>
<td>9</td>
</tr>
</tbody>
</table>

Total units for the major  21-22

Fire Technology:

Professional Firefighter

The Fire Technology degree and certificate programs are designed to (1) prepare interested students for careers in public or private fire service, (2) provide existing fire service personnel with continuing in-service training in skills applicable to their present position, (3) provide existing fire service personnel with upgraded skills needed to avail themselves of promotional opportunities, and (4) for college transfer students pursuing a higher education degree in Fire Protection Administration and Technology.

Major requirements for the Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRETEC 1</td>
<td>Fire Protection and Organization</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 2</td>
<td>Fire Behavior and Combustion</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 3</td>
<td>Fire Protection Systems</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 4</td>
<td>Building Construction for Fire Protection</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 5</td>
<td>Fire Prevention</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 6</td>
<td>Fire Apparatus and Equipment</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIRETEC 7</td>
<td>Strategies and Tactics</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 8</td>
<td>Fire Ground Hydraulics</td>
<td>3</td>
</tr>
<tr>
<td>FIRETEC 402</td>
<td>Basic Incident Command Systems, ICS-200</td>
<td>1</td>
</tr>
<tr>
<td>FIRETEC 403</td>
<td>Intermediate Incident Command Systems, ICS-300</td>
<td>1.5</td>
</tr>
<tr>
<td>FIRETEC 405</td>
<td>Hazardous Materials First Responder Operations</td>
<td>1</td>
</tr>
</tbody>
</table>

Total units for the major  20-24

Requirements for the Fire Technology: Professional Firefighter Certificate:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[L141/15674/2133.00]</td>
<td>Same as the major requirements for the A.S. Degree.</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the certificate  20-24
FOREIGN LANGUAGES
(See Modern Languages)

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:
[210/04819/4901.10]
Completion of all the requirements, including a minimum of 39 semester units, of the California State University General Education Certification Course Pattern. (See “Preparation for Advanced Standing.”)

GEORGIC INFORMATION SYSTEMS

GIS is a field of geography that relies on spatial data and its use in management, analysis, and communication.

Requirements for the Vocational GIS
(Geographic Information Systems) Specialist Certificate:
[210/04819/4901.10] Units
GIS 1 Introduction to Geographic Information Systems 4
(or GIS 1A, Introduction to GIS I, 2 and GIS 1B, Introduction to GIS II, 2)
GEOG 4 Physical Geography 3
GEOG 5 Physical Geography Laboratory 1
GEOG 6 Environmental Geography 3

Plus three units from the following:
GEOG 1 World Regional Geography 3
GEOG 10 Cultural Geography of North America 3
GEOG 11 World Cultures 3

Total units for the certificate 14

Note: Course work must be completed within a five-year period.

GEOGRAPHY

Geographers integrate time, space, and demographics into maps which have both academic and applied values. Geography is an interdisciplinary area of study that interfaces with earth sciences, life sciences, business, and teaching. The field of geography requires that students be broadly based in two major areas: cultural geography and physical geography. These areas form the core of the curriculum. Students may then pursue other areas of concentration.

Geography specialists may focus on meteorology, economic geography, urban geography, political geography, historical geography, geomorphology, environmental geography, or biogeography. Geographical knowledge has specific application to urban planning, environmental studies, business, defense, satellite mapping, demographics, history, and economics. Geography is also a core area of study for elementary or high school teachers. Students interested in a teaching career can focus on the General Studies requirements for the target school along with cultural geography and physical geography with a lab.

Major requirements for the Associate in Science Degree:
[S205/07401/2206.00] Units
Mathematics through Trigonometry
GEOG 1 World Regional Geography 3
GEOG 3 Geography of California 3

GEOG 4 Physical Geography 3
GEOG 5 Physical Geography Laboratory 1
GEOG 6 Environmental Geography 3
GEOG 10 Cultural Geography of North America 3
GEOG 11 World Cultures 3

Total units for the major 19

Note: Computer literacy is basic to geography. Students would be well advised to acquire knowledge of word processing, database, graphing, and graphics programs.

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:
[S215/04809/1914.00] Units
GS 1 Fundamentals of Computer Science 3
GEOL 1 Physical Geography 3
GEOL 2 Historical Geography 3
GEOL 30 Geology of California 3
GEOL 30T Geology of California Field Trip 1.5
GEOL 80 Mineralogy I 4
GEOL 85 Petrology I 5
PHYS 5 The Ideas of Physics 3
PHYS 6 The Ideas of Physics Laboratory 1

Total units for the major 28.5-30

Required general education courses:
ART 14 Introduction to Drawing 3
CHEM 10 Introductory Chemistry (or BIOL 1, General Biology)
or BIOL 50, Core Biology) 4
ENGL 1A Composition 3
MATH 31 Plane Trigonometry (or higher level math) 4

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.
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 the development of urban and metropolitan areas; hydrology, application of geology to surface and subsurface water resources including protection of water quality and purity; public sector, governmental agencies responsible for the geologic and natural resources of the United States and foreign countries, and public and academic research institutions.

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>CHEM 21</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 21L1</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 21L2</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 22L1</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22L2</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CS 1</td>
<td>Fundamentals of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 1</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 2</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEOL 30</td>
<td>Geology of California</td>
<td>3</td>
</tr>
<tr>
<td>GEOL 30T</td>
<td>Geology of California Field Trip</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>(or GEOL 70, California Field Trip, 2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or GEOL 75A or B, Out of State Field Trip, 2, 3</td>
<td></td>
</tr>
<tr>
<td>Total units for the major</td>
<td></td>
<td>25.5-27</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>ART 14</td>
<td>Introduction to Drawing</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 50</td>
<td>Core Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1B</td>
<td>Advanced Composition and Critical Thinking</td>
<td>3</td>
</tr>
</tbody>
</table>

GERONTOLOGY

Gerontology prepares students for new careers resulting from the increasing population of older people. This is an interdisciplinary field incorporating research on aging in psychology, physiology, and sociology as well as public policy and social ethics.

Gerontology courses provide short-term training for immediate employment and may also lead to a Community Caregiver certificate, a certificate in Gerontology, or an Associate in Science degree in Gerontology. Nurses, social workers, and administrators of care facilities may earn Continuing Education units.

Gerontology is increasingly important in professions such as medicine, law, architecture, mental health, and social work. Transfer students will find Gerontology courses at more than 15 California universities. Other employment opportunities are found in residential communities, recreation, marketing, nutrition, counseling and referral, paralegal services, and business and agencies serving older adults, including persons with dementia.

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>GERO 11</td>
<td>Introduction to Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>GERO 18</td>
<td>Sociology of Aging (also available as SOC 18)</td>
<td>3</td>
</tr>
<tr>
<td>GERO 21</td>
<td>Developmental Psychology: Adulthood and Aging</td>
<td>3</td>
</tr>
<tr>
<td>GERO 405</td>
<td>Resources and Services for Older Adults</td>
<td>2</td>
</tr>
<tr>
<td>GERO 415</td>
<td>Health and Wellness for Older Adults</td>
<td>3</td>
</tr>
<tr>
<td>GERO 482</td>
<td>Internship in Gerontology</td>
<td>1</td>
</tr>
<tr>
<td>SCSCI 13</td>
<td>Introduction to Social Work</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 25-28

Requirements for the Gerontology Certificate:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURAST 400*</td>
<td>Nursing Assistant</td>
<td>3.5</td>
</tr>
<tr>
<td>NURAST 400L*</td>
<td>Nursing Assistant Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>NURAST 405*</td>
<td>Nursing Assistant Skills Laboratory</td>
<td>0.5</td>
</tr>
<tr>
<td>NURAST 420**</td>
<td>Home Health Aide</td>
<td>1.5</td>
</tr>
<tr>
<td>NURAST 420L**</td>
<td>Home Health Aide Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>NURAST 450*</td>
<td>Professional Development for the Nursing Assistant</td>
<td>1</td>
</tr>
</tbody>
</table>

*Students must take these four NURAST courses or provide proof of a current California State Nursing Assistant Certificate.
**Students must take these two NURAST courses or provide proof of a current California State Home Health Aide Certificate.

Total units for the certificate 6-16.5

Note: A mandatory orientation and verification of fingerprinting are required prior to enrollment. Conviction of a crime other than a minor traffic offense may preclude enrollment in these courses. Contact Health Sciences at (909) 466-2886 for information and dates of the orientation. Contact Gerontology at (909) 941-2418 for information on other courses pertinent to community caregiving.
## 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>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIST 1</td>
<td>3</td>
</tr>
<tr>
<td>HIST 2</td>
<td>3</td>
</tr>
<tr>
<td>HIST 17</td>
<td>3</td>
</tr>
<tr>
<td>HIST 18</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus six units from the following:**

- Art 3, 5
- English 1C
- History 4, 7, 16, 20, 21, 25, 40, 50, 51, 70, 71, 92A-H
- Humanities 5, 6, 20

**Total units for the major** 18

## Hotel and Food Service Management: Food Service

The Food Service program prepares students for management positions in the rapidly growing food service industry. Graduates are prepared to assume management responsibilities in restaurants, resorts, commercial food services, institutional and owner-operated businesses, food production, and related commercial food sales and services.

**Note:** A current negative tuberculosis test is required for participation in this program.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 14</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 428</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 430</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 432</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major** 30

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 436A</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436B</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436C</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 496A-D</td>
<td>1-4</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 37-40

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

The Food Production Management certificate is an entry-level program designed to prepare students for employment in the food production industry. Students gain a foundation in food production standards, customer service, and operations.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 436A</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436B</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 436C</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 496B-D</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 22-24

### Requirements for the Hotel and Food Service Management: Food Service/Waitstaff Personnel Certificate:

Entry-level program designed to prepare the student for employment as a food server in the hospitality industry. Students will be exposed to a variety of service styles and restaurant settings designed to facilitate a seamless transition between course work and industry.

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>3</td>
</tr>
</tbody>
</table>

**Plus one of the following:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 434</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 10-13
HOTEL AND FOOD SERVICE MANAGEMENT:
HOTEL MANAGEMENT

Students who receive the Associate in Science degree or certificate in the Hotel Management program will be prepared to work in entry-level management positions of the hospitality industry. Included among the employment opportunities are restaurants, hotels, institutional kitchens, catering operations, and owner-operated businesses.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOTFS 10</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 12</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 16</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 16L</td>
<td>1</td>
</tr>
<tr>
<td>HOTFS 18</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 20</td>
<td>2</td>
</tr>
<tr>
<td>HOTFS 422</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 424</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 428</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: 33

Requirements for the Hotel and Food Service Management:

Hotel Management Certificate:

Same as the major requirements for the A.S. Degree, plus:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 60A</td>
<td>3</td>
</tr>
<tr>
<td>HOTFS 496A-D</td>
<td>1-4</td>
</tr>
</tbody>
</table>

Total units for the certificate: 37-40

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</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN 5</td>
<td>3</td>
</tr>
<tr>
<td>HUMAN 6</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus six units from the following:

History 1, 2, 4, 5, 6, 9, 10, 17, 18

Electromechanical Technology

The Electromechanical Technology program curriculum covers electricity, hydraulics, pressure and force, pneumatics, cylinder controls, basic PLC, troubleshooting, sensors, automation including modern sophisticated concepts, and practical applications.

Major requirements for the Associate in Science Degree:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>IET 401A</td>
<td>2.5</td>
</tr>
<tr>
<td>IET 401B</td>
<td>2.5</td>
</tr>
<tr>
<td>IET 407</td>
<td>3</td>
</tr>
<tr>
<td>IET 411</td>
<td>3</td>
</tr>
<tr>
<td>IETELMT 430</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 432</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 434</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 436</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 438</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 440</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the major: 25.5

Strongly recommended:

IET 496ABCD Internship in Industrial Electricity (Internship not to exceed 4 units)

Requirements for the Electromechanical Technology Level I Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 1</td>
<td>3</td>
</tr>
<tr>
<td>IET 401A</td>
<td>2.5</td>
</tr>
<tr>
<td>IET 401B</td>
<td>2.5</td>
</tr>
<tr>
<td>IET 407</td>
<td>3</td>
</tr>
<tr>
<td>IETELMT 430</td>
<td>2</td>
</tr>
<tr>
<td>IETELMT 432</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the certificate: 15
Graduation Requirements and Programs of Study

Requirements for the Electromechanical Technology Level II Certificate:
[L154/15522/0935.00]
Same requirements as for Level One Certificate, plus:
IET 411 Programmable Logic Controllers 3
IETELMT 434 Hydraulic Applications with Programmable Logic Controllers 2
IETELMT 436 Pneumatics Fundamentals 2
Total units for the certificate 22

Requirements for the Electromechanical Technology Level III Certificate:
[L155/15857/0935.00]
Same as the major requirements for the A.S. Degree.
Total units for the certificate 25.5

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)

Industrial Electrical Technology

The Industrial Electrical Technology program curriculum covers electricity, magnetism, solid-state devices, electrical machinery, micro processing, programmable logic controllers (PLC), DC and AC variable speed drives, and automation, including modern sophisticated concepts and practical applications.

Major requirements for the Associate in Science Degree:
[S150/07378/0934.40]
IET 401A Introduction to Electricity 2.5
IET 401B Industrial Basic Controls 2.5
IET 403A Electrical Motors and Controls I 2.5
IET 403B Electrical Motors and Controls II 2.5
IET 405 National Electrical Code 3
IET 407 Electrical Blueprints 3
IET 409 Static Devices 3
IET 411 Programmable Logic Controllers 3
IET 413 Intermediate Programmable Logic Controllers 3
IET 415 Advanced Electricity Laboratory 2
IET 417 Electrical Troubleshooting 3
IET 419 DC Variable Speed Drive 1.5
IET 421 AC Variable Frequency Speed Drive 1.5
IET 422 OSHA Construction Safety Training 2

Total units for the major 35

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)

Requirements for the Industrial Electrical Technology Level I Certificate:
[L150/99999/0934.40]
IET 401A Introduction to Electricity 2.5
IET 401B Industrial Basic Controls 2.5
IET 403A Electrical Motors and Controls I 2.5
IET 403B Electrical Motors and Controls II 2.5
IET 405 National Electrical Code 3
IET 407 Electrical Blueprints 3

Total units for the certificate 16

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)

Requirements for the Industrial Electrical Technology Level II Certificate:
[L151/15317/0934.40]
Same requirements as for Level One Certificate, plus:
IET 409 Static Devices 3
IET 411 Programmable Logic Controllers 3
IET 413 Intermediate Programmable Logic Controllers 3
IET 415 Advanced Electricity Laboratory 2

Total units for the certificate 27

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)

Requirements for the Industrial Electrical Technician (Level III) Certificate:
[T154/07378/0934.40]
Same as the major requirements for the A.S. Degree.
Total units for the certificate 35

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)

Requirements for the Fiber Optic Cabling Technician Certificate:
[L164/99999/0934.30]
CIS 1 Introduction to Computer Information Systems 3
IET 401A Introduction to Electricity 2.5
IET 458 Fundamentals of Cable Networking: The Physical Layer 3
IET 459 Fundamentals of Fiber Optic Cabling: The Physical Layer 3

Total units for the certificate 11.5

Requirements for the Network Cabling Technician Certificate:
[L165/99999/0934.30]
CIS 1 Introduction to Computer Information Systems 3
IET 401A Introduction to Electricity 2.5
IET 458 Fundamentals of Cable Networking: The Physical Layer 3

Total units for the certificate 8.5

Instrumentation Technology

The Instrumentation Technology program curriculum covers electricity, level process, flow process, temperature process, proportional integral and derivative loops, basic programming of microprocessor-based controllers, troubleshooting, automation including modern sophisticated concepts, and practical applications.

Major requirements for the Associate in Science Degree:
[S157/15523/0943.00]
CIS 1 Introduction to Computer Information Systems 3
IET 401A Introduction to Electricity 2.5
IET 401B Industrial Basic Controls 2.5
IET 407 Electrical Blueprints 3
IET 441 Flow Process Fundamentals 2
IET 442 Flow Measurement and Control 2
IET 443 Level Measurement Fundamentals 2
IET 444 Level Measurement and Control 2
IET 445 Temperature Process Fundamentals 2
IET 446 Temperature Process Controller 2

Total units for the major 23

Strongly recommended:
IET 496ABCD Internship in Industrial Electricity 1-4
(Internship not to exceed 4 units)
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, architectural materials, furniture layout, space planning, business principles, computer aided design, and the historical development of furniture, architecture, art, and decorative arts.

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>ART 10</td>
<td>Fundamentals of Design in Two Dimensions</td>
<td>4</td>
</tr>
<tr>
<td>FASHM 60</td>
<td>Textiles</td>
<td>3</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 I</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 13</td>
<td>Non-European Architecture and Design</td>
<td>3</td>
</tr>
<tr>
<td>ID 16</td>
<td>Quick Sketching for Interior Design</td>
<td>2.5</td>
</tr>
<tr>
<td>ID 17</td>
<td>Introduction to Lighting</td>
<td>3</td>
</tr>
<tr>
<td>ID 21</td>
<td>Space Planning</td>
<td>3</td>
</tr>
<tr>
<td>ID 22</td>
<td>Interior Design Materials</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>3.5</td>
</tr>
<tr>
<td>ID 427</td>
<td>Computer Aided Design for Set and Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>(also available at THEATRE 427)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID 482</td>
<td>Industry Internship: Interior Design</td>
<td>1</td>
</tr>
</tbody>
</table>

Total units for the major: 40

Recommended:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 3</td>
<td>Art History of Western World: Ancient - 1400</td>
<td>3</td>
</tr>
<tr>
<td>BUS 13</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 2</td>
<td>Fundamentals of Effective Speaking</td>
<td>3</td>
</tr>
<tr>
<td>CONSUM 11</td>
<td>Housing and Environment</td>
<td>3</td>
</tr>
<tr>
<td>DRAFT 410</td>
<td>Building Trades Blueprint Reading</td>
<td>2</td>
</tr>
<tr>
<td>FASHM 12</td>
<td>Visual Merchandising</td>
<td>3</td>
</tr>
</tbody>
</table>

Requirements for the Interior Design Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[T270/04794/1302.00]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Same as the major requirements for the A.S. Degree.

JOURNALISM

The Journalism certificate is designed to provide students an opportunity to sample the cross-curricular course offerings at the college in preparation for a career in the mass media. The program is well suited for 2-year students planning to enter the fields of writing, photography, and design for publication directly, as well as for those planning to transfer to a 4-year degree program in journalism or mass communications. Course offerings include Journalism practice and theory, English, Photography, computer skills and Communication Studies.

Requirements for the Journalism Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[L336/04763/0602.00]</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 12</td>
<td>Mass Communication and Society</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 10</td>
<td>Newswriting</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 11</td>
<td>Advanced Newswriting and Editing</td>
<td>3</td>
</tr>
<tr>
<td>JOUR 61ABC</td>
<td>Newspaper Production</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 10</td>
<td>Beginning Photography</td>
<td>4</td>
</tr>
<tr>
<td>(or PHOTO 7, Introduction to Digital Photography)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plus a minimum of three units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 63</td>
<td>Introduction to Graphic Design</td>
<td>4</td>
</tr>
<tr>
<td>BRDCAST 3</td>
<td>Survey of Broadcasting and Electronic Media</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 7A</td>
<td>Creative Writing: Short Fiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 7E</td>
<td>Creative Writing: Nonfiction</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 35</td>
<td>Literary Magazine Production</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 20</td>
<td>Photography for Publications</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 21</td>
<td>Public Relations and Communications Photography</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the certificate: 25

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:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>[A275/07393/4901.00]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Applied Technologies and Business:


Arts and Humanities:

Mathematics and Sciences:
Astronomy, Biology, Chemistry, Dental Assisting, Drafting, Earth Science, Engineering, Geographic Information Systems, Geography, Geology, Health Science, Mathematics, Nursing: ADN, Nursing: VN, Nursing Assistant, Pharmacy Technician, Physical Education Lecture, Physical Science, Physics, Radiologic Technology, Statistics

Social Sciences:
Anthropology, Child Development and Education, Communication Studies, Economics, Education, Gerontology, Guidance, History, Political Science, Psychology, Social Science, Sociology

MANAGEMENT
Management is the process of adapting to change and visualizing today and the future as it applies to the individual organization’s use of current and proposed limited or scarce resources (i.e., money, machines, manpower, and materials). 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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</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 Communication 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 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus nine units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 8</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 460</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: 33-34

Requirements for the Management Level One Certificate:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</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>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 15-16

Requirements for the Management Level Two Certificate:  

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</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>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 33-34

MANAGEMENT - LOGISTICS MANAGEMENT
The Logistics Management program prepares students for a career in the logistics industry. Students will gain a working knowledge of transportation, warehousing, and supply chain management in addition to the skills needed to efficiently operate a warehouse.

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>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 430</td>
<td>Warehouse Management and Material Handling</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 432</td>
<td>Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 434</td>
<td>Transportation Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</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>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 402</td>
<td>Introduction to Import/Export</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 460</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: 26

Requirements for the Logistics Management Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 460</td>
<td>Total Quality Management Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 26

MANAGEMENT - RETAIL MANAGEMENT
Retail Management prepares students for employment in all aspects of retailing related to merchandise buying and management. Other career avenues are sales representatives for manufacturers, visual display, distribution, importing and exporting, and sales promotions.

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>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 40</td>
<td>Marketing Principles</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSTD 4</td>
<td>Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 11</td>
<td>Retail Merchandising and Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
</tbody>
</table>

Total units for the major: 29-30

Requirements for the Retail Management Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTGFS 465</td>
<td>Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Principles of Accounting I, 4)</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>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate: 29-30
MANAGEMENT - 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: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSOT 88</td>
<td>Written Communication for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 4</td>
<td>Fundamentals of Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two courses from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 60</td>
<td>Business Ethics</td>
<td>3</td>
</tr>
<tr>
<td>BUS 61</td>
<td>Introduction to Global Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Total units for the major 27.5-29

Requirements for the Supervision Level I Certificate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 42</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 44</td>
<td>Introduction to Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 440</td>
<td>Principles of Leadership</td>
<td>2</td>
</tr>
<tr>
<td>MGMT 480</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the certificate 14

Requirements for the Supervision Level II Certificate:

Same as the major requirements for the A.S. Degree.

Total units for the certificate 27.5-29

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: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS 1</td>
<td>Fundamentals of Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 65B</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 75</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 85</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(or MATH 81, Linear Algebra)</td>
<td></td>
</tr>
</tbody>
</table>

Plus one of the following two groups:

<table>
<thead>
<tr>
<th>Group I:</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 21</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 21L1</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 21L2</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 22L1</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22L2</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
</tbody>
</table>

Group II:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>PHYS 47</td>
<td>Physics for Scientists and Engineers III</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units for the major 30-35

Required General Education course:

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

MODERN LANGUAGES

Majoring in a modern language 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 or to see newspapers, magazines, websites, poems, and stories in American Sign Language, French, German, Mandarin, or Spanish. Communication, access, and job opportunities are expanded and enhanced by learning a modern language.

French

Major requirements for the Associate in Arts Degree: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FR 1, 2</td>
<td>Elementary French</td>
<td>4-4</td>
</tr>
<tr>
<td>FR 3, 4</td>
<td>Intermediate French</td>
<td>4-4</td>
</tr>
<tr>
<td>FR 15</td>
<td>French Conversation</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(or FR 92A-H, Special Topics: French Literature)</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major 24

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

Spanish

Major requirements for the Associate in Arts Degree: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1SS</td>
<td>Elementary Spanish for Spanish Speakers</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 2SS</td>
<td>Elementary Spanish for Spanish Speakers</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 3</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 4</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPAN 7</td>
<td>Survey of Hispanic Literature: 1100-1700</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(or SPAN 8, Survey of Hispanic Literature: 1700-Present, or SPAN 13, Survey of Mexican Literature)</td>
<td></td>
</tr>
</tbody>
</table>

Track B (Non-Native Speakers Track)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPAN 1</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(or SPAN 1A, Elementary Spanish, 2 and SPAN 1B, Elementary Spanish, 2)</td>
<td></td>
</tr>
<tr>
<td>SPAN 2</td>
<td>Elementary Spanish</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(or SPAN 2A, Elementary Spanish, 2 and SPAN 2B, Elementary Spanish, 2)</td>
<td></td>
</tr>
<tr>
<td>SPAN 3, 4</td>
<td>Intermediate Spanish</td>
<td>4-4</td>
</tr>
<tr>
<td>SPAN 13</td>
<td>Survey of Mexican Literature</td>
<td>3</td>
</tr>
<tr>
<td>SPAN 15*</td>
<td>Elementary Spanish Conversation</td>
<td>2</td>
</tr>
</tbody>
</table>
Graduation Requirements and Programs of Study

Plus six units from the following (for both tracks): 6
A second modern language (American Sign Language, Chinese, French, German)
Art 3, 5, 9
Communication Studies 74
English 70A, 70B
History 1, 2, 70, 71
Spanish 7*, 8*, 13

Total units for the major 25-27

*Spanish 7 or 8 may substitute for Spanish 15 in the core requirements, but may not be counted twice.

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

MULTIMEDIA
(See Art)

MUSIC
The Music curriculum provides participation in musical performance activities as well as courses of interest to the general college student who seeks music for 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>Units</th>
<th>MUSIC 2A</th>
<th>Music History and Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 2B</td>
<td>Music History and Literature</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 3A</td>
<td>Musicianship</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 3B</td>
<td>Musicianship</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 51A*</td>
<td>Beginning Class Piano</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 51B*</td>
<td>Beginning Class Piano</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 52</td>
<td>Intermediate Piano (take twice)</td>
<td></td>
</tr>
<tr>
<td>1-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 70A</td>
<td>Harmony and Intermediate Musicianship</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 70B</td>
<td>Harmony and Intermediate Musicianship</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Students may be exempt from the MUSIC 51 series upon passing a proficiency exam

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

<table>
<thead>
<tr>
<th>Units</th>
<th>MUSIC 32</th>
<th>Concert Choir</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 33</td>
<td>Concert Ensemble Singers</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 60</td>
<td>Jazz Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 62</td>
<td>College-Community Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 67</td>
<td>Latin Jazz Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major 28-30

Notes:
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 32, 33, 60, 62). Part-time students must enroll in a performance class four semesters (not necessarily consecutive) for a minimum of six units.

Commercial Music

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>Units</th>
<th>MUSIC 3A</th>
<th>Musicianship</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 10</td>
<td>Songwriting and Commercial Harmony</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Electronic Music (may be repeated; see below)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 14</td>
<td>Introduction to the Music Business</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 51A*</td>
<td>Beginning Class Piano</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 51B*</td>
<td>Beginning Class Piano</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 70A</td>
<td>Harmony and Intermediate Musicianship</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Students may be exempt from the MUSIC 51 series upon passing a proficiency exam

Plus five units from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>MUSIC 2A</th>
<th>Music History and Literature</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 2B</td>
<td>Music History and Literature</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 4</td>
<td>Music Appreciation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 11</td>
<td>Record Production</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 12</td>
<td>Electronic Music</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 21</td>
<td>History of Jazz</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 22</td>
<td>History and Survey of Rock Music</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plus two units from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>MUSIC 30</th>
<th>Elementary Class Voice (may be repeated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 40</td>
<td>Beginning Guitar (may be repeated)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 41</td>
<td>Intermediate Guitar (may be repeated)</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 52</td>
<td>Intermediate Piano (two times)</td>
<td></td>
</tr>
<tr>
<td>1-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 53</td>
<td>Studio Piano</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Plus 5.5 units from the following (courses may be repeated):

<table>
<thead>
<tr>
<th>Units</th>
<th>MUSIC 32</th>
<th>Concert Choir</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 33</td>
<td>Concert Ensemble Singers</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 60</td>
<td>Jazz Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 62</td>
<td>College-Community Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUSIC 67</td>
<td>Latin Jazz Band</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total units for the major 27.5-29.5

Required General Education course:

<table>
<thead>
<tr>
<th>Units</th>
<th>MUSIC 3A</th>
<th>Musicianship</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Required General Education course:
NURSING

Chaffey College offers a career ladder path in Nursing where students can start with the Nursing Assistant program and follow the ladder to earn their Vocational Nursing Certificate and then may choose to proceed to the Associates Degree in Nursing program. Students may also choose not to follow the career ladder, but meet the program requirements for the Vocational Nursing or Associate Degree Nursing programs. While students are not required to follow the ladder format, they must meet the entrance requirements for each program before applying to that program.

NURSING ASSISTANT

The Nursing Assistant (NA) program prepares students for entry-level employment in health care facilities. Nursing Assistants are an important member of the health care team providing direct care to patients in long-term care settings. All Nursing Assistants function under the supervision of a Licensed Nurse. Programs are approved by the California Department of Health Services. Upon completion of the Nursing Assistant program, the student is eligible to take the state examination for Certified Nurse Assistant (CNA) for a fee. The CNA may then complete courses for certification in Home Health Aide (HHA) and/or Acute Care Technician (ACT).

The application process for the NA program is as follows:
1. Attend a mandatory information meeting to obtain the application packet.
2. Submit application to Chaffey College and to the Nursing Assistant Program.
3. Submit background check verification to the Department of Health Services and the Health Sciences Office.

Enrollment in the NA program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. Criminal background screening (details provided at mandatory information meeting).
3. Evidence of satisfactory physical and emotional health as determined by health examination.
4. Current cardiopulmonary resuscitation certificate at the “Health Care Professional” (American Heart Association) or “Professional Rescuer” (American Red Cross) level. The CPR card must be updated annually. Details of times and locations of CPR classes are provided at mandatory information meetings.
5. Submission of health form, laboratory results, and appropriate CPR card at the mandatory orientation meeting. Details provided at the information meeting.
6. The student must be at least 16 years of age.

Requirements for the Chaffey College NA/HHA Certificate: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURAST 400* Nursing Assistant</td>
<td>3.5</td>
</tr>
<tr>
<td>NURAST 400L Nursing Assistant Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>NURAST 405* Nursing Assistant Skills Laboratory</td>
<td>0.5</td>
</tr>
<tr>
<td>NURAST 450 Professional Development for the Nursing Assistant</td>
<td>1</td>
</tr>
</tbody>
</table>

Total units for the Chaffey College certificate: 7

The application process for the HHA program is as follows:
1. Attend a mandatory information meeting to obtain the application packet.
2. Submit application to Chaffey College and to the Nursing Assistant Program.
3. Submit application to the Department of Health Services and verification to the Health Sciences Office.

Enrollment in the HHA program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. Evidence of satisfactory physical and emotional health as determined by health examination.
3. Current cardiopulmonary resuscitation certificate at the “Health Care Professional” (American Heart Association) or “Professional Rescuer” (American Red Cross) level. The CPR card must be updated annually. Details of times and locations of classes provided at mandatory information meetings.
4. Submission of health form and appropriate CPR card before the first day of class.
5. Submit a copy of the state CNA certification prior to enrolling in NURAST 420/420L (Home Health Aide courses).

Requirements for the Chaffey College NA/HHA Certificate: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURAST 420/420L (Home Health Aide courses)</td>
<td>70</td>
</tr>
</tbody>
</table>

Strongly Recommended:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 450 Fundamentals of Composition</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 30 Beginning Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

ACUTE CARE TECHNICIAN

To enter the Acute Care Technician (ACT) program a student must have an active California State Certified Nursing Assistant (CNA) certificate or equivalent. The Acute Care Technician program prepares the nursing assistant to function in acute care settings including hospitals and sub-acute facilities. The Acute Care Technician will gain skills for the Vocational Nursing Program at Chaffey College.

The application process for the ACT program is as follows:
1. Attend a mandatory information meeting to obtain the application packet.
2. Submit application to Chaffey College and to the Acute Care Technician Program.
3. Submit active California CNA certificate or equivalent documentation to the Health Sciences Office.

Enrollment in the ACT program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. Evidence of satisfactory physical and emotional health as determined by health examination.
3. Current cardiopulmonary resuscitation certificate at the “Health Care Professional” (American Heart Association) or “Professional Rescuer” (American Red Cross) level. The CPR card must be updated annually. Details of times and locations of classes provided at mandatory information meetings.
4. Submission of health form and appropriate CPR card at the mandatory orientation meeting to be announced at the information meeting.
5. Submit a copy of the state CNA certification or equivalent documentation prior to enrolling in NURACT 420/420L (Acute Care Technician courses).
6. Be a high school graduate, or have passed the GED, or have passed the High School Proficiency Examination, or have an associates degree or higher.

HOME HEALTH AIDE

To enter the Home Health Aide (HHA) program, the student must have an active California State Certified Nursing Assistant (CNA) certificate. The Home Health Aide program is a state certified add-on certificate to the CNA certificate that prepares students for entry level positions with health agencies. The Home Health Aide courses prepare the CNA to provide care independently in the patient’s home or in assisted living, independent living, and hospice environments.
7. Provide official transcripts from other colleges attended. International transcripts (high school and college) require AERC, IERF, or other approved agency evaluation.
8. Complete a criminal background screening (details provided at mandatory meeting).

Requirements for the Chaffey College NA/ACT Certificate:  

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURACT 420 Nursing Acute Care Technician</td>
</tr>
<tr>
<td>NURACT 420L Nursing Acute Care Technician Laboratory</td>
</tr>
<tr>
<td>NURACT 450 Professional Development for the Nursing Acute Care Technician</td>
</tr>
<tr>
<td>NURAST 400* Nursing Assistant</td>
</tr>
<tr>
<td>NURAST 400L Nursing Assistant Laboratory</td>
</tr>
<tr>
<td>NURAST 405* Nursing Assistant Skills Laboratory</td>
</tr>
<tr>
<td>NURAST 450* Professional Development for the Nursing Assistant</td>
</tr>
</tbody>
</table>

Total units for the Chaffey College certificate: 7-14

*Students must take these four NURAST classes or equivalent, or provide proof of a current California State Nursing Assistant Certificate.

Notes:
1. All courses required for any of the above certificates must be completed with a minimum grade of "C".
2. The college does not provide transportation to clinical facilities.

NURSING: VOCATIONAL

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 Nursing and Psychiatric Technicians (BVNPT). Upon completion of the program, students are eligible to apply to take the Board of Vocational Nursing and Psychiatric Technicians’ licensing examination to practice as a Vocational Nurse.

The VN program is one year in length and begins in the summer term each program year. The program consists of lecture and laboratory instruction in actual nursing situations.

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 for a fee.

Enrollment in the VN program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. Be a high school graduate, or have passed the GED, or have passed the High School Proficiency Examination, or have associates degree or higher.
3. Provide official copies of all previous college transcripts (must be on file).
4. Demonstrate eligibility for English 450 by assessment or prerequisite course completion.
5. Provide official copies of all previous college transcripts (must be on file).
6. Complete the preliminary VN application with a counselor, submit the application, and sign up in the Counseling Center for an orientation session. Applications for the VN program beginning Summer 2008 will be available March 1-31, 2008. Late applications may be accepted.
7. All selected applicants must attend a mandatory orientation session for the application to be reviewed for admission to the VN program.

Notes:
1. The selection process is based on completion of prerequisite courses, completion of recommended course Health Science 428, and available space.
2. In order to continue in the program, students must earn a minimum grade of C in all program courses.
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 examination.)
4. The college does not provide transportation to clinical facilities.

Major requirements for the Associate in Science Degree:  

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURVN 400 Critical Thinking in Health Care</td>
</tr>
<tr>
<td>NURVN 402 Fundamentals of Nursing</td>
</tr>
<tr>
<td>NURVN 402L Fundamentals of Nursing Laboratory</td>
</tr>
<tr>
<td>NURVN 404 Introduction to Medical–Surgical Nursing</td>
</tr>
<tr>
<td>NURVN 404L Introduction to Medical–Surgical Nursing Laboratory</td>
</tr>
<tr>
<td>NURVN 406A Intermediate Medical Surgical Nursing 2</td>
</tr>
<tr>
<td>NURVN 406AL Intermediate Medical Surgical Nursing Laboratory 2</td>
</tr>
<tr>
<td>NURVN 406B Intermediate Medical Surgical Nursing 3</td>
</tr>
<tr>
<td>NURVN 406BL Intermediate Medical Surgical Nursing Laboratory 3</td>
</tr>
<tr>
<td>NURVN 408 Advanced Medical-Surgical Nursing</td>
</tr>
<tr>
<td>NURVN 408L Advanced Medical-Surgical Nursing Laboratory</td>
</tr>
<tr>
<td>NURVN 428 Basic Pharmacology</td>
</tr>
<tr>
<td>NURVN 429A Growth/Development Psychology Adult-Geriatric</td>
</tr>
<tr>
<td>NURVN 429B Growth/Development Psychology Infancy-Young Adult</td>
</tr>
<tr>
<td>NURVN 434 Pediatric Nursing</td>
</tr>
<tr>
<td>NURVN 434L Pediatric Nursing Laboratory</td>
</tr>
<tr>
<td>NURVN 436 Maternity Nursing</td>
</tr>
<tr>
<td>NURVN 436L Maternity Nursing Laboratory</td>
</tr>
<tr>
<td>NURVN 439 Leadership and Supervision for the Vocational Nurse</td>
</tr>
</tbody>
</table>

Total units for the major: 48

Required prerequisite courses:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 424 * Anatomy and Physiology</td>
</tr>
<tr>
<td>(or BIOL 20 *, Human Anatomy, 4 and BIOL 22 *, Human Physiology, 4)</td>
</tr>
<tr>
<td>MATH 401 Mathematics for Health Science</td>
</tr>
<tr>
<td>NURACT 420+ Acute Care Technician</td>
</tr>
<tr>
<td>NURACT 420L+ Acute Care Technician Laboratory</td>
</tr>
<tr>
<td>NURAST 400** Nursing Assistant</td>
</tr>
<tr>
<td>NURAST 400L** Nursing Assistant Laboratory</td>
</tr>
<tr>
<td>NURAST 405** Nursing Assistant Skills Laboratory</td>
</tr>
<tr>
<td>NURAST 450** Professional Development for the Nursing Assistant</td>
</tr>
</tbody>
</table>

*Must be taken within the previous 5 years.
**Students must take the four NURAST classes above or equivalent, or provide proof of a current California State Nursing Assistant Certificate.
Students must take the two NURACT classes above or provide proof of a Chaffey NA/ACT Certificate.
Graduation Requirements and Programs of Study

Requirements for the Nursing: Vocational (VN) Certificate:
[T315/04789/1230.20]
Same as the major requirements for the A.S. Degree and required prerequisite courses above.

Total units for the certificate: 52-70

Vocational Nursing Advanced Placement
Contact the VN program coordinator for evaluation of nursing course work. Transfer students must meet all prerequisites for the VN program.

NURSING: ASSOCIATE DEGREE

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 Accrediting Commission (61 Broadway - 33rd Floor, New York City, New York, 10006, 1-800-669-1656, ext. 153, or website: www.nlnac.org). The graduate is eligible to take the National Council for Licensure Examination (NCLEX) and, upon successful completion, become licensed as a Registered Nurse in the state of California. There are fees for obtaining licensure by examination or endorsement, interim permit, and biennial renewal. California law requires that all applicants for licensure pass a criminal background check. Details about these requirements will be provided to students when they apply.

The curriculum is based upon the humanistic philosophy of Abraham Maslow. Nursing assists the individual and family in preventing or coping with threats to the individual’s basic needs 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.

Information about the program prerequisites — those requirements that must be completed prior to applying to the ADN program — can be obtained from our website, the Counseling Department, the ADN office, or from attending an ADN information session offered the first Thursday of every month. To access the ADN online application, go to www.chaffey.edu, click on Instruction, Instructional Programs, Nursing: ADN. The listed criteria is subject to change.

Once a student is ready to apply, he or she must pick up the ADN Application Instructions for Beginning or Advanced Placement students in the Counseling Department or ADN office. Six to eight weeks should be allowed for obtaining the information needed in these instructions, prior to the application period. Application forms for admission to the ADN program are available online at www.chaffey.edu and must be submitted from October 1-31 or April 1-30. Should there be more qualified applicants than spaces available students must reapply the next semester. Only coursework completed prior to application to the ADN program will be considered in the selection process.

Applicants to the ADN program must meet the following requirements:
1. Be a high school graduate, or have passed the GED, or have passed the High School Proficiency Examination, or have associate degree or higher.
2. Provide official transcripts from other colleges attended. International transcripts (high school and college) require AERC, IERF, or other approved agency evaluation.
3. Complete related nursing or biological science (physiology and microbiology) courses, which the student is applying toward the ADN course requirements, within the last five years.
4. Anatomy, Physiology, Composition, Microbiology, and Microbiology Lab must be completed at the time of application.
5. Mathematics 401 must be completed or in progress at the time of application.

Notes:
1. Prior to enrollment in the ADN program, students must demonstrate physical and emotional health as determined by health examination and pass a criminal background check. A pre-enrollment assessment of English, reading, math, and science must also be passed. Details about these requirements will be provided to students when they apply.
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.
5. The nursing program must be completed within five (5) years of admission.

NURADN 50* Professional Issues in Nursing 1
NURADN 43* Nursing Process IV 4.5
NURADN 43L* Nursing Process IV Laboratory 4.5
NURADN 37L* Mental Health and Psychiatric 1
NURADN 37* Mental Health and Psychiatric Nursing 2
NURADN 37L* Mental Health and Psychiatric Nursing Laboratory 1
NURADN 43* Nursing Process IV Laboratory 1
NURADN 43L* Nursing Process IV Laboratory 4.5
NURADN 50* Professional Issues in Nursing 1

Total units for the major: 41.5

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

Required General Education and additional courses:

- ENGL 1A Composition 3
- MATH 401 Mathematics for Health Science 1
- PSYCH 25 Developmental Psychology: Lifespan Development 3
- SOC 10 Introduction to Sociology 3
- BIOL 22 Human Physiology 4
- BIOL 23 General Microbiology 3
- BIOL 23L General Microbiology Laboratory 2
- BIOL 20 Human Anatomy 4
- BIOL 22 Human Physiology 4
- BIOL 23 General Microbiology 3
- BIOL 23L General Microbiology Laboratory 2
- COMSTD 8 Fundamentals of Speech Communication 3

Notes:
1. Current cardiopulmonary resuscitation card (CPR) is required prior to entering any nursing class. This must be the “Health Care Provider” from the American Heart Association.
2. Medication calculation proficiency must be demonstrated by written examination prior to registration in each semester.

ADN Advanced Placement
Prospective students who have prior nursing education or experience in healthcare 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 with an active vocational nursing license.
2. Completion of NURADN 3 and NURADN 3L with a minimum grade of C.
3. Fulfillment of application requirements under Nursing: ADN in this section of the catalog. See “Applicants to the ADN program must meet the following requirements.”

Major requirements for the VN to RN Associate in Science Degree option:
[S312/07384/1230.10] (also available as PELEC 15)

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>NURADN 3 Transition in Nursing</td>
</tr>
<tr>
<td>0.5</td>
<td>NURADN 3L Transition in Nursing Laboratory</td>
</tr>
<tr>
<td>4</td>
<td>NURADN 33 Nursing Process III</td>
</tr>
<tr>
<td>4</td>
<td>NURADN 33L Nursing Process III Laboratory</td>
</tr>
<tr>
<td>2</td>
<td>NURADN 37 Mental Health and Psychiatric Nursing</td>
</tr>
<tr>
<td>1</td>
<td>NURADN 37L Mental Health and Psychiatric Nursing Laboratory</td>
</tr>
<tr>
<td>4.5</td>
<td>NURADN 43L Nursing Process IV Laboratory</td>
</tr>
<tr>
<td>4.5</td>
<td>NURADN 43 Nursing Process IV</td>
</tr>
<tr>
<td>1</td>
<td>NURADN 50 Professional Issues in Nursing</td>
</tr>
</tbody>
</table>

Total units for the major: 

See also required General Education and additional courses listed for Nursing: ADN.

VN to RN: Non-Degree Option
Students completing this program are eligible to apply to take the NCLEX for licensure as a Registered Nurse. The student who elects to take this program is not recognized as a graduate of an accredited ADN program, is not recognized as a Chaffey College ADN graduate, and may not qualify for licensure by endorsement in another state.

Acceptance into this program is based on the following criteria:
1. Graduation from a Vocational Nursing Program with an active vocational nursing license.
2. Completion of NURADN 3 and NURADN 3L with a minimum grade of C.
3. Fulfillment of application requirements 1 and 2 under Nursing: ADN in this section of the catalog.
4. Physiology and Microbiology must be completed at the time of application.

Requirements for VN to RN: Non-Degree option:
[S241/07399/1306.00]

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BIOL 22 Human Physiology</td>
</tr>
<tr>
<td>3</td>
<td>BIOL 23 General Microbiology</td>
</tr>
<tr>
<td>1.5</td>
<td>NURADN 3 Transition in Nursing</td>
</tr>
<tr>
<td>0.5</td>
<td>NURADN 3L Transition in Nursing Laboratory</td>
</tr>
<tr>
<td>4</td>
<td>NURADN 33 Nursing Process III</td>
</tr>
<tr>
<td>4</td>
<td>NURADN 33L Nursing Process III Laboratory</td>
</tr>
<tr>
<td>2</td>
<td>NURADN 37 Mental Health and Psychiatric Nursing</td>
</tr>
<tr>
<td>1</td>
<td>NURADN 37L Mental Health and Psychiatric Nursing Laboratory</td>
</tr>
<tr>
<td>4.5</td>
<td>NURADN 43L Nursing Process IV Laboratory</td>
</tr>
<tr>
<td>4.5</td>
<td>NURADN 43 Nursing Process IV</td>
</tr>
<tr>
<td>1</td>
<td>NURADN 50 Professional Issues in Nursing</td>
</tr>
</tbody>
</table>

Total units: 

Transfer Student: Degree Program
Acceptance into this program is based on the following criteria:
1. Completion of NURADN 3 and NURADN 3L 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 909/652-6200.
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:

Requirements for Registered Nurse Ladder Program:

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>BIOL 20 Human Anatomy</td>
</tr>
<tr>
<td>4</td>
<td>BIOL 22 Human Physiology</td>
</tr>
<tr>
<td>3</td>
<td>BIOL 23 General Microbiology</td>
</tr>
<tr>
<td>2</td>
<td>BIOL 23L General Microbiology Laboratory</td>
</tr>
<tr>
<td>3</td>
<td>COMSTD 8 Fundamentals of Speech Communication</td>
</tr>
<tr>
<td>3</td>
<td>ENGL 1A Composition</td>
</tr>
<tr>
<td>3</td>
<td>PSYCH 25 Developmental Psychology: Lifespan Development</td>
</tr>
<tr>
<td>3</td>
<td>SOC 10 Introduction to Sociology</td>
</tr>
<tr>
<td>4</td>
<td>Humanities General Education</td>
</tr>
</tbody>
</table>

Total units:

Note: Some CSU campuses with B.S. in Nursing programs require college courses in chemistry, and in college algebra or statistics. See counselor for additional graduation requirements.

NUTRITION AND FOOD
The Nutrition and Food 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 daycares/camps.

Major requirements for the Associate in Science Degree:
[S241/07399/1306.00]

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>BIOL 14 Health Science</td>
</tr>
<tr>
<td>3</td>
<td>BIOL 424 Anatomy and Physiology</td>
</tr>
<tr>
<td>3</td>
<td>GERO 415 Health and Wellness for Older Adults</td>
</tr>
<tr>
<td>3</td>
<td>NF 5 Nutrition for Life</td>
</tr>
<tr>
<td>3</td>
<td>NF 21 Diet and Fitness</td>
</tr>
<tr>
<td>2</td>
<td>PELEC 17 Advanced First Aid and Emergency Response</td>
</tr>
</tbody>
</table>

Total units for the major

Required General Education course:
COMSTD 8 Fundamentals of Speech Communication

Requirements for the Nutrition and Food Certificate:
[L241/07399/1306.00]

Same as the major requirements for the A.S. Degree and general education requirement above

Total units for the certificate
**PHARMACY TECHNICIAN**

This occupational program prepares students for work as Pharmacy Technicians. The program provides both the technical and practical training that enables the technician, upon licensure, to function as a competent entry-level assistant to the pharmacist. Pharmacy Technicians may be employed in hospitals, community pharmacies, home-health care settings, and government agencies. Program curriculum consists of lecture and laboratory instruction in both simulated and supervised clinical environments.

Upon successful completion of the Pharmacy Technician (PT) program, students are qualified to apply to the California State Board of Pharmacy for registration; registration is a legal requirement for work in California as a pharmacy technician. California law also allows for the denial of certification on the basis of any prior criminal convictions substantially related to pharmaceutical practice.

**Enrollment in the PT 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, or have associates degree or higher. International transcripts must have AERC, IERF or approved agency evaluation.
3. Eligibility for ENGL 450 or ESL 450 and eligibility for Math 520.

**Notes:**

A. The college does not provide transportation to clinical facilities.

B. Students must demonstrate satisfactory physical and emotional health, as determined by health examination and proof of immunizations.

C. Students must possess a current cardiopulmonary resuscitation (CPR) certificate prior to clinical externship (PHARMT 482). Certificate may be the American Heart Association “Health Care Provider with AED” or American Red Cross “Professional Rescuer with AED”.

D. To continue in the Pharmacy Technician program, students must earn satisfactory grades (minimum of “C” in graded courses; “CR” in pass/fail courses) in all Pharmacy Technician and other required courses.

E. Students with prior pharmacy technician education should contact the Pharmacy Technician Program Coordinator, (909) 477-8954.

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

- [S322/15524/1221.00]
  - HS 405 Computer Applications for Health Science 1
  - PHARMT 400 Introduction to Pharmacy Technology 2
  - PHARMT 401 Body Systems I 3
  - PHARMT 402 Body Systems II 3
  - PHARMT 405 Sterile Products 2
  - PHARMT 415 Pharmacy Calculations 3
  - PHARMT 420 Community Pharmacy Operations 3
  - PHARMT 420L Community Pharmacy Operations Laboratory 0.5
  - PHARMT 430 Institutional Pharmacy Operations 3
  - PHARMT 430L Institutional Pharmacy Operations Laboratory 0.5
  - PHARMT 482 Clinical Externship 4

**Total units for the major** 25

Plus six units from the following:

- PHIL 72 Seminar in Ethics 3
- PHIL 76 Critical Thinking 3
- PHIL 77 History of Philosophy: Ancient to Medieval 3
- PHIL 78 History of Philosophy: Modern 3

**Total units for the major** 25

**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, to free oneself from conventional opinions of one’s time and place.

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

- [A335/04804/1509.00]
  - PHIL 72 Seminar in Ethics 3
  - PHIL 76 Critical Thinking 3
  - PHIL 77 History of Philosophy: Ancient to Medieval 3
  - PHIL 78 History of Philosophy: Modern 3

**Plus two courses from the following or from approved special topics:**

- HUMAN 20 The Holocaust: History and Philosophy 3
- PHIL 70 Introduction to Philosophy 3
- PHIL 80 Introduction to Religion 3
- PHIL 81 Introduction to Eastern Philosophy 3
- PHIL 82 Introduction to Monotheistic Religions: Judaism/Christianity/Islam 3

**Plus six units from the following:**

- Anthropology 3
- Biology 1, 2, 10
- English 68, 70A, 71, 75A, 75B, 76, 79, 81
- Fine Arts 50
- History 1, 2, 5, 6, 9
- Political Science 2
- Psychology 1

**Total units for the major** 24

**PHILOSOPHY: RELIGIOUS STUDIES**

Religious Studies encompass the personal, cultural, and ultimate dimensions in life. Students are introduced to theistic and non-theistic religions and philosophies, East and West, and their distinctive world views through cognitive and social emphases. Religion courses aim to enable students to discover basic structures or essential characteristics of human religious experience through critical observation and thought.

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

- [A385/07390/1510.00]
  - PHIL 72 Seminar in Ethics 3
  - PHIL 80 Introduction to Religion 3
  - PHIL 81 Introduction to Eastern Philosophy 3
  - PHIL 82 Introduction to Monotheistic Religions: Judaism/Christianity/Islam 3

**Plus two courses from the following:**

- HUMAN 20 The Holocaust: History and Philosophy 3
- PHIL 70 Introduction to Philosophy 3
- PHIL 76 Critical Thinking 3
- PHIL 77 History of Philosophy: Ancient to Medieval 3
- PHIL 78 History of Philosophy: Modern 3

**Plus six units from the following or from approved special topics:**

- Anthropology 3
- Biology 1, 2, 10
- English 68, 70A, 71, 75A, 75B, 76, 79, 81
- Fine Arts 50
- Political Science 2
- Psychology 1, 5
- Sociology 10, 11, 16

**Total units for the major** 24
PHOTOGRAPHY

The Photography 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>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOTO 1 History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 10* Beginning Photography</td>
<td>4</td>
</tr>
<tr>
<td>(or PHOTO 7, Introduction to Digital Photography)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 11* Intermediate Photography</td>
<td>4</td>
</tr>
<tr>
<td>(or PHOTO 9, Digital Imaging)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 12 Studio Lighting</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 13 Fine Art Photography</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 20 Photography for Publications</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 50* Introduction to Color Photography</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total units for the major** 27

**Required General Education courses:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 1 Contemporary Art: 1950 - Present</td>
<td>3</td>
</tr>
<tr>
<td>(or ART 5, Art History of Western World: 1400 - Contemporary)</td>
<td></td>
</tr>
<tr>
<td>ART 10 Fundamentals of Design in Two Dimensions</td>
<td>4</td>
</tr>
<tr>
<td>(or ART 63, Introduction to Graphic Design)</td>
<td></td>
</tr>
</tbody>
</table>

**Requirements for the Still Photography Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 45 Small Business Ownership and Management</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 1 History of Photography</td>
<td>3</td>
</tr>
<tr>
<td>PHOTO 10* Beginning Photography</td>
<td>4</td>
</tr>
<tr>
<td>(or PHOTO 7, Introduction to Digital Photography)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 11* Intermediate Photography</td>
<td>4</td>
</tr>
<tr>
<td>(or PHOTO 9, Digital Imaging)</td>
<td></td>
</tr>
<tr>
<td>PHOTO 12 Studio Lighting</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 13 Fine Art Photography</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 20 Photography for Publications</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 21 Public Relations and Communications Photography</td>
<td>2</td>
</tr>
<tr>
<td>PHOTO 50* Introduction to Color Photography</td>
<td>4</td>
</tr>
<tr>
<td>PHOTO 422 Wedding Photography</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 38

**Recommended:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 5 Art History of Western World: 1400 - Contemporary</td>
<td>3</td>
</tr>
<tr>
<td>ART 8 Contemporary Media, Art and Visual Language</td>
<td>3</td>
</tr>
<tr>
<td>ART 83 Internet and Web Design</td>
<td>4</td>
</tr>
<tr>
<td>ART 480 Portfolio and Presentation</td>
<td>3</td>
</tr>
<tr>
<td>COMSTD 8 Fundamentals of Speech Communication</td>
<td>4</td>
</tr>
<tr>
<td>JOUR 10 Newswriting</td>
<td>3</td>
</tr>
</tbody>
</table>

*PHOTO 10 must be taken before PHOTO 11 and PHOTO 50.

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 14 Health Science</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 20 Human Anatomy</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 22 Human Physiology</td>
<td>4</td>
</tr>
<tr>
<td>NF 5 Nutrition for Life</td>
<td>3</td>
</tr>
<tr>
<td>(or NF 15, Nutrition I: The Science of Nutrition)</td>
<td></td>
</tr>
<tr>
<td>PELEC 15 Diet and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>(also available as NF 21)</td>
<td></td>
</tr>
<tr>
<td>PELEC 16 First Aid (or PELEC 17, Advanced First Aid and Emergency Response)</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 18 Introduction to Physical Education</td>
<td>3</td>
</tr>
<tr>
<td>Any three one-unit Physical Education Activity, Adaptive, or Team courses</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the major** 32

**Coaching**

The Coaching Certificate prepares students for employment as walk-on head coaches, and is also for those individuals interested in pursuing coaching as a career.

**Requirements for the Coaching Certificate:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PELEC 2 Introduction to Athletic Training</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 12 Principles and Practices of Officiating Team Sports</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 13 Professional Activities: Coaching Team Sports</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 15 Diet and Fitness</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 16 First Aid (or PELEC 17, Advanced First Aid and Emergency Response)</td>
<td>3</td>
</tr>
<tr>
<td>PELEC 18 Introduction to Physical Education</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total units for the certificate** 18

PHYSICAL SCIENCE

The Physical Science curriculum provides transfer students a sampling of courses fundamental to subsequent upper division specialization in astronomy, chemistry, earth science, engineering, geography, geographic information systems (GIS), geology, mathematics, physics, or statistics. For non-transfer students, this curriculum is valuable preparation for obtaining employment at the level of technician.

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

20 units selected from transfer level courses in astronomy, chemistry, earth science, engineering, geography, geographic information systems (GIS), geology, physical science, physics, statistics, or mathematics. Special topics courses may not be applied to the 20 unit requirement. Students must choose courses from at least three subject areas. No more than eight units from any single subject area may be counted toward the major.

**Total units for the major** 20

**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. It also provides many of the prerequisite courses for engineering majors.

Major requirements for the Associate in Science Degree: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 21</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 21L1</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 21L2</td>
<td>General Chemistry Lab I</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22</td>
<td>General Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 22L1</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>CHEM 22L2</td>
<td>General Chemistry Lab II</td>
<td>1</td>
</tr>
<tr>
<td>MATH 65A</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>MATH 65B</td>
<td>Calculus II</td>
<td>4</td>
</tr>
<tr>
<td>MATH 75</td>
<td>Calculus III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 85</td>
<td>Differential Equations</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 44</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>
<tr>
<td>PHYS 47</td>
<td>Physics for Scientists and Engineers III</td>
<td>5</td>
</tr>
</tbody>
</table>

Total units for the major: **42**

Required General Education course:

PHYS 44 Introduction to Motion 4

**Psychology**

The Psychology program is for associate degree 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 1</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 5</td>
<td>Personal and Social Awareness</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 80</td>
<td>Research Methods in Psychology</td>
<td>4</td>
</tr>
<tr>
<td>SCSCI 10</td>
<td>Statistics for Social Science</td>
<td>4</td>
</tr>
</tbody>
</table>

Plus nine units from the following or from approved special topics*:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSYCH 20</td>
<td>Developmental Psychology: Childhood and Adolescence**</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 21</td>
<td>Developmental Psychology: Adulthood and Aging**</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 25</td>
<td>Developmental Psychology: Lifespan Development**</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 41</td>
<td>Biological Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 45</td>
<td>Psychoactive Drugs: The Chemistry of Consciousness</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 55</td>
<td>Abnormal Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 65</td>
<td>Social Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PSYCH 430</td>
<td>Health Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SCSCI 17</td>
<td>Human Sexuality</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: **23**

Required General Education courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1A</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1B</td>
<td>Advanced Composition and Critical Thinking (or PHIL 76, Critical Thinking)</td>
<td>3</td>
</tr>
</tbody>
</table>

*R *A maximum of six units of special topics (PSYCH 92A-H) may be taken to fulfill this requirement with prior approval of the school dean or designee. At least two different special topics must be completed.

**Radiologic Technology**

The Radiologic Technology program leads to an Associate in Science degree or certificate. Training includes operation of digital and conventional x-ray equipment, exposing and processing images, utilizing radiation protection practices, positioning patients, and patient care. Concurrent clinical training is conducted 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; www.jrcert.org). Upon successful completion, graduates earn Diagnostic Radiologic Technology and Radiologic Technologist Fluoroscopy Permit certificates and are eligible to become licensed as Radiologic Technologists. There are fees for obtaining licensure by examination and certification. The national certification examination and the State of California Certified Radiologic Technologist and Fluoroscopy Permit examinations are administered by the American Registry of Radiologic Technologists (ARRT; www.arrt.org). There are application fees for certification with the State of California (CRT). The program articulates with the California State University Northridge Radiologic Technology program for the bachelor’s degree.

The special application form for admission to the RT program is available in the Counseling Department or online at www.chaffey.edu/radtec and must be submitted during the month of February for classes beginning the following August. Information about the requirements that must be completed prior to applying to the Radiologic Technology program must be obtained from the RT website or from the Counseling Department. Go to www.chaffey.edu/radtec and click on the application process checklist, form, and information packet. This criteria is subject to change.
Applicants to the Radiologic Technology program must meet the following criteria:

1. Eligibility for admission to Chaffey College.
2. High school graduation, pass the GED test, or pass the High School Proficiency examination, or have associates degree or higher. International transcripts must have AERC, IERF or approved agency evaluation.
3. Completion of the following courses with a minimum grade of C (2.0), or courses in progress at the time of application:
   a. MATH 410, 411, or higher level math, STAT 10 or SCSCI 10, or pass Algebra Skills Test.
   b. CHEM 9; 10; or 21, 21L1, and 21L2; or PHYS 5 or higher, or one year of high school chemistry or physics.
   c. BIOL 20 (or BIOL 424 and 424L)
   d. BIOL 30

Notes:

1. Students are admitted to the Radiologic Technology program on a point system. Therefore, it is imperative that applicants meet with a counselor regarding the point system prior to beginning the prerequisite and general education courses.
2. Required courses listed under number three above and general education courses are assigned points. Only courses completed prior to the application period will be including for full point calculation.
3. Students must earn a minimum grade of C (2.0) in all required and general education courses.
4. Applicants will be notified if they are accepted into the program by the end of May.
5. Prior to admission to the RT program, evidence of satisfactory physical and emotional health is required as determined by a health examination.
6. In order to continue in the RT program, students must earn a minimum grade of C (78%) in all Radiologic Technology courses.
7. Complete a criminal background clearance (details provided at mandatory examination or license will be granted. Contact the ARRT and submit and emotional health is required as determined by a health examination.
8. Applicants with a record of any felony are subject to review by the ARRT before pre-application to determine eligibility for ARRT licensing (www.arrt.org).

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>RADTEC 10</td>
<td>Anatomy and Radiographic Positioning I</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 10L</td>
<td>Laboratory for Anatomy and Radiographic Positioning I</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 16</td>
<td>Medical Procedures for Radiologic Technologists</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 16L</td>
<td>Laboratory for Medical Procedures for Radiologic Technologists</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 20</td>
<td>Radiologic Science and Protection</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 20L</td>
<td>Laboratory for Radiologic Science and 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 25L</td>
<td>Laboratory for Anatomy and Radiographic Positioning II</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 31</td>
<td>Radiographic Clinical Education I</td>
<td>2</td>
</tr>
<tr>
<td>RADTEC 34</td>
<td>Radiographic Imaging</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 34L</td>
<td>Laboratory for Radiographic Imaging</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 40</td>
<td>Radiographic Clinical Education II</td>
<td>8</td>
</tr>
<tr>
<td>RADTEC 50</td>
<td>Radiographic Clinical Education III</td>
<td>6</td>
</tr>
<tr>
<td>RADTEC 55</td>
<td>Radiographic Equipment and Clinical Application</td>
<td>2</td>
</tr>
<tr>
<td>RADTEC 61</td>
<td>Radiographic Clinical Education IV</td>
<td>8</td>
</tr>
<tr>
<td>RADTEC 66</td>
<td>Anatomy and Radiographic Positioning III</td>
<td>3</td>
</tr>
<tr>
<td>RADTEC 66L</td>
<td>Laboratory for Anatomy and Radiographic Positioning III</td>
<td>1</td>
</tr>
<tr>
<td>RADTEC 70</td>
<td>Radiographic Clinical Education V</td>
<td>11</td>
</tr>
<tr>
<td>RADTEC 76</td>
<td>Radiographic Pathology</td>
<td>4</td>
</tr>
<tr>
<td>RADTEC 81</td>
<td>Radiographic Clinical Education VI</td>
<td>5</td>
</tr>
<tr>
<td>RADTEC 85</td>
<td>Development of Advanced Radiographic Skills</td>
<td>2</td>
</tr>
<tr>
<td>RADTEC 460</td>
<td>Venipuncture for Imaging Professionals</td>
<td>1.5</td>
</tr>
<tr>
<td>RADTEC 460L</td>
<td>Venipuncture Laboratory for Imaging Professionals</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Total units for the major: 74

Note: RADTEC 50 and 55 are offered during the first summer of the program and RADTEC 81 and 85 are offered during the second summer of the program.

Real Estate

The real estate professional in California is concerned with the transfer of title to real property and those activities supporting this vital function. Range in scope from the sale of single family residence to the management of a multi-unit residential complex, the real estate industry requires extensive education and practical experience of its licensees. The California Real Estate Commission has established stringent regulations, and the National Association of Realtors has an equally stringent Code of Ethics to ensure a high level of individual professionalism.

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>RE 10</td>
<td>Real Estate Principles</td>
<td>3</td>
</tr>
<tr>
<td>RE 15</td>
<td>Real Estate Practice</td>
<td>3</td>
</tr>
<tr>
<td>RE 50</td>
<td>Legal Aspects of Real Estate I</td>
<td>3</td>
</tr>
<tr>
<td>RE 60</td>
<td>Real Estate Finance</td>
<td>3</td>
</tr>
<tr>
<td>RE 70</td>
<td>Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>RE 86</td>
<td>Real Estate Property Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus three courses from the following (at least 9 units):

<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>ACCTGFS 453</td>
<td>U.S. and California Income Tax Preparation</td>
<td>4</td>
</tr>
<tr>
<td>ACCTGFS 454</td>
<td>Introduction to the Taxation of Corporations and Partnerships</td>
<td>4</td>
</tr>
<tr>
<td>BUS 13</td>
<td>Professional Selling</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28A</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 28B</td>
<td>Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 49</td>
<td>Business Computations</td>
<td>3</td>
</tr>
<tr>
<td>BUSOT 455</td>
<td>Fundamentals of English for Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 1</td>
<td>Introduction to Computer Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 68</td>
<td>Using the Internet</td>
<td>1.5</td>
</tr>
<tr>
<td>COMSTD 8</td>
<td>Fundamentals of Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>ECON 1</td>
<td>Introduction to Economics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 40</td>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>RE 472</td>
<td>Advanced Real Estate Appraisal</td>
<td>3</td>
</tr>
<tr>
<td>RE 475</td>
<td>Real Estate Escrow I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major: 27

Requirements for the Real Estate Certificate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>L382/14400/0511.00</td>
<td>Same as the major requirements for the A.S. Degree.</td>
<td></td>
</tr>
</tbody>
</table>

Total units for the certificate: 27

Real Estate Salesperson's Certificate:

This program is intended for individuals desiring to become real estate salespersons with a minimum of course requirements.
Graduation Requirements and Programs of Study

Requirements for the Real Estate Salesperson Certificate:  
RE 10 Real Estate Principles 3

Plus two courses from the following:  
RE 15 Real Estate Practice 3
RE 50 Legal Aspects of Real Estate I 3
RE 60 Real Estate Finance 3
RE 70 Real Estate Appraisal 3
RE 86 Real Estate Property Management 3
RE 475 Real Estate Escrow I 3

Total units for the certificate 9

Note: As of July 1, 2003, all applicants for a real estate salesperson license for the state of California will be required to complete a course in Real Estate Practices in addition to the other required courses. Real Estate Practices must be taken either prior to the license examination or for conditional licenses, within eighteen months after issuance of the license. Real estate salesperson applicants will still be required to take Real Estate Principles.

SOCIAL SCIENCE

The Social Science major is designed with two main 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 Arts Degree:  
Twenty-one units from four of the following disciplines: Anthropology 2, 3  
Child Development and Education  
Communication Studies  
Correctional Science  
Economics  
Education  
Geography 1, 10, 11  
Gerontology  
Political Science  
Psychology  
Social Science  
Sociology

Total units for the major 21

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

SOCIOLGY

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:  
SCSCI 10 Statistics for Social Science 4  
SOC 10 Introduction to Sociology 3  
SOC 70 Social Problems 3

Plus three courses from following or from approved special topics:  
SCSCI 11 Computer Applications for the Social Sciences 3  
SCSCI 17 Human Sexuality 3  
SOC 11 Popular Culture 3  
SOC 14 Sociology of Gender 3  
SOC 15 Ethnic and Race Relations: U.S. and Global Perspectives 3  
SOC 16 Marriage, Family and Relationships 3  
SOC 18 Sociology of Aging (also available as GERO 18) 3  
SOC 19 Sociology of Deviance 3

Total units for the major 25

Required General Education Course:  
ENGL 1A Composition 3
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 Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATRE 1</td>
<td>Introduction to Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 2</td>
<td>Stage Movement</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 4</td>
<td>Development of the Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 5</td>
<td>Development of the Theatre II</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 10</td>
<td>Beginning Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 20</td>
<td>Directing for the Stage I</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 30</td>
<td>Technical Theatre</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 50</td>
<td>Main Stage Production Workshop I</td>
<td>3</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>THEATRE 16</td>
<td>Principles of Costume Design and Production</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(also available as FASHD 16)</td>
<td></td>
</tr>
<tr>
<td>THEATRE 32</td>
<td>Theatre Design - Lighting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 34</td>
<td>Theatre Design - Scenography</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 40</td>
<td>Stage Costuming</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 42</td>
<td>Theatrical Makeup</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 64</td>
<td>History of Costume</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>THEATRE 12</td>
<td>Intermediate Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 14</td>
<td>Stylized Acting</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 18</td>
<td>Seminar in Television Production: Acting Techniques</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 21</td>
<td>Directing for the Stage II</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 35</td>
<td>Musical Theatre Performance</td>
<td>3</td>
</tr>
<tr>
<td>THEATRE 56</td>
<td>Children’s Theatre</td>
<td>4</td>
</tr>
<tr>
<td>THEATRE 60</td>
<td>Seminar: Acting</td>
<td>3</td>
</tr>
</tbody>
</table>

Total units for the major 33-34

Required General Education course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>THEATRE 10</td>
<td>Beginning Acting</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.”)
Faculty Lecturer
OF THE YEAR 2007

Eva Rose

Eva was born and raised on a farm in southern Sweden. She is the only child of a strong man that exemplified emotional intelligence. Through her early childhood experiences, Eva cultivated an interest in the integration of both cognitive and emotional intelligence. Through Eva’s grade school experiences, she realized that these are all too often bifurcated in academic culture. It became her goal to both personally develop and to advocate for the integration of both character and intellect.

At the age of 19, Ms. Rose moved to England to study English Literature at Wimbledon College, supporting herself by working at a pub. The following summer, while exploring the Mediterranean world, Eva met her wonderful husband of 26 years, on a rooftop in Jerusalem. She was surprised and delighted to meet another man of profound emotional intelligence. “It was love at first sight,” says Eva, “and yet it is a daily choice, involving a lot of hard work, with each day being more rewarding than the one before.” Scott and Eva have a 15-year old daughter, Charlotte, “the symbol of love in our life.” She is an accomplished flautist and loves boys above everything, much like her mother when she was younger. Virtually every one of Eva’s students can relate to her as a friend, mentor, and mother.

With a nursing degree from her homeland, Rose decided to start anew. She moved to Southern California to begin an academic career. Within two years in her adopted homeland, not only was Rose the valedictorian at RCC, but she was chosen as the Woman of Distinction of her graduating class. Graduating from California State University, Fullerton with a 4.0 GPA, Rose was allowed to have champagne with the president, a tradition that she continues to carry on to this day. Rose was selected for a teaching fellowship in the graduate school in Speech Communication while finishing her graduate work. When she turned in her thesis, she already had two adjunct positions at Chaffey and Cypress College. Her thesis, Narrowing the Gender Gap, earned First Prize at the National Speech Communication Conference in New Orleans, 1988.

Eva joined the Chaffey faculty in September of 1989, and has been teaching a variety of classes in her field. With Eva’s emphasis in Intercultural Communication, she will be teaching this class in China this coming June for four weeks. The love for teaching that will carry her to China has earned her academic and teaching excellence awards at both Chaffey College (Faculty of the Year, 1997, 2003) and California State University, Fullerton (Outstanding Professor, 2000).

Ms. Rose has served as the Director of the Honors Program for the last six years, expanding it to become one of the premier programs in the country. This has given her a lot of joy traveling with her wonderful students to many conferences where they have represented the best of Chaffey. Her students have presented in colleges and universities around the country.

On a personal note, if there is anything that comes as close to her heart as her family and students, it is Starbucks, Godiva Chocolate and Cakebread Chardonnay. During her minimal spare time, Rose enjoys reading, entertaining, and traveling to different cultures around the world. She has enjoyed repeated treks throughout Southeast Asia, tours within Europe, and adventures in Central and South America. But, her favorite spot is Christ Church, New Zealand. Most students with whom she interacts are changed by the loving environment that Eva brings. Eva’s intercultural experience makes it so that she is able to adapt to diverse audiences. As an Honors student, Richard Johnson states that “I would not be who I am today if it were not for Eva, who has molded me into the man that I have become.” A Phi Theta Kappa student, Tamira Hopkins says that “she is the first person that found out where I came from and did not turn her back on me. She encouraged me to be the best in all that I want to do.” Eva bridges the gap between teachers and students and makes them feel as though they can be whoever they want to be. After all of her hard work, we can only hope that she can end her time at Chaffey College with a dance of the YMCA.
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. Students should concentrate on meeting admissions, preparation for the major, prerequisites, and general education requirements while attending the community college. Information on many four-year colleges and universities is available in the Chaffey College Counseling Center. Students are advised to obtain information about the chosen transfer college from that college’s catalog and website, and information available online at www.csumentor, www.ucop.edu/pathways, uctransfer.org, or www.assist.org. Information about many independent colleges and universities in California is available online at www.aiccu.org. Students planning to transfer should be aware of dates and procedures in filling the application for admission. Applications for the University of California (UC) and California State University (CSU) systems are available at the Counseling Center, although students are encouraged to apply online at the MENTOR website (for CSU) or the PATHWAYS website (for UC). Students may also personally contact the appropriate campus or institution.

Cross Enrollment - California residents currently enrolled at a California community college may enroll in one undergraduate course per academic term at any CSU or UC campus, provided the student has met course prerequisites and approval is granted by both the home and the CSU or UC campus. A $10 fee plus any material/laboratory fees associated with the course may be charged. Cross enrollment does not constitute regular admission.

To cross-enroll, the student must:
• have completed at least one term at the home campus, and:
• have a minimum 2.0 GPA in work completed, and:
• be enrolled in at least six units at their home campus and have paid appropriate fees to the home campus for the term in which they wish to cross-enroll.

CALIFORNIA STATE UNIVERSITY

There are 23 state university campuses in California. Q = Quarter system; S = Semester system

1 California State University, Bakersfield - Q
9001 Stockdale Highway
Bakersfield, CA 93311-1099
(661) 654-2782 – www.csubak.edu

2 California State University, Channel Islands - S
One University Drive
Camarillo, CA 93012-8584
(805) 437-8520 – www.csuci.edu

3 California State University, Chico - S
400 W. First Street
Chico, CA 95929-0722
(530) 898-4636 – www.csuchico.edu

4 California State University, Dominguez Hills - S
1000 East Victoria Street
Carson, CA 90747-0005
(310) 243-3696 – www.csudh.edu

5 California State University, Fresno - S
5150 North Maple Avenue
Fresno, CA 93740-0057
(559) 278-4240 – www.csufresno.edu

6 California State University, Fullerton - S
800 N. State College Blvd.
Fullerton, CA 92834-9480
(714) 278-2011 – www.fullerton.edu

7 California State University, East Bay - Q
25800 Carlos Bee Blvd.
Hayward, CA 94542-3035
(510) 885-3000 – www.csueastbay.edu

8 Humboldt State University - S
1 Hapst Street, Arcata, CA 95521-8299
(707) 826-4402 – www.humboldt.edu

9 California State University, Long Beach - S
1250 Bellflower Blvd.
Long Beach, CA 90840-0106
(562) 985-4111 – www.csulb.edu

10 California State University, Los Angeles - Q
5151 State University Drive
Los Angeles, CA 90032-8530
(323) 343-3000 – www.calstatela.edu

11 California Maritime Academy - S
200 Maritime Academy Drive
Vallejo, CA 94590-8181
(707) 654-1000 – www.csum.edu
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.

- 4 years: English
- 3 years (4 years is recommended): Mathematics (Algebra I, Geometry, and Algebra II; or integrated mathematics including these)
- 2 years: History and Social Science, including one year of U.S. History (or one semester of U.S. History and one semester of civics or American Government) and one year of social science
- 2 years: Science with a laboratory: (one year biological and one year physical)
- 2 years: Language other than English (both years must be in the same language; American Sign language is applicable. See below for waiver requirements.)
- 1 year: Visual and Performing Arts: Dance, Theatre/Drama, Music, or Visual Art
- 1 year: Elective chosen from the subject areas listed above

Each of the state universities accepts a maximum of 70 semester units of credit in transferable courses completed in the community college. Junior standing requires the completion of 60 semester units in transferable courses. The community college 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. 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.

Admission Requirements for Freshman Applicants

Admission Eligibility - Students are eligible for admission if they:
- Have/will have graduated from high school.
- Meet the eligibility index required of a first-time freshman, or have successfully completed the courses necessary to make up the deficiencies they had in high school if they did not complete the 15-unit pattern of college preparatory study totaling 15 units.
- Meet the admission requirements for a first-time freshman and must meet those recommended requirements.
- Are in good standing at the last college or university attended (i.e. eligible to re-enroll).
- Students who have completed 60 or more transferable semester units (90 quarter units) are considered upper-division transfer students.
- Students who completed college units before graduation from high school, or during the summer between high school graduation and CSU enrollment, are considered first-time freshmen and must meet those admission requirements.
- Students who did not complete the 15-unit pattern of college preparatory study totaling 15 units.
- Students who have completed fewer than 60 semester college units (90 quarter units) are considered lower division transfer students.
- Students who have completed 60 or more transferable semester units (90 quarter units) are considered upper-division transfer students.
- Students who completed college units before graduation from high school, or during the summer between high school graduation and CSU enrollment, are considered first-time freshmen and must meet those admission requirements.

Lower Division Transfer Admission Requirements

Students are eligible for admission as a lower division transfer student if they:
- Have a college grade point average of 2.0 or better in all transferable college units attempted.
- Are in good standing at the last college or university attended (i.e. eligible to re-enroll).
- Meet the admission requirements for a first-time freshman, or have successfully completed the courses necessary to make up the deficiencies they had in high school if they did not complete the 15-unit pattern of college preparatory subjects.
- Meet the eligibility index required of a freshman.
- Some CSU campuses may require completion of English composition and general education mathematics.
- Students should contact the CSU campus of choice to determine if there are limits on admission as a lower-division transfer.
Upper Division Transfer Admission Requirements

Students are eligible for admission as an upper division transfer student if they:

- Have a college grade point average of 2.00 or better (2.40 for non-California residents) in all transferable college units completed.
- Are in good standing at the last college or university attended (i.e. eligible to re-enroll).
- Have completed, or will complete prior to transfer*, at least 30 semester units (45 quarter units) of courses equivalent to general education requirements, with grades of C or better. The 30 units must include all of the general education requirements in communication in the English language (Area A1: oral communication; Area A2: English composition; and Area A3: critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college level mathematics (Area B4: Mathematics).

*Note: Some CSU campuses will admit transfer students based on courses “in progress”, and some will not. Consult the specific campus(es) or their published or electronic materials for current campus information.

Chaffey College is authorized to certify a maximum of 39 units of the 48–unit state general education requirement. See page entitled “California State University General Education Certification Course Pattern” for Chaffey courses meeting this requirement. Students have an additional option for meeting general education requirements by fulfilling the 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 “Course Descriptions” section of this catalog.

Advanced Placement (AP) Examinations in CSU General Education – Breadth Certification

(Excerpted from Office of the CSU Chancellor - Memo 09/25/97)

Effective with the Fall 1997 term, the following Advanced Placement (AP) examinations may be incorporated into certification of completion of CSU General Education – Breadth requirements. Students must have scored 3, 4, or 5 on an AP examination listed below to receive the credit indicated. All CSU campuses will accept the minimum units shown below toward fulfillment of the designated General Education-Breadth area, if the examination is included in a full- or subject-area certification. Individual CSU campuses may choose to accept more units than those specified below towards completion of General Education - Breadth requirements. The CSU campus to which the student is transferring determines the total number of units awarded for successful completion of an AP examination, and the applicability of the examination to other graduation requirements.

<table>
<thead>
<tr>
<th>AP Subject</th>
<th>Number of Semester Units Applicable to General Education-Breadth Certification (for Students Obtaining Full or Subject-Area Certification)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art: History of Art</td>
<td>3 units toward Area C1</td>
</tr>
<tr>
<td>Biology</td>
<td>3 units toward Area B2</td>
</tr>
<tr>
<td>Chemistry</td>
<td>6 units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Economics: Macroeconomics</td>
<td>3 units toward Area D2</td>
</tr>
<tr>
<td>Economics: Microeconomics</td>
<td>3 units toward Area D2</td>
</tr>
<tr>
<td>English: English Language and Composition</td>
<td>3 units toward Area A2</td>
</tr>
<tr>
<td>English: English Literature and Composition</td>
<td>6 units toward Areas A2 and C2</td>
</tr>
<tr>
<td>French: French Language</td>
<td>6 units toward Area C2</td>
</tr>
<tr>
<td>German Language</td>
<td>6 units toward Area C2</td>
</tr>
<tr>
<td>Government and Politics: United States</td>
<td>3 units toward Area D8</td>
</tr>
<tr>
<td>Government and Politics: Comparative</td>
<td>3 units toward Area D8</td>
</tr>
<tr>
<td>History: European History</td>
<td>3 units toward Area D6</td>
</tr>
<tr>
<td>History: United States History</td>
<td>3 units toward Area C2</td>
</tr>
<tr>
<td>Latin: Vergil</td>
<td>3 units toward Area C2</td>
</tr>
<tr>
<td>Latin: Latin Literature</td>
<td>3 units toward Area B4</td>
</tr>
<tr>
<td>Mathematics: Calculus AB</td>
<td>3 units toward Area B4</td>
</tr>
<tr>
<td>Mathematics: Calculus BC</td>
<td>3 units toward Area C1</td>
</tr>
<tr>
<td>Music Theory</td>
<td>6 units toward Areas B1 and B3</td>
</tr>
<tr>
<td>Physics B</td>
<td>3 units toward Area D9</td>
</tr>
<tr>
<td>Physics C (mechanics)</td>
<td>6 units toward Area C2</td>
</tr>
<tr>
<td>Physics C (electricity and magnetism)</td>
<td>6 units toward Area C2</td>
</tr>
<tr>
<td>Psychology</td>
<td>6 units toward Area B4</td>
</tr>
<tr>
<td>Spanish: Spanish Language</td>
<td>3 units toward Area B4</td>
</tr>
<tr>
<td>Spanish: Spanish Literature</td>
<td>3 units toward Area C1</td>
</tr>
<tr>
<td>Statistics</td>
<td>3 units toward Area B4</td>
</tr>
</tbody>
</table>
AREA A  
9 units required

AREAS B, C, & D  
A minimum of 9 units is required in each area.

AREA E  
3 units required

(1) 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

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 25, 26, 35*, 36*
Chemistry 7*, 9*, 10*, 12**, 21 & 21L1 & 21L2*
Earth Science 1, 1& 1L*, 5, & 5L*, 8
Geography 4, 4 & 5*, 6°
Geology 1*, 2*, 6, 20*
Physical Science 10*
Physics 5, 6, 21, 21L1, 21L2*, 22*, 26, 26L*, 30A*, 30B*, 44**, 45*

B2  
Life Science
Anthropology 1, 1& 1L*
Biology 1*, 2*, 3*, 4*, 5*, 10, 10 & 10L*, 11, 12*
20*, 22*, 23, 23 & 23L*, 50*
Geography 6

B3  
Laboratory Activity
This requirement is satisfied by completion of any course in B1 or B2 with a laboratory. Those courses are identified with an asterisk (*).

B4  
Mathematics
Mathematics 4, 25, 31, 60, 61, 65A, 81
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 1, 3, 5, 6, 8, 9, 10, 11, 12, 14, 16, 18, 20, 44, 64
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Fine Arts 50
Interior Design 11, 12
Music 1, 2A, 2B, 3A, 4, 21, 22*, 26
Photography 1, 10
Theatre Arts 1, 4, 5, 10, 12, 64

C2  
Humanities
American Sign Language 1+, 2, 3, 4
Chinese 1, 2
English 1C, 30, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 79, 80A, 80B, 81
French 1, 2, 3, 4
German 1, 2
History 1, 2, 4+, 7, 16+, 20, 40*
Humanities 5, 6, 20
Philosophy 70, 72, 73, 80, 81, 82
Social Science 40*
Spanish 1 or 1SS or 1A and 1B, 2 or 2SS or 2A and 2B, 3, 4, 7, 8, 13

AREA D  
SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS AND BEHAVIOR; HISTORICAL BACKGROUND
(Minimum 9 units - choose courses from two different disciplines)

Administration of Justice 1+
Anthropology 2, 3
Child Development and Education 2, 4, 6
Communication Studies 12, 74, 76
Consumer Studies 11
Economics 1, 2, 4, 8
Geography 1, 10, 11*, 16+
Gerontology 11, 18, 21, 22
History 1, 2, 4, 5, 6, 7, 9, 10, 16, 17, 18, 20, 40*, 50, 51, 70, 71
Political Science 1, 2, 7, 10, 25
Psychology 1, 20, 21, 25, 65
Social Science 22, 25
Sociology 10, 14, 15, 16*, 18

AREA E  
LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT
(Minimum 3 units)

Biology 13, 14
Child Development and Education 2
Consumer Studies 40
Gerontology 22
Guidance 3
Nutrition and Food 5, 15, 21
Physical Education Lecture 15
Psychology 5, 25
Social Science 17, 22
Sociology 16*

+=Course must be completed Fall 2003 or later. X=Course must be completed Fall 2006 or later.
°=Course must be completed Fall 2005 or later. •=Course must be completed Spring 2007 or later.

COURSES COUNT IN ONE AREA ONLY.

CHAFFEY REQUIREMENT

Students completing the CSU/GE pattern must also complete the following as part of the 60-unit requirement to earn the associate degree in General Education.

Multi-Cultural/Gender Studies (minimum of 3 units)
Physical Education, Recreation, & Wellness (minimum of 2 units)
Computer Literacy (completion of one of the three options)

CSU REQUIREMENT

The State Requirement in U.S. HISTORY and U.S. CONSTITUTION / STATE AND LOCAL GOVERNMENT is met with History 17 or 18 and Political Science 1
INTERSEGMENTAL GENERAL EDUCATION
TRANSFER CURRICULUM (IGETC) 2007-2008

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.

Course requirements for all areas must be completed before the IGETC can be certified. All courses must be completed with grades of "C" or better (C- grades are not acceptable), and be a minimum of 3 semester/4-5 quarter units. A course can not be certified unless it was on the list during the year when it was taken by the student.

There are limited circumstances under which a student may be eligible for IGETC certification after transfer. Consult with a counselor regarding "IGETC after Transfer" prior to the last term before transfer.

**AREA 1 ENGLISH COMMUNICATION**

<table>
<thead>
<tr>
<th>Group A</th>
<th>English Composition (CSU &amp; UC - Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English 1A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group B</th>
<th>Critical Thinking-English Composition (CSU &amp; UC - Required)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>English 1B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group C</th>
<th>Oral Communication (CSU Requirement Only - 1 course)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Communication Studies 2, 6, 8</td>
</tr>
</tbody>
</table>

**AREA 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (CSU & UC - 1 course required)**

<table>
<thead>
<tr>
<th>Mathematics 25#<em>, 60, 61</em>, 65A, 65B, 75, 81#*, 85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Science 10#</td>
</tr>
<tr>
<td>Statistics 10</td>
</tr>
</tbody>
</table>

**AREA 3 ARTS AND HUMANITIES**

(3 courses minimum, with at least one course from Arts and one from Humanities)

<table>
<thead>
<tr>
<th>Arts:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art 1, 3, 5, 6, 9, 11</td>
</tr>
<tr>
<td>Cinema 25, 26</td>
</tr>
<tr>
<td>Dance 1</td>
</tr>
<tr>
<td>Fine Arts 50</td>
</tr>
<tr>
<td>Music 2A, 2B, 3A, 3B, 4, 21*, 22*, 26*</td>
</tr>
<tr>
<td>Theatre Arts 1, 4, 5</td>
</tr>
</tbody>
</table>

**HUMANITIES:**

| American Sign Language 3, 4 |
| English 1C, 30, 32, 33, 68, 70A, 70B, 71, 74#, 75A, 75B, 76, 79, 80A, 80B, 81 |
| French 3, 4 |
| History 1, 2, 4#, 5, 6, 7, 9, 10, 16#, 20, 25, 40#, 50, 51, 70, 71 |
| Humanities 5, 6, 20 |
| Philosophy 70, 72, 73, 80, 81, 82 |
| Social Science 40# |
| Spanish 3, 4, 7, 8, 13 |

**AREA 4 SOCIAL AND BEHAVIORAL SCIENCES**

(3 courses minimum, from at least two disciplines)

| Anthropology 2, 3 |
| Child Development and Education 2*, 4 |
| Communication Studies 12, 74 |
| Economics 1*, 2, 4, 8 |
| Geography 1*, 10, 11*, 18* |
| Gerontology 18* |
| History 4#, 5, 6, 7, 9, 10, 16#, 17, 18, 20, 40#, 50, 51, 70, 71 |
| Political Science 1, 2, 7, 10, 25 |
| Psychology 1, 20*, 25*, 65 |
| Social Science 25, 40# |
| Sociology 10, 14, 15, 16*, 18*, 70 |

**AREA 5 PHYSICAL AND BIOLOGICAL SCIENCES**

(2 courses minimum, with at least one Physical Science course and one Biological Science course, one of which must include a laboratory. Lab courses are underlined.)

**PHYSICAL SCIENCES:**

| Astronomy 25*, 26, 35 |
| Chemistry 8*, 9*, 10*, 12*, 21 & 21L1 & 21L2*, 22 & 22L1 & 22L2*, 70, 75A, 75B |
| Earth Science 1, 1 & 1L, 9*, 5 & 5L*, 8* |
| Geography 4, 4 & 5, 6*, 11* |
| Geology 1, 2, 20, 80, 85 |
| Physical Science 10 |
| Physics 5*, 6 & 6*, 20A*, 20B*, 30A*, 30B*, 44*, 45*, 46*, 47* |

**BIOLOGICAL SCIENCES:**

| Anthropology 1, 1 & 1L |
| Biology 1*, 2, 4*, 5, 10*, 11, 12, 20, 22, 23, 23 & 23L, 50, 52*, 55, 56, 63 |

**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, with grades of C or better, two years of formal schooling at the sixth grade level or higher, in an institution where the language of instruction is not English, OR complete one of the following courses:

| American Sign Language 2 |
| Chinese 2 |
| French 2* |
| German 2* |
| Spanish 2*, 2B*X, 2SS* |
| (American Sign Language 3 or 4, or French 3 or 4, or Spanish 3 or 4 may be used to validate this requirement. |

COURSES MAY COUNT IN ONLY ONE AREA

**GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS**

(Not part of IGETC; may be completed prior to transfer.)

High school coursework can be used to meet this requirement at all UC's except Santa Barbara. Most UC's accept "C" grades; UCLA requires a "B" or higher. 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. |
| Group 1 Political Science 1 |
| Group 2 History 17, 18 |

Courses used to meet this requirement may not be used to satisfy requirements for IGETC. Please consult with a counselor for additional information.
IGETC after Transfer
Partial Certification of the Intersegmental General Education Transfer Curriculum (IGETC)

The IGETC provides a pattern of courses that fulfills the transfer general education requirements at both the University of California (UC) and the California State University (CSU). Each California community college offers a complete set of courses that satisfy IGETC. If a student attends more than one community college, the campus attended just prior to transfer will certify completion of IGETC, including courses taken at other colleges. The IGETC pattern is not recommended for all majors. See a counselor/educational advisor for advice and more complete information on the IGETC certification.

If, for good cause, a student is unable to complete one or two IGETC courses*, they may be eligible to complete IGETC after transfer. Typical situations constituting good cause for not completing one or two IGETC courses are: illness, unavailable or canceled classes, military service, and unexpected hardships, such as family or employment problems. These situations must have occurred in the final term before transfer.

A student may petition only during the final semester before transfer. If the petition for partial certification of IGETC is approved, the student will be able to complete IGETC in one of the following ways:

1. Take a certified IGETC course, in the area to be completed, at any California community college at a time that does not require concurrent enrollment, such as during summer session.

2. Complete the requirement at a California community college while concurrently enrolled at the UC or CSU. This option is subject to the UC or CSU campus rules regarding concurrent enrollment, and may not be an available choice.

3. Take a comparable course at the UC or CSU campus to which the student is transferring. This option is at the discretion of each campus, so it may not be an available choice in all circumstances.

Students are expected to complete IGETC before the beginning of the second full year of enrollment at the UC or CSU campus. It's important for the student to check with the campus counselor/educational advisor after transfer for more information, including which of the above options are available and which UC or CSU courses may be comparable to the IGETC courses remaining to be completed.

*Area 1, English Communication and Area 2, Mathematics must be completed prior to transfer.

To petition for IGETC after transfer, see an academic counselor in the Counseling department.
Minimum Admission Requirements for Transfer Students

(Excerpted from the University of California Pamphlet “Answers for Transfers”)

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

The requirements described below represent the minimum academic standards students must attain to be eligible for admission to the University. However, meeting the minimum eligibility requirements does not guarantee admission, as admission to the campus and program of choice often require students to meet more demanding standards.

California Residents - To qualify for admission to the University as a transfer student, a student must meet one of the three sets of requirement described below. The pathway the student follows depends upon whether they were eligible for admission to the University when they graduated from high school. California residents must have at least a C (2.0) average in all transferable college coursework. Subject, Scholarship, and Examination requirements referred to below are described in detail in the “Answers for Transfers” pamphlet in the chapter on Admission as a Freshman. The Subject Requirements chart is also found at the end of this section.

Options for meeting admission requirements are:

1. Students who were eligible for admission to the University when they graduated from high school — meaning they satisfied the Subject, Scholarship, and Examination requirements, or were identified by the University during the senior year in high school as eligible under the Eligibility in the Local Context (ELC) program — are eligible to transfer if they have a C (2.0) average in transferable coursework.

2. Students who met the Scholarship Requirement, but not the Subject Requirement, when they graduated from high school must take transferable college courses in the missing subjects, earning a C or better in each required course, and have an overall C average in all transferable coursework. (See chart titled “Clearing Deficiencies in the Subject Requirement” at the end of this section.)

3. Students who were not eligible for admission to the University when they graduated from high school because they did not meet the Scholarship Requirement must:

   A. Complete 60 semester units or 90 quarter units of transferable college credit with a grade point average of at least 2.4 (no more than 14 semester/21 quarter units may be taken pass/not-pass), and

   B. Complete the following course pattern, earning a grade of C or better in each course:

      - two transferable college courses (3 semester or 4-5 quarter units each) in English composition; and

   Students should refer to the “Answers for Transfers” pamphlet and the current General Catalog of the desired campus.*
Preparation for Advanced Standing

- one transferable college course (3 semester or 4-5 quarter units) in mathematical concepts and quantitative reasoning; and
- four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: arts and humanities, social and behavioral sciences, and physical and biological sciences.

(Students who satisfy the Intersegmental General Education Transfer Curriculum [IGETC] prior to transfer to the University will satisfy Option 3B above. Refer to the “Answers for Transfers” pamphlet * and the Chaffey College Counseling Department for additional information.)

Non-Residents - The minimum admission requirements for non-residents are very similar to those for residents. Students are advised to consult with the Admissions Office at the desired University of California campus for details. In all cases, however, non-residents must have a grade point average of 2.8 or higher in all transferable college coursework.

Deadlines for Completing Courses Required for Admission - Prospective transfer applicants planning to meet the University of California’s minimum admission requirements using Option 3 described earlier, must satisfy certain aspects of the requirements by the end of the spring term preceding fall enrollment at some UC campuses. Students should contact the UC campus Admissions Office for information about course completion deadlines when applying for the winter and spring terms.

Transfer GPA - In 2002, the average GPA of transfer students admitted to the University of California was 3.3. However, the average GPA varies widely by campus and by major, and the GPA is only one factor by which an applicant is evaluated. Other factors, such as course patterns, are also considered. The criteria used to select students for impacted programs - those where the number of applicants exceeds the number of spaces available - are described for each campus in the “Answers for Transfers” pamphlet. *

Grades of D - A grade of D in a transferable course is acceptable and may be counted toward the units described under Option 3A, however, D grades are not acceptable to clear subject requirements described in Options 1, 2, and 3B. In some cases, grades of D are not acceptable in courses used to satisfy major or general education requirements.

Admission by Exception - Because all students have not had the same opportunities to prepare for higher education, the University gives special consideration to a limited number of applicants who show potential to succeed at the University even though they do not meet the minimum admission requirements. Decisions on admission by exception are made at the individual campus level. More information may be obtained from the Admissions Office at the campus where the student wishes to attend.

Selection Criteria - The University of California makes every effort to provide a place on one of its campuses for all California resident applicants who meet the minimum admission requirements and file an application during the appropriate period. However in recent years, the number of applicants for some campuses and some majors has far exceeded the number of spaces available. When a campus cannot admit all eligible applicants, it uses standards to select students that are more demanding than the minimum requirements. These standards, called selection criteria, identify students who have demonstrated the capacity for high academic achievement and who have a variety of other qualities that can contribute to the strength and diversity of the campus community.

See the “Answers for Transfers” * pamphlet for more information.

* These publications are available at the Chaffey College Counseling Office, at University of California campuses, and on the UC website at www.ucop.edu/pathways.

Courses Transferable to the University of California

All baccalaureate degree level courses transferable to the University of California are marked Transfer credit: UC in the “Course Descriptions” section of this catalog.

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.

Advanced Placement (AP) Examinations: University of California

(Excerpted from the University of California “2006-2007 Quick Reference for Counselors” Pamphlet)

The University of California (UC) grants credit for College Board Advanced Placement (AP) tests on which a student scores 3 or higher (see chart on next page). The credit may be subject credit, graduation credit, or credit toward general education or breadth requirements, as determined by evaluators at each campus. Additional restrictions may apply within specific programs; students should check with their program advisors. Units granted for AP tests do not count toward the maximum number of credit required for formal declaration of an undergraduate major or the maximum number of units a student may accumulate prior to graduation from the UC. Likewise, students who enter the UC with AP credit do not have to declare a major earlier than other students, nor are they required to graduate earlier. Students should be aware that the College Board reports all AP test results to the UC; student may not choose which test scores they wish reported. College courses taken prior to or subsequent to enrollment at the UC may duplicate the content of AP tests; credit cannot be awarded for both.
<table>
<thead>
<tr>
<th>AP SUBJECT TEST</th>
<th>NUMBER OF QUARTER UNITS* AWARDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art, Studio</td>
<td></td>
</tr>
<tr>
<td>Drawing Portfolio</td>
<td>8 units</td>
</tr>
<tr>
<td>2-D Design Portfolio</td>
<td>8 units</td>
</tr>
<tr>
<td>3-D Design Portfolio</td>
<td>8 units</td>
</tr>
<tr>
<td>(8 unit maximum for all three tests)</td>
<td></td>
</tr>
<tr>
<td>Art, History of</td>
<td>8 units</td>
</tr>
<tr>
<td>Biology</td>
<td>8 units</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8 units</td>
</tr>
<tr>
<td>Computer Science</td>
<td></td>
</tr>
<tr>
<td>Computer Science A</td>
<td>2 units</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>4 units</td>
</tr>
<tr>
<td>(4 unit maximum for both tests)</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td></td>
</tr>
<tr>
<td>Macroeconomics</td>
<td>4 units</td>
</tr>
<tr>
<td>Microeconomics</td>
<td>4 units</td>
</tr>
<tr>
<td>English</td>
<td></td>
</tr>
<tr>
<td>Language and Composition</td>
<td>8 units</td>
</tr>
<tr>
<td>Literature and Composition</td>
<td>8 units</td>
</tr>
<tr>
<td>(8 unit maximum for both tests)</td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>4 units</td>
</tr>
<tr>
<td>Government and Politics</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>4 units</td>
</tr>
<tr>
<td>Comparative</td>
<td>4 units</td>
</tr>
<tr>
<td>History</td>
<td></td>
</tr>
<tr>
<td>United States History</td>
<td>8 units</td>
</tr>
<tr>
<td>European History</td>
<td>8 units</td>
</tr>
<tr>
<td>World History</td>
<td>8 units</td>
</tr>
<tr>
<td>Human Geography</td>
<td>4 units</td>
</tr>
<tr>
<td>Language Other than English***</td>
<td></td>
</tr>
<tr>
<td>French Language</td>
<td>8 units</td>
</tr>
<tr>
<td>French Literature</td>
<td>8 units</td>
</tr>
<tr>
<td>German Language</td>
<td>8 units</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>8 units</td>
</tr>
<tr>
<td>Spanish Literature</td>
<td>8 units</td>
</tr>
<tr>
<td>(German Literature no longer offered)</td>
<td></td>
</tr>
<tr>
<td>Latin</td>
<td></td>
</tr>
<tr>
<td>Latin Literature</td>
<td>4 units</td>
</tr>
<tr>
<td>Vergil</td>
<td>4 units</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Calculus AB</td>
<td>4 units</td>
</tr>
<tr>
<td>Calculus BC**</td>
<td>8 units</td>
</tr>
<tr>
<td>(8 unit maximum for both tests)</td>
<td></td>
</tr>
<tr>
<td>Music Theory**</td>
<td>8 units</td>
</tr>
<tr>
<td>(Listening and Literature no longer offered)</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>8 units</td>
</tr>
<tr>
<td>Physics C Mechanics</td>
<td>4 units</td>
</tr>
<tr>
<td>Physics C Electricity and Magnetism</td>
<td>4 units</td>
</tr>
<tr>
<td>(8 unit maximum for all three tests)</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>4 units</td>
</tr>
<tr>
<td>Statistics</td>
<td>4 units</td>
</tr>
</tbody>
</table>

* FOR BERKELEY AND MERCED, DIVIDE THE UNITS BY 1.5 TO CONVERT TO SEMESTER UNITS  
** SEE UC LITERATURE FOR ADDITIONAL INFORMATION ON THESE TEST AREAS. 
*** CREDIT FOR CHINESE, ITALIAN, AND JAPANESE IS PENDING FACULTY APPROVAL.
### CLEARING DEFICIENCIES IN THE SUBJECT REQUIREMENT (from 2007-2008 University of California pamphlet “Answers for Transfers”)

Prospective transfer students who did not complete the Subject Requirement while in high school may take equivalent courses in college, as described in the chart below. Students must earn a grade of C or better in all courses completed to clear Subject Requirement deficiencies, and all courses used to clear deficiencies must be identified as UC-transferable.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>High School</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>“a” History/</td>
<td>Two years required:</td>
<td>For a deficiency in U.S. history/civics/American government, a transferable college course of three or more semester units in U.S. history, civics, or American government. For a deficiency in world history/cultures/geography, a transferable college course of three or more semester units in world history, cultures, and geography. (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td>Social Science</td>
<td>Two years of history/social science, including one year of world history, cultures and geography; and one year of U.S. history or one-half year of U.S. history and one-half year of civics or American government.</td>
<td></td>
</tr>
<tr>
<td>“b” English</td>
<td>Four years required:</td>
<td>For each year of deficiency, one transferable course of three or more semester units in English composition, literature (American or English), speech, foreign literature in translation, public speaking, or oral interpretation of literature. Literature and speech courses must include substantial composition. (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td>“c” Mathematics</td>
<td>Three years required: 4 years recommended:</td>
<td>To clear the entire deficiency, complete one of the following: a transferable mathematics course that employs the topics of intermediate algebra, or, a transferable statistics course offered by either the mathematics or statistics department that has intermediate algebra as a prerequisite. (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td></td>
<td>Three years of college preparatory mathematics that include the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Approved integrated math courses may be used to fulfill part or all of this requirement, as may math courses taken in the seventh and eighth grades, that your high school includes on your transcript with units and grades.</td>
<td></td>
</tr>
<tr>
<td>“d” Laboratory</td>
<td>Two years required: 3 years recommended:</td>
<td>For each year of deficiency, a transferable course in a natural (physical or biological) science with at least 30 hours of laboratory (not “demonstration”). (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td>Science</td>
<td>Two years of laboratory science providing fundamental knowledge in two of these three foundational subjects: biology, chemistry, and physics. Advanced laboratory science courses that have biology, chemistry, or physics as prerequisites and offer substantial additional material may be used to fulfill this requirement. The final two years an approved three-year integrated science program that provides rigorous coverage of at least two the three foundational subjects may be used to fulfill this requirement.</td>
<td></td>
</tr>
<tr>
<td>“e” Languages</td>
<td>Two years required: 3 years recommended:</td>
<td>Any transferable course(s) (excluding conversation) held by your college to be equivalent to two years of high school language. Many colleges list the prerequisites for their second course in language as “Language I at this college or two years of high school language.” In this case, Language I clears both years of the requirement. (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td>Other than English</td>
<td>Two years of the same language other than English. Courses should emphasize speaking and understanding, and include instruction in grammar, vocabulary, reading, composition, and culture. Courses in languages other than English taken in the seventh and eighth grades, may be used to fulfill part of this requirement if the high school includes them, with grades and units, on the transcript.</td>
<td></td>
</tr>
<tr>
<td>“f” Visual and</td>
<td>One year required:</td>
<td>Any transferable course of three semester units that clearly falls within one of four visual/performing arts disciplines: dance, drama/theater, music, or visual art. (Must earn a grade of C or better.)</td>
</tr>
<tr>
<td>Performing Arts</td>
<td>One year of visual and performing arts chosen from the following: dance, drama/theatre, music, or visual art.</td>
<td></td>
</tr>
<tr>
<td>(VPA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“g” College</td>
<td>One year required:</td>
<td>One transferable course beyond those listed above as clearing any of the “a-f” requirements; or a transferable course having as prerequisite the equivalent of two high school years in a second language; or transferable courses equivalent to those that clear the “c”, “d”, or “e” requirement; or a transferable course of three or more semester units in history, social science, or visual and performing arts. (Must earn grade of C or better in each course.)</td>
</tr>
<tr>
<td>Preparatory</td>
<td>One year (two semesters), in addition to those required in “a-f” above, chosen from the following areas: visual and performing arts (non-introductory level courses), 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).</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CALIFORNIA ARTICULATION NUMBER SYSTEM*

The California Articulation Number (CAN) system is a statewide numbering system independent from the course numbers assigned by local colleges, that identifies some of the transferable, lower division courses commonly taught within academic disciplines on college campuses. The CAN number indicates that participating California colleges and universities have determined that courses offered by other campuses are comparable in content and scope to courses offered on their own campuses, regardless of each campus’s unique titles or local identifying numbers. If a schedule of classes or catalog shows a course bearing a CAN number, students on one campus can be assured that it will be accepted in lieu of the comparable CAN course noted in the catalog or schedule of classes of another campus. At Chaffey, the CAN designation may be found just after transfer credit in the catalog course descriptions area. In the schedule of classes, it is located at the end of the class description.

* The CAN system is being phased out; a new program, the Lower Division Transfer Pattern (LDTP) Project, is being implemented. For an interim period, some CAN designated courses are accepted as meeting the associated statewide LDTP requirements. The interim articulation will be superseded by full articulation once course outlines have been approved through the LDTP submission and review process, and additional courses may be approved during that process. Courses having interim approval reflect both TCSU and CAN designations in the table below. Students are encouraged to check with the Counseling departments at Chaffey and/or at the CSU campus to which they intend to transfer to obtain more current information.

CAN courses qualified as of November 3, 2004.
TCSU courses qualified as of May 22, 2007.

<table>
<thead>
<tr>
<th>TCSU ID</th>
<th>CAN COURSES</th>
<th>CHAFFEY COLLEGE COURSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCSU ANTH 110</td>
<td>CAN ANTH 2</td>
<td>ANTHRO 1, Physical Anthropology</td>
</tr>
<tr>
<td>TCSU ANTH 120</td>
<td>CAN ANTH 4</td>
<td>ANTHRO 3, Intro to Social and Cultural Anthropology</td>
</tr>
<tr>
<td>TCSU ANTH 150</td>
<td>CAN ANTH 6</td>
<td>ANTHRO 2, Prehistory and Archaeological Methods</td>
</tr>
<tr>
<td>TCSU ART 110</td>
<td>CAN ART 2</td>
<td>ART 3, Art History of Western World: Ancient-1400</td>
</tr>
<tr>
<td>TCSU ART 120</td>
<td>CAN ART 4</td>
<td>ART 5, Art History of Western World: 1400-Contemporary</td>
</tr>
<tr>
<td>TCSU ART 210</td>
<td>CAN ART 6</td>
<td>ART 18, Introduction to Ceramics</td>
</tr>
<tr>
<td>TCSU ART 230</td>
<td>CAN ART 14</td>
<td>ART 10, Fundamentals of Design in Two Dimensions</td>
</tr>
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<td>TCSU ART 24</td>
<td>CAN ART 18</td>
<td>PHOTO 10, Beginning Photography</td>
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<td></td>
<td>CAN ART SEQ A</td>
<td>ART 3 + 5, Art History of Western World: Ancient - 1400 and 1400 - Contemporary</td>
</tr>
<tr>
<td>TCSU BIOL 2</td>
<td>CAN BIOL 2</td>
<td>BIOL 50, Core Biology</td>
</tr>
<tr>
<td>TCSU BIOL 14</td>
<td>CAN BIOL 6</td>
<td>BIOL 52, General Botany</td>
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<td>TCSU BUS 110</td>
<td>CAN BUS 2</td>
<td>ACCTG 1A, Principles of Accounting I</td>
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<td>TCSU BUS 120</td>
<td>CAN BUS 4</td>
<td>ACCTG 1B, Principles of Accounting II</td>
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<tr>
<td>TCSU CHEM 110</td>
<td>CAN CHEM 2</td>
<td>CHEM 21 + 21L1 + 21L2, General Chemistry and Labs</td>
</tr>
<tr>
<td>TCSU CHEM 120</td>
<td>CAN CHEM 4</td>
<td>CHEM 22 + 22L1 + 22L2, General Chemistry and Labs</td>
</tr>
<tr>
<td>TCSU CHEM 6</td>
<td>CAN CHEM 8</td>
<td>CHEM 12, Elementary Organic and Biochemistry</td>
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<tr>
<td>TCSU CHEM 12</td>
<td>CAN CHEM 12</td>
<td>CHEM 70, Quantitative Analysis</td>
</tr>
<tr>
<td>TCSU CHEM SEQ A</td>
<td>CAN CHEM SEQ A</td>
<td>CHEM 21 + 22, General Chemistry and all Labs</td>
</tr>
<tr>
<td>TCSU CHEM SEQ B</td>
<td>CAN CHEM SEQ B</td>
<td>CHEM 10 + 12, Intro Chemistry + Elementary Organic &amp; Biochemistry</td>
</tr>
<tr>
<td>TCSU CJ 110</td>
<td>CAN AJ 2</td>
<td>AJ-1, Administration of Justice System</td>
</tr>
<tr>
<td>TCSU CJ 120</td>
<td>CAN AJ 4</td>
<td>AJ-2, Concepts of Criminal Law</td>
</tr>
<tr>
<td>TCSU COMS 110</td>
<td>CAN SPCH 4</td>
<td>COMSTD 2, Fundamentals of Effective Speaking</td>
</tr>
<tr>
<td>TCSU COMS 120</td>
<td>CAN SPCH 6</td>
<td>COMSTD 72, Logic and Argumentation</td>
</tr>
<tr>
<td>TCSU COMS 130</td>
<td>CAN SPCH 8</td>
<td>COMSTD 4, Fundamentals of Interpersonal Communication</td>
</tr>
<tr>
<td>TCSU COMS 140</td>
<td>CAN SPCH 10</td>
<td>COMSTD 6, Fundamentals of Small Group Communication</td>
</tr>
<tr>
<td>TCSU CSCI 2</td>
<td>CAN CSCI 18</td>
<td>CS-21, Fundamentals of C++ Programming</td>
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<tr>
<td>TCSU DRAM 8</td>
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<td>TCSU DRAM 12</td>
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<td>TCSU DRAM 14</td>
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<td>TCSU DRAM 18</td>
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<td>TCSU DRAM 22</td>
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<tr>
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<td>TCSU ECON 120</td>
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<td>ECON 4, Principles of Microeconomics</td>
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<td>ENGL 1A, Composition</td>
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<tr>
<td>CAN ENGL 4</td>
<td>ENGL 1C, Composition and Literature</td>
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<tr>
<td>CAN ENGL 8</td>
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<td>CAN ENGL 14</td>
<td>ENGL 75A, American Literature</td>
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<td>CAN ENGL 16</td>
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<tr>
<td>CAN ENGL SEQ A</td>
<td>ENGL 1A + 1C, Composition + Composition and Literature</td>
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<tr>
<td>CAN ENGL SEQ B</td>
<td>ENGL 80A + 80B, Survey of British Literature</td>
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<tr>
<td>CAN ENGL SEQ C</td>
<td>ENGL 75A + 75B, American Literature</td>
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<tr>
<td>CAN ENGR 2</td>
<td>ENGIN-26, Engineering Graphics and CAD</td>
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<td>TCSU ENGR 130</td>
<td>CAN ENGR 8</td>
<td>ENGIN 50, Engineering Statics</td>
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<td>TCSU ENGR 140</td>
<td>CAN ENGR 10</td>
<td>ENGIN 34, Elementary Surveying</td>
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<td>CAN FCS 12</td>
<td>SOC 16, Marriage, Family, and Relationships</td>
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<td>CAN FCS 14</td>
<td>CDE-2, Child Growth and Development</td>
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<td>CAN FREN 8</td>
<td>FR 3, Intermediate French</td>
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<td>CAN FREN 10</td>
<td>FR 4, Intermediate French</td>
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<tr>
<td>CAN FREN SEQ A</td>
<td>FR 1 + 2, Elementary French</td>
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<tr>
<td>CAN FREN SEQ B</td>
<td>FR 3 + 4, Intermediate French</td>
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<tr>
<td>TCSU GEOG 110</td>
<td>CAN GEOG 2</td>
<td>GEOG 4, Physical Geography</td>
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<td>TCSU GEOG 120</td>
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<td>GEOG 10, Cultural Geography of North America</td>
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<td>CAN GEOL 2</td>
<td>GEOL 1, Physical Geology</td>
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<td>CAN GEOL 4</td>
<td>GEOL 2, Historical Geology</td>
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<td>CAN GERM SEQ A</td>
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<td>CAN HIST 2</td>
<td>HIST 5, Early Western Civilizations</td>
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<tr>
<td>CAN HIST 4</td>
<td>HIST 6, Modern Western Civilizations</td>
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<td>CAN HIST 8</td>
<td>HIST 17, History of the United States</td>
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<td>CAN HIST 10</td>
<td>HIST 18, History of the United States</td>
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<tr>
<td>CAN HIST 14</td>
<td>HIST 1, World History: Pre-Civilization to 1500</td>
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<td>CAN HIST 16</td>
<td>HIST 2, World History: 1500 to Present</td>
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<td>CAN HIST SEQ B</td>
<td>HIST 17 + 18, History of the United States</td>
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<td>TCSU HIST SEQ C</td>
<td>CAN HIST SEQ B</td>
<td>HIST 1 + 2, World History: Pre-Civilization to 1500 and 1500 to Present</td>
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<td>CAN JOUR 2</td>
<td>JOUR 10, News Writing</td>
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<td>CAN JOUR 4</td>
<td>COMSTD 12, Mass Communication and Society</td>
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<td>CAN MATH 8</td>
<td>MATH 31, Plane Trigonometry</td>
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<td>CAN MATH 10</td>
<td>MATH 25, College Algebra</td>
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<td>CAN MATH 16</td>
<td>MATH 61, Pre-Calculus</td>
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<td>TCSU MATH 210</td>
<td>CAN MATH 18</td>
<td>MATH 65A, Calculus I</td>
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<td>TCSU MATH 220</td>
<td>CAN MATH 20</td>
<td>MATH 65B, Calculus II</td>
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<td>TCSU MATH 230</td>
<td>CAN MATH 22</td>
<td>MATH 75, Calculus III</td>
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<td>TCSU MATH 240</td>
<td>CAN MATH 24</td>
<td>MATH 85, Differential Equations</td>
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<td>TCSU MATH SEQ A</td>
<td>CAN MATH SEQ B</td>
<td>MATH 65A + 65B, Calculus I and II</td>
</tr>
<tr>
<td>TCSU MATH SEQ B</td>
<td>CAN MATH SEQ C</td>
<td>MATH 65A + 65B + 75, Calculus I, II, and III</td>
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<td>TCSU NUTR 110</td>
<td>CAN FCS 2</td>
<td>NF-5, Nutrition for Life</td>
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<tr>
<td>TCSU PHIL 120</td>
<td>CAN PHIL 2</td>
<td>PHIL 70, Introduction to Philosophy</td>
</tr>
<tr>
<td>TCSU PHIL 120</td>
<td>CAN PHIL 4</td>
<td>PHIL 72, Seminar in Ethics</td>
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<tr>
<td>TCSU PHYS 110</td>
<td>CAN PHYS 8</td>
<td>PHYS 45, Physics for Scientists and Engineers I</td>
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<tr>
<td>TCSU PHYS 120</td>
<td>CAN PHYS 12</td>
<td>PHYS 46, Physics for Scientists and Engineers II</td>
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<td>TCSU PHYS 150</td>
<td>CAN PHYS 2</td>
<td>PHYS 20A, College Physics I</td>
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<td></td>
<td>CAN PHYS 4</td>
<td>PHYS 20B, College Physics II</td>
</tr>
<tr>
<td>TCSU PHYS SEQ A</td>
<td>CAN PHYS 8 + 12</td>
<td>PHYS 45 + 46, Physics for Scientists and Engineers I and II</td>
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<td></td>
<td>CAN PHYS 14</td>
<td>PHYS 47, Physics for Scientists and Engineers III</td>
</tr>
<tr>
<td></td>
<td>CAN PHYS SEQ A</td>
<td>PHYS 20A + 20B College Physics I and II</td>
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<tr>
<td></td>
<td>CAN PHYS SEQ B</td>
<td>PHYS 45 + 46 + 47, Physics for Scientists and Engineers I, II, and III</td>
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<tr>
<td>TCSU POLS 110</td>
<td>CAN GOVT 2</td>
<td>PS 1, American Politics</td>
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<tr>
<td>TCSU PSY 110</td>
<td>CAN PSY 2</td>
<td>PSYCH 1, Introduction to Psychology</td>
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<td>CAN PSY 8</td>
<td>PSYCH 80, Research Methods in Psychology</td>
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<td>TCSU SOC 110</td>
<td>CAN SOC 2</td>
<td>SOC 10, Introduction to Sociology</td>
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<tr>
<td>TCSU SOC 120</td>
<td>CAN SOC 4</td>
<td>SOC 70, Social Problems</td>
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<td></td>
<td>CAN SPAN 2</td>
<td>SPAN 1, Elementary Spanish</td>
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<td></td>
<td>CAN SPAN 4</td>
<td>SPAN 2, Elementary Spanish</td>
</tr>
<tr>
<td>TCSU SPAN 130</td>
<td>CAN SPAN 8</td>
<td>SPAN 3, Intermediate Spanish</td>
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<tr>
<td></td>
<td>CAN SPAN SEQ A</td>
<td>SPAN 1 + 2, Elementary Spanish</td>
</tr>
<tr>
<td>TCSU STAT 110</td>
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<td>STAT 10, Elementary Statistics</td>
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<tr>
<td>TCSU STAT 120</td>
<td>CAN PSY 6</td>
<td>SCSCI 10, Statistics for Social Science</td>
</tr>
</tbody>
</table>
Courses listed in this catalog apply to the Fall 2007, Spring 2008, and Summer 2008 terms. Courses are ordered numerically within alphabetically arranged subject areas.

The bolded first line(s) indicates the official course number, a descriptive title, and the number of units each term. The next line is a statement of the number of class and laboratory hours per term. Next are lines indicating limitations on enrollment, prerequisites, corequisites, advisories, transfer credit, and CAN numbers (when applicable). A course description paragraph follows.

Courses that are divided into parts (semesters) marked as A, B, C, or D are usually taken in that sequence. In such sequences, A is usually a prerequisite to B, etc. Alpha suffixes A, B, C, etc. may also be used to designate variable unit value.

## Course Numbering System

1-99
College transfer and baccalaureate degree level courses are 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 should consult a counselor for details on the limitations.

400-499
Associate degree level courses may be applied to the Associate in Arts and Associate in Science degrees, as well as to vocational certificates.

500-599
Not degree applicable remedial and college preparatory 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 may be graded or credit/no credit. If graded, the grades are not included in students’ degree applicable grade point average computation.

600-699
Non-credit courses provide remedial, developmental, occupational, and general education opportunities. They are not graded, do not earn unit credit, and are not considered part of collegiate-level study.

### Credit by Examination (Cx)
Courses designated [Cx] may be challenged for credit by examination.

### Requisites
Some courses place limitations on enrollment. These limitations may require successful completion of other courses, concurrent enrollment in other courses, specified assessment scores for English, math, and/or reading skills, performance criteria, or health and safety conditions. Students not meeting the conditions imposed by these requirements may be unable to register for or may be dropped from any class requiring same. See the “Limitations on Enrollment” section elsewhere in this catalog for more information.

## 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. A complete list of Chaffey courses meeting CAN requirements may be found elsewhere in this document.

### Taxonomy of Program Numbers (TOP)
The TOP number, as assigned by the 6th edition of the Taxonomy of Programs, is listed at the end of each course description. This number is included for Chancellor Office reference and program planning/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.

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**ACCOUNTING (ACCT)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 100</td>
<td>Principles of Accounting</td>
<td>Principles of accounting, financial statements, cash and financial statement analysis. May be repeated for credit.</td>
</tr>
<tr>
<td>ACCT 110</td>
<td>Accounting Information Systems</td>
<td>Introduction to the use of accounting information systems in business decision making.</td>
</tr>
<tr>
<td>ACCT 120</td>
<td>Basic Financial Accounting</td>
<td>Principles of financial accounting, including financial statement analysis.</td>
</tr>
<tr>
<td>ACCT 125</td>
<td>Managerial Accounting</td>
<td>Emphasis on managerial decision making.</td>
</tr>
<tr>
<td>ACCT 200</td>
<td>Intermediate Accounting</td>
<td>Introduction to intermediate accounting concepts and techniques.</td>
</tr>
<tr>
<td>ACCT 210</td>
<td>Accounting for Business</td>
<td>Accounting for business decision making.</td>
</tr>
<tr>
<td>ACCT 220</td>
<td>Cost Accounting</td>
<td>Principles and applications of cost accounting.</td>
</tr>
<tr>
<td>ACCT 230</td>
<td>Advanced Accounting</td>
<td>Advanced topics in accounting, including cost accounting, financial accounting, and taxation.</td>
</tr>
</tbody>
</table>

**ACCOUNTING AND FINANCIAL SERVICES (ACCS)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 300</td>
<td>Principles of Accounting</td>
<td>Principles of accounting, financial statements, cash and financial statement analysis. May be repeated for credit.</td>
</tr>
<tr>
<td>ACCT 310</td>
<td>Professional Accounting</td>
<td>Accounting principles and practices for professionals.</td>
</tr>
<tr>
<td>ACCT 320</td>
<td>Financial Accounting</td>
<td>Principles of financial accounting, including financial statement analysis.</td>
</tr>
<tr>
<td>ACCT 330</td>
<td>Managerial Accounting</td>
<td>Emphasis on managerial decision making.</td>
</tr>
<tr>
<td>ACCT 340</td>
<td>Cost Accounting</td>
<td>Principles and applications of cost accounting.</td>
</tr>
<tr>
<td>ACCT 350</td>
<td>Advanced Accounting</td>
<td>Advanced topics in accounting, including cost accounting, financial accounting, and taxation.</td>
</tr>
</tbody>
</table>

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**GENERAL CATALOG INFORMATION**

Chaffey College is a member of the California Community College System and is certified by the California Postsecondary Education Commission. The college offers a variety of degree and certificate programs, as well as non-degree courses. For more information, please visit the college’s website or contact the Office of Admissions and Records.

**FINANCIAL AID**

Chaffey College offers various types of financial aid, including grants, loans, and scholarships. Students are encouraged to apply for aid as soon as possible. For more information, please visit the Financial Aid Office or contact the college’s website.

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**SPECIAL TOPICS LABORATORY (SCL)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCL 100</td>
<td>Special Topics</td>
<td>Special topics in a variety of subjects.</td>
</tr>
</tbody>
</table>

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**INTERNATIONAL STUDENT SERVICES (ISS)**

Chaffey College provides support and services to international students, including visa advising, cultural activities, and academic support. For more information, please contact the International Student Services Office.

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**STUDENT SERVICES**

Chaffey College offers a range of student services, including academic advising, counseling, and career planning. Students are encouraged to visit the various student services offices for support and guidance.

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**LIBRARY SERVICES**

The Chaffey College Library offers a comprehensive collection of print and electronic resources, as well as research support and instructional services. Visit the library’s website for more information.

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**SCHEDULE OF CLASSES**

The Schedule of Classes is available online and contains information about courses, instructors, meeting times, and locations. For more information, please visit the college’s website.

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**TRANSCRIPTS**

Chaffey College provides official transcripts to students who complete courses at the college. Transcripts can be requested online through the college’s website or in person at the Office of Admissions and Records.

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**CHAFFEY COLLEGE**

Chaffey College is a public community college in Pomona, California. The college offers a variety of programs in fields such as business, health sciences, and technology. For more information, please visit the college’s website or contact the admissions office.

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**ACKNOWLEDGMENTS**

Chaffey College acknowledges the support and contributions of its faculty, staff, and students. The college is committed to providing a high-quality education and fostering a diverse and inclusive learning community.

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**INDEX**

A list of courses is provided in the index, allowing students to quickly find information about specific courses. The index is available in the print catalog and online. For more information, please visit the college’s website.
**ACCOUNTING (ACCTG)**

**1A Principles of Accounting I (4)**
Class hours: 64-72 lecture.
Advisory: Completion of or concurrent enrollment in Computer Information Systems 1.
Transfer Credit: CSU: UC.
(CAN BUS 2) (CAN BUS SEQ A = ACCTG1A + 1B)
Accounting meets the information needs of various users by developing and communicating financial information that is useful for decision-making. Course material covered includes the accounting environment; basic financial statements; accounting cycle; and operating, investing, and financing activities.

**1B Principles of Accounting II (4)**
Class hours: 64-72 lecture.
Prerequisite: Accounting 1A.
Advisory: Computer Information Systems 1 or experience using spreadsheets.
Transfer Credit: CSU: UC.
(CANBUS 4) (CAN BUS SEQ A = ACCTG1A + 1B)
Accounting meets the information needs of managers by developing and communicating information that is useful for management decision-making. Course material covered includes foundations of management accounting, planning, control, performance evaluation, and other dimensions of decision making, plus statements of cash flows, financial analysis, and stock and bond investments.

**70 Cost Accounting (3)**
Class hours: 48-54 lecture.
Prerequisite: Accounting 1B.
Transfer Credit: CSU.
Fundamentals of cost accounting including planning, controlling, and product costing.

**90A Accounting Honors Seminar (1)**
Class hours: 16-18 lecture.
Transfer Credit: CSU: UC credit limitations.
Honors component for Accounting. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken 4 times with change in topic emphasis.

**430 Accounting for Governmental and Not-for-Profit Organizations (4)**
Class hours: 64-72 lecture.
Prerequisite: Accounting 1A.
Introduction to the fundamentals of governmental and not-for-profit accounting. Emphasis on accounting for the various fund types and restrictions relevant to government and not-for-profit agencies. Both theoretical and practical aspects are explored.

**435 Payroll Accounting (3)**
Class hours: 48-54 lecture.
Federal and state payroll laws and their effect on payroll records and required government reports, using, in part, the microcomputer.

**450 Federal Tax Principles I (3)**
Class hours: 48-54 lecture.
Federal income tax principles relating to individuals and, to a lesser degree, to corporations.

**459 Simplified Commercial Accounting Software (1.5)**
Class hours: 24-27 lecture.
Basic concepts and techniques for using simplified commercial accounting software as a powerful planning tool for small businesses. Develop an understanding of the accounting process and how to enter and process data, create reports and interpret the results for effective business planning. May be taken twice.

**460 Commercial Accounting Software (3)**
Class hours: 48-54 lecture.
Advisory: Completion of Accounting 1A.
Basic concepts and techniques for using commercial accounting software designed for microcomputers in businesses grossing less than $500,000 annually. How to enter and process data, create reports and interpret the information. May be taken twice.

**461 Advanced Commercial Accounting Software (3)**
Class hours: 48-54 lecture.
Advisory: Completion of Accounting 1A.
Basic concepts and techniques for using commercial accounting software designed for microcomputers in businesses grossing $500,000 or more annually. How to enter and process data, prepare financial reports, and interpret financial information. May be taken twice.

**462 Advanced Techniques in Accounting Software Programs (1.5)**
Class hours: 24-27 lecture.
Advisory: Completion of Accounting 459 or 460, or experience in accounting software including spreadsheets.
Advanced concepts and techniques for using simplified accounting software, in conjunction with other business software programs, to generate a variety of technical reports, tables, and graphs. How to export data and interpret the resultant documents. May be taken twice.

**480 Bookkeeping I (3) [CZ]**
Class hours: 48-54 lecture.
Introduction to the bookkeeping of a small business, with emphasis on service-oriented sole proprietorships. Skills and tasks covered include journalizing business transactions, maintaining a general ledger system, and preparing and analyzing financial statements. Course is suitable preparation for Accounting 481 and for students interested in basic accounting for a small business.

**481 Bookkeeping II (3)**
Class hours: 48-54 lecture.
Prerequisite: Accounting 480.
Continuation of bookkeeping for a small service business, with an introduction to bookkeeping for a merchandising enterprise and accounting for partnerships and corporations. Course culminates in a comprehensive review of full-charge bookkeeping practices, and is suitable preparation for Accounting 1A or the Certified Bookkeeper exam, and for students interested in small business accounting.

**492A-H Special Topics: Accounting (1.5-6)**
Class hours: 16-18 hours/term lecture for each unit of credit.
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.

**492LA-H Special Topics Laboratory: Accounting (1.5-6)**
Class hours: 48-54 hours/term laboratory for each unit of credit.
Selected laboratory topics for students who desire 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.

**496A,B,C,D Internships in Accounting (1, 2, 3, or 4)**
Class hours: 60 hours/term (paid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Corequisite: Concurrent enrollment in any Chaffey College course.
Limitation on Enrollment: Consent of the Accounting Program Coordinator is required.
Advisory: Completion of Accounting 459 or 460.
Supervised internship in cooperation with private or public sector employers. Designed to apply knowledge and learn new skills, directly related to the student’s program of study, outside of the normal classroom environment. Placement is arranged through the instructor. Participation requirements may vary with the job setting. May be taken four times, for a maximum of six units credit.

**ACCOUNTING AND FINANCIAL SERVICES (ACCTGS)**

**440 Introduction to Financial Planning (3)**
Class hours: 48-54 lecture.
Introduction to the concepts of the personal financial planning process, including budgeting, cash flow, debt considerations, the economic environment, wealth accumulation, and retirement concerns. Examination of regulation and licensing of investment advisors within the financial planning profession.

**442 Fundamentals of Finance and Investing (3)**
Class hours: 48-54 lecture.
Introduction to finance theory and its application to investment decisions involving stocks, bonds, mutual funds, government securities, options, and real estate. Topics include asset allocation principles, modern portfolio theory, investment tools and strategies, diversification, and tax efficient investing.

**450 Tax Preparation for Small Business (1.5)**
Class hours: 24-27 lecture.
Tax consequences of business decisions from the small business owners’ perspective. Topics include applicable U.S. and California tax laws, deductions, depreciation, medical and insurance plans, withholding, payroll, and income tax liabilities, and retirement plan options. May be taken four times.

**453 U.S. and California Income Tax Preparation (4)**
Class hours: 64-72 lecture.
U.S. and California income tax principles and tax return preparation as it relates to individuals, sole proprietorships, and other business entities. This course is certified by the California Tax Education Council as fulfilling the 60-hour qualifying education requirement imposed by the State of California for becoming a Registered Tax Preparer.

**454 Introduction to the Taxation of Corporations and Partnerships (4)**
Class hours: 64-72 lecture.
Advisory: Completion of Accounting and Financial Services 453, basic computer skills, and some experience with spreadsheets.
Introduction to the tax issues pertinent to corporations, partnerships, estates, and trusts. Emphasis on the tax code and relevant regulations, as well as the transactions common to these types of entities. Helps prepare students for the Enrolled Agents exam.
### Administration of Justice (AJ)

While many of the Administration of Justice courses may be challenged for Credit-by-Examination, a limitation to the number of challenges may apply. Contact the office of the Dean of Business and Applied Technology for more information.

#### 1 Administration of Justice System (3) [Cx]
Class hours: 48-54 lecture.
**Transfer credit:** CSU; UC. **(CAN AJ 2)**

The history and philosophy of the administration of justice in America. A recapitulation of the system: identification of the various subsystems; role expectations and their interrelationships; theories of crime, punishment, and rehabilitation; ethics; education; and training for professionalism within the system.

**2105.00**

#### 2 Concepts of Criminal Law (3) [Cx]
Class hours: 48-54 lecture.
**Transfer credit:** CSU; UC. **(CAN AJ 4)**

Historical development, philosophy of law and constitutional provisions, definitions, classification of crime and the application to the system of administration of justice. Legal research, study of case law, methodology, and concepts of law as a social force.

**2105.00**

#### 3 Principles and Procedures of the Justice System (3) [Cx]
Class hours: 48-54 lecture.
**Transfer credit:** CSU.

The role and responsibilities of law enforcement and judicial corrections as segments within the system of administrative justice. A past, present, and future exposure to each subsystem procedure, from initial entry to final disposition, and the relationship each segment maintains with its system members.

**2105.00**

#### 4 Community Relations (3) [Cx]
Class hours: 48-54 lecture.
**Transfer credit:** CSU; UC.

Exploration of the roles of administration of justice practitioners and their agencies. Interrelationships and role expectations among the various agencies and the public. Primary emphasis on the processional image of the system of administrative justice and the development of positive relationships between members of the system and the public they serve.

**2105.00**

#### 5 Legal Aspects of Evidence (3) [Cx]
Class hours: 48-54 lecture.
**Transfer credit:** CSU.

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

**2105.00**

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### Aeronautics (AERO)

#### 10 Materials, Processes and Inspections (4.5) [Cx]
Class hours: 72-81 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.

**0950.00**

#### 11 Aeronautics and FAA Regulations (4.5) [Cx]
Class hours: 72-81 lecture.
**Corequisite:** Aeronautics 13AB, 14ABCD.
**Transfer Credit:** CSU.

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.

**0950.00**

#### 13A_B General Aeronautics Laboratory (1.5-1.5)
Class hours: 72-81 laboratory.
**Corequisite:** Aeronautics 10 or 11 (may be taken previously).
**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, blue-print reading, aircraft servicing, electricity and mathematics. May be taken twice.

**0950.00**
Course Descriptions

14A,B,C,D General Aeronautics Laboratory
(1-1-1-1)
Class hours: 48-54 laboratory.
Corequisite: 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 twice. 0950.00

20 Power Plant Theory and Maintenance (4.5) [Cx]
Class hours: 72-81 lecture.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Power plant theory, fundamentals, construction, maintenance, inspection, overhaul and operation of reciprocating and turbojet aircraft engines. Related training for the FAA powerplant maintenance technician’s license. 0950.20

21 Powerplant Systems and Components I (4.5)[Cx]
Class hours: 72-81 lecture.
Prerequisite: Aeronautics 10 and 11.
Transfer Credit: CSU.
Reciprocating and turbine aircraft engine instrument, electrical, lubrication, and ignition systems and components. Related training for the FAA powerplant maintenance technician’s license. 0950.20

22 Powerplant Systems and Components II (4.5 ) [Cx]
Class hours: 72-81 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. 0950.20

23A,B,C Powerplant Aeronautics Laboratory
(1-1-1-1-1-1-1)
Class hours: 72-81 lecture.
Prerequisite: Aeronautics 10 or 11.
Corequisite: Aeronautics 20, 21, or 22.
Transfer Credit: CSU.
Theory, fundamentals, construction, maintenance, inspection, overhaul and operation of reciprocating and turbojet aircraft engines. Powerplant systems and components inspection and overhaul. Related training for the FAA powerplant maintenance technicians license. May be taken twice. 0950.20

24A,B,C,D,E,F Power Plant Aeronautics Laboratory
(1-1-1-1-1-1)
Class hours: 48-54 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 turbojet aircraft engines. Powerplant systems and components inspection and overhaul. Related training for the FAA powerplant maintenance technician’s license. May be taken twice. 0950.20

31 Airframe Primary Systems (4.5) [Cx]
Class hours: 72-81 lecture.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.EF.
Transfer Credit: CSU.
Aircraft landing gear, hydraulic, pneumatic, fuel, and electrical system inspection and repair methods. Related training for FAA airframe maintenance technician’s license. 0950.10

32 Airframe Auxiliary Systems (4.5) [Cx]
Class hours: 72-81 lecture.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 33ABC or 34ABCD.EF.
Transfer Credit: CSU.
Aircraft cabin atmosphere, instrument, communication, navigation, position, warning, ice and rain control, and fire protection systems. Related training for FAA airframe maintenance technician’s license. 0950.10

33A,B,C Airframe Laboratory (1.5-1-1-1-1-1) [Cx]
Class hours: 72-81 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 30, 31, or 32.
Transfer Credit: CSU.
Aircraft structure and materials. Related training for FAA airframe maintenance technicians license. 0950.10

34A,B,C,D,E,F Airframe Laboratory (1-1-1-1-1-1)
Class hours: 48-54 laboratory.
Prerequisite: Aeronautics 10 and 11.
Corequisite: Aeronautics 30, 31, or 32.
Transfer Credit: CSU.
Aircraft structure and materials. Related training for FAA airframe maintenance technicians license. 0950.10

492A-H Special Topics: Aeronautics (5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
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-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course. 0950.10

492A-LH Special Topics Laboratory: Aeronautics (5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Selected laboratory topics for students who desire in-depth exploration in specialized areas of airframe and powerplant. May be taken four times. 0950.00

501 Aeronautics Laboratory Projects (1)
Class hours: 48-54 self-paced laboratory.
For students needing additional coursework to complete the number of lab projects and hours required by the Federal Aviation Administration (Part 147 of the Federal Aviation Regulations) for program certification. Topics include: safety, environmental regulations and guidelines as applied to individual projects, tool and equipment applications, lab procedures, required documentation, airworthiness standards, and project evaluation. May be taken four times. 0950.00

AMERICAN SIGN LANGUAGE (ASL)

1 Elementary American Sign Language (4)
Class hours: 64-72 lecture.
Transfer Credit: CSU; UC.
Study of American Sign Language (ASL) including appreciation of the deaf culture. Introduction to current and historical aspects of the deaf culture, survival skills of the hearing-impaired including special schools, equipment, and lip-reading, parenting techniques, and challenges of living in a hearing world. Skills focus on the basic principles of phrasing, vocabulary, sentence patterns, manual counting and spelling, semantics, and the development of expressive and receptive abilities. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. This course corresponds to the first year of high school ASL. 0850.00

2 Elementary American Sign Language (4)
Class hours: 64-72 lecture.
Prerequisite: American Sign Language 1 or one year of high school American Sign Language.
Transfer Credit: CSU; UC.
Continued systematic study of the structure, vocabulary, and conversational strategies of American Sign Language (ASL). Skills focus on the basic principles of phrasing, sentence patterns, manual counting and spelling, semantics, and the development of expressive and receptive abilities. Continued study of the American Deaf Culture history, community and language. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 0850.00

3 Intermediate American Sign Language (4)
Class hours: 64-72 lecture.
Prerequisite: American Sign Language 2 or two years of high school American Sign Language.
Transfer Credit: CSU; UC.
Continued study and review of the structure, vocabulary, and conversational strategies of American Sign Language (ASL). Review of ASL grammar, with special emphasis on idiomatic constructions. Continued study of the American Deaf culture history, community, and language, thereby promoting an understanding of the wide variety of cultural issues concerning the Deaf community. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 0850.00

4 Intermediate American Sign Language (4)
Class hours: 64-72 lecture.
Prerequisite: American Sign Language 3.
Transfer Credit: CSU.
Continued study and review of the structure, vocabulary, grammar, and conversational strategies of American Sign Language (ASL). Further development and refinement of ASL fluency in both productive and receptive skills, including mastery of ASL sentence structures. Appreciation and application of Deaf cultural norms, values, and behaviors. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. The supplemental instruction provides for research into Deaf culture, events, and reinforcement of receptive and productive skills through video, computer programs, and signing practice. 0850.00
16 American Deaf Culture (3)  
(Formerly American Sign Language 408)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC credit pending.  
An introduction to American Deaf culture, history, community, and language. Deaf cultural values, characteristics, norms, minority issues, and community dynamics are explored. Societal and individual perceptions of self in relation to group identity are examined through articles, books, interviews, videos, and community interaction. Students engage in community service activities in order to experience Deaf culture first-hand.  
0850.00

ANTHROPOLOGY (ANTHRO)  
(SEE ALSO SOCIAL SCIENCES)

1 Introduction to Physical Anthropology (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN ANTH 2)  
Study of the biological features of humankind, utilizing scientific and comparative methods to help understand variation and adaptation among humans through the exploration of genetics, primatology, and the human fossil record.  
2202.00

1L Laboratory for Physical Anthropology (1)  
Class hours: 48-54 laboratory plus one Saturday field trip.  
Corequisite: Anthropology 1  
(may be taken previously).  
Transfer Credit: CSU; UC.  
Optional laboratory experience coordinated with Anthropology 1. Comparative study of both human and non-human primates, human variation, evolution, genetics, forensic anthropology, and the primate fossil record.  
2202.00

2 Introduction to Archaeology (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN ANTH 6)  
Survey of archaeology, including the use of basic methods of investigation, prehistoric and historic records, and related materials to help reconstruct past behaviors. Major cultural developments are explored, including the development of stone tools, fire use, shelters, agriculture, and the formation of cities and states.  
2202.20

3 Introduction to Social and Cultural Anthropology (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN ANTH 4)  
The nature of culture and the range of cultural phenomena, including material culture, social organization, religion, language, and other topics. The course emphasizes the ways of living that different societies have developed to adapt to their environment. The comparative method is stressed. May be offered as an Honors course.  
2202.00

92A-H Special Topics: Anthropology (.5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
Special-interest course of varying length for students who wish further exploration in specific areas of anthropology. 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.

ARABIC (ARABIC)

1 Elementary Arabic (4)  
Class hours: 64-72 lecture.  
Transfer Credit: CSU; UC credit pending.  
Introduction to the four basic language skills in functional modern Arabic – aural, oral, reading, and writing. Students learn the basics of Arabic script and pronunciation while building a foundational vocabulary. Arabic cultural norms, values, and customs are explored and serve as a basis for additional skill-building practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required for reinforcement of language skills. Corresponds to the first year of high school Arabic. 1112.00

ART (ART)

1 Contemporary Art: 1950 - Present (3) [Cx]  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN ART 1)  
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.  
1002.00

11 Asian Art History (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Survey of the art, architecture, religion, and history of south and southeast Asia, China, Korea, and Japan. Art styles and characteristics unique to each culture and their function within the ideology of that society. Impact of changing art history theories, the critical problem of looting of historical sites, and the influence of these ancient cultures on both modern and world art.  
1001.00

12 Fundamentals of Design in Three Dimensions (4)  
Class hours: 48-54 lecture; 48-54 laboratory.  
Transfer Credit: CSU; UC.  
(CAN ART 7)  
Introduction to contemporary media, artists, and visual technologies in the arts.  
1001.00

6 Women Artists in History (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Architecture, sculpture, and painting by women artists from the Middle Ages to the present; how the iconography and style of art by women reflects and affects the philosophy, religion, values, and concerns of the cultures and historical period. May be offered as an Honors course.  
1001.00
16 Introduction to Painting (3)
Class hours: 24-27 lecture; 72-81 laboratory.
Advisory: Completion of Art 10 and/or Art 14.
Transfer Credit: CSU: UC.
Advisory: Completion of 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. 1002.10

18 Introduction to Ceramics (3)
Class hours: 24-27 lecture; 72-81 laboratory.
Transfer Credit: CSU: UC.
(CAN ART 6)
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. 1002.30

30 Figure Drawing (3)
Class hours: 24-27 lecture; 72-81 laboratory.
Transfer Credit: CSU: UC.
Advisory: Completion of Art 10.
Corequisite: Art 18 or 20 (may be taken previously)
Transfer Credit: CSU: UC.
Open laboratory for current ceramics students to continue working with clay and glazes, to seek markets for ceramic art and ceramic skills, and/or to transfer to an upper-division course. May be taken twice. 1002.30

32 Intermediate Drawing (4)
Class hours: 24-27 lecture; 72-81 laboratory.
Transfer Credit: CSU: UC.
Prerequisite: Art 14.
Advisory: Completion of Art 10.
Transfer Credit: CSU: UC.
Creating drawings using significant works of art as inspiration. The visual expression of personal and social themes. Research, writings, discussions, and critiques encourage personal creative growth in a studio environment. May be taken twice. 1002.10

34 Intermediate Painting (4)
Class hours: 24-27 lecture; 48-54 laboratory.
Prerequisite: Art 16.
Advisory: Completion of Art 10.
Transfer Credit: CSU: UC.
Prerequisite: Art 18.
Advisory: Completion of Art 12.
Transfer Credit: CSU: UC.
Performance of tasks and procedures designed to further the student's ability to understand and manipulate clay and glazes and types of kiln firings, emphasizing creation of beautiful, utilitarian, well-made objects. 1002.30

40 Advanced Ceramics (3)
Class hours: 24-27 lecture; 72-81 laboratory.
Prerequisite: Art 35.
Advisory: Completion of Art 12.
Transfer Credit: CSU: UC.
Advanced use of the potter's wheel and off-wheel construction methods. Designed to prepare students to continue working with clay and glazes, to seek markets for ceramic art and ceramic skills, and/or to transfer to an upper-division course. May be taken twice. 1002.30

44 Mixed-Media Studio and Theory (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Advisory: Completion of a course in art or photography.
Transfer Credit: CSU: UC.
Exploration of unconventional uses of materials and interdisciplinary attitudes in 20th century art, the evolution of collage, assemblage, installation works, site specific, video, and performance artworks. Emphasis will be on studio projects and processes utilizing a variety of contemporary mixed-media and multi-media approaches. May be taken twice. 0614.10

60 Graphic Design I (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Completion of a course in art or photography.
Transfer Credit: CSU: UC.
Introduction to the essential principles of digital imaging and design. Overview including historical aspects of the fields of art and design in relation to the rise of digital media and the principles of portfolio development. Project-based experience, with current hardware and software used for design and printing of contemporary visual communications. 0614.60

68C Computer Graphics Laboratory (1, 2)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU.
Course appropriate software).
Advisory: Completion of any art or photography course.
Transfer Credit: CSU.
Use of the computer graphics lab for class related and/or independent projects. May be taken four times, regardless of the unit combination. 0614.60

70 Museum and Gallery Field Study (1)
(Also available as Humanities 70 and Photography 70)
Class hours: 16-18 lecture.
Advisory: Completion of any art or photography course.
Transfer Credit: CSU.
Issues in contemporary art, photography, art history, and photo history are investigated through direct observation of museum and gallery exhibitions. Readings, research, and class discussion provide the foundation for student understanding and analysis of art (including drawing, painting, photography, mixed media, sculpture, installation, and new media) in a museum setting. Field trips are a required part of this course. May be taken four times. 1001.00

73 Typography and Layout (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Art 67.
Advisory: Completion of any art or photography course.
Transfer Credit: CSU.
Introduction to the practice, theory, history, and analysis of layout and typography, and the study of formal elements of typographic composition. Projects are directed toward both print media (poster, package, and magazine design) and computer screen based projects (web design, motion graphics for TV, business presentations, interactive kiosks, type and layout for CD-ROM). May be taken four times. 1030.00

82 Introduction to Multimedia (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Advisory: Completion of Art 10 and basic keyboarding skills are recommended.
Transfer Credit: CSU.
Introduction to digital media production for interactive media; the Web, CD-ROM, DVD-ROM, and interactive kiosks. Emphasis on developing visual language through contemporary tools and techniques for multimedia authoring with graphic and interactive software. Includes introduction to historical aspects and analysis of interactive applications. May be taken three times. 0614.10

83 Internet and Web Design (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Art 67.
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software).
Transfer Credit: CSU.
Principles of Web Site production and design using HTML and streaming video software tools, such as Dreamweaver and Flash. Topics include: visual content design, movie basics, streaming audio and video, text/titles, animation, toolbar functions, libraries, buttons, tweening, masks, sound publishing, editing, interface design, and integration of Web software tools. May be taken four times. 0614.30
Course Descriptions

89 Student Invitational Exhibition (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Transfer Credit: CSU. 
Limitation on Enrollment: Student must pass faculty review of creative project proposal and portfolio in December for the following Spring term course and exhibition. 
Honors course for highly motivated studio art and photography students who meet portfolio requirements. In-depth independent research involving critical evaluation of concepts and ideas in the context of contemporary artistic expression, as well as rigorous exploration of media and techniques. In conjunction with the Wignall Museum Gallery staff and art and photography faculty, student artists cooperatively undertake all phases of the complex task of mounting a professional quality exhibition of their artworks. Interested students should contact an art or photography faculty member no later than early November. 
1001.00

90A, B, C Art Honors Seminar (1)
Class hours: 16-18 lecture. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
Honors component for Art. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 
1001.00

92A-H Special Topics: Art (1-5-6)
Class hours: 16-18 hours/term lecture for each unit of credit. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
Special-interest course of varying length for students who wish further exploration in specific areas of art. Topics will be determined by the individual instructor and may cover the range of arts research in all forms of creative endeavor. This course, in combination with Art 92L, 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. 
1001.00

92LA-H Special Topics Laboratory: Studio Art (1-5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
Special-interest course of varying length for students who wish further exploration in specific areas of studio art. Topics will be determined by the instructor and may cover the range of arts research in all forms of creative endeavor. In combination with Art 92A, may be taken 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. 
1001.00

98A, B, C Independent Study: Art (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a paper on a creative 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 taken three times, regardless of the unit combination. 
1001.00

400 Fundamentals of Animation (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Art 92. 
Introduction to the art and design of 2D animation, the principles and practice of animation. Provides students a traditional education in the fundamentals of animation; animation terminology, tools, techniques, composition, and color in motion; and an overview of digital techniques. May be taken three times. 
0614.40

407 History of Design (3)
Class hours: 48-54 lecture. 
Study of visual communication integrating typography and image. History of graphic design from the invention of writing to the present electronic age. Relationships between art movements, social settings, and graphic communications styles. Emphasis on Western design, with exploration of non-European cultures. 
1030.00

410 Ceramic Glazes (3)
Class hours: 32-36 lecture; 72-81 laboratory. 
Prerequisite: Art 18. 
Introduction to materials, equipment, and processes used in making and firing ceramic glazes. May be taken four times. 
1002.30

412 Firing Techniques (3)
Class hours: 24-27 lecture; 72-81 laboratory. 
Prerequisite: Art 18. 
Investigation of concepts and technologies related to firing of raku, low fire, salt, and high fire. Personal growth through individual experimentation is encouraged. May be taken four times. 
1002.30

433 Illustration Skills for Animators (3)
Class hours: 24-27 lecture; 72-81 laboratory. 
Prerequisite: Art 14 and 30. 
Introduction to principles of image animation utilizing traditional media in preparation for digital or computer based media. Projects involve character development techniques, storyboards, and the study of movement, expression, weight, and style. May be taken twice. 
0614.40

468B,C Art Digital Laboratory (1, 2)
Class hours: 48-54 hours/term laboratory for each unit of credit. 
Corequisite: Any course requiring the use of the digital media lab. 
Use of the computer graphics lab for class related and/or independent projects. May be taken four times, regardless of the unit combination. 
0614.60

474 Identity System Design (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Art 67. 
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software). 
A visual identity program provides an integrated typographic and graphic system for identifying an organization in all print and motion graphic media. Explores the formal and conceptual attributes that distinguish effective visual identity systems. Study of the steps involved in the development of a business’s visual identity, from the initial meetings with the client, through research methodology, visual concept generation, final presentations, and identity applications. May be taken three times. 
1030.00

476 Sound for Multimedia Digital Productions (3)
Class hours: 24-27 lecture; 72-81 laboratory. 
Prerequisite: Art 67. 
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software). 
Examination of a range of technical issues including signal level, sample rate, and computer sound peripherals, as well as a range of aesthetic issues including sound design, effects, and mixing. Experimentation with different sound generation techniques, introduction to MIDI, digital sound editing, mixing, effects, and equalization. Utilization of a range of computer audio programs. Projects directed toward integrating sound into video and Web, sound, editing, and creation software. May be taken three times. 
0614.40

478 Illustration on the Computer (3)
Class hours: 32-36 lecture; 48-54 laboratory. 
Prerequisite: Art 67. 
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software). 
Advisory: Completion of Art 62A or 433. 
Introduction to commercial illustration using the computer. Emphasis on mastering software and integrating its use into the problem solving process of commercial assignments, ranging from editorial and promotional expression, to informational and children’s book illustration. May be taken twice. 
1030.00

480 Portfolio and Presentation (3)
Class hours: 48-54 lecture; 48-54 laboratory. 
Limitation on Enrollment: Completion of majority of other course requirements in general art major, or graphic communications, or visual communications certificate is required. 
Preparation and presentation of portfolio in a professional manner. Emphasis on appropriate selection of work, concept improvement, and methods of presentation. Awarding of certificate is dependent upon successful completion of this course. May be taken twice. 
1013.00

482 Editing Digital Media (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: ART-67 or 82. 
Principles of editing for film, video and multimedia. Use of theory, history, process, and techniques to digitally create and edit a film or video production. May be taken three times. 
0614.00

484 2-D Motion Graphic Animation (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Art 67. 
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software). 
Advisory: Completion of Art 400, Broadcasting 60, and/or Photography 10. 
Introduction to the art and design of 2D animation, motion graphics, visual effects, and compositing. Projects include: digital image manipulation, animation principles, editing basics, green screen compositing, animated effects, digital input and output, compression, and an historical and theoretical overview. 
0614.60

487 3-D Animation I (4)
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Art 67 or 82. 
Advisory: Completion of Art 30. 
Introduction to basic three-dimensional (3-D) digital modeling and animation using professional software to achieve the modeling, texturing, lighting, rendering, and animation of a character in 3D. Production of a fully-rendered digital model that performs basic movements. An examination of current practices in the context of the history of animation is included. May be taken three times. 
0614.40
Course Descriptions

Astronomy (Astron)

25 Planets and the Solar System (3)
Class hours: 48-54 lecture.
Advisory: Completion of Math 410.
Transfer Credit: CSU; UC.
Overview of the universe beyond our solar system. Understand planets, moons, and other bodies in the solar system by understanding the processes that shape them. Use observations from telescopes and spacecraft, the scientific method, and basic physical concepts. Briefly consider relativity, spacetime, and the history and fate of the universe. NOTE: Students who have successfully completed Astronomy 35 may not take Astronomy 25. 0949.00

26 Stars and Galaxies (3)
Class hours: 48-54 lecture.
Advisory: Completion of Math 410.
Transfer Credit: CSU; UC.
Overview of the universe beyond our solar system. Understand stars and galaxies by understanding the processes that shape them. Use observations from telescopes and spacecraft, the scientific method, and basic physical concepts. Briefly consider relativity, spacetime, and the history and fate of the universe. NOTE: Students who have successfully completed Astronomy 36 may not take Astronomy 26. 1911.00

35 Planets and the Solar System with Lab (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Advisory: Completion of Math 410.
Transfer Credit: CSU; UC.
Overview of the solar system. Understand planets, moons, and other bodies in the solar system by understanding the processes that shape them. Use observations from telescopes and spacecraft, the scientific method, and basic physical concepts. Briefly consider relativity, spacetime, and the history and fate of the universe. NOTE: Students who have successfully completed Astronomy 35 may not take Astronomy 25. 1911.00

36 Stars and Galaxies with Lab (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Advisory: Completion of Math 410.
Transfer Credit: CSU; UC.
Overview of the universe beyond our solar system. Understand stars and galaxies by understanding the processes that shape them. Use observations from telescopes and spacecraft, the scientific method, and basic physical concepts. Briefly consider relativity, spacetime, and the history and fate of the universe. NOTE: Students who have successfully completed Astronomy 36 may not take Astronomy 35. 1911.00

Automotive Collision Repair Technology (ACRT)

400 Basic Automotive Collision Repair (5) [Cx]
Class hours: 40-45 lecture; 120-135 laboratory.
Introductory course in automotive collision repair. Topics include: tools, welding, shrinking, soldering, plastic filling, and metal shaping. May be taken four times. 0949.00

410 Advanced Automotive Collision Repair (5)
Class hours: 40-45 lecture; 120-135 laboratory. Prerequisite: Automotive Collision Repair Technology 400.
Further study of automotive collision repair. Topics include: body and frame construction types; impact forces and associated damage to body alignment and mechanical components; adjustments of windows, doors, hoods, and trunks; and estimate writing. May be taken four times. 0949.00

420 Basic Automotive Collision Refinishing (5) [Cx]
Class hours: 40-45 lecture; 120-135 laboratory.
Fundamentals of automotive collision refinishing. Topics include surface preparation; painting equipment; undercoating primer-surfacers, solvents and reducers; and painting techniques. May be taken four times. 0949.00

430 Advanced Automotive Collision Refinishing (5)
Class hours: 40-45 lecture; 120-135 laboratory. Prerequisite: Automotive Collision Refinishing Technology 420.
Continuing study of automotive collision refinishing. Emphasis on paints - types of materials, thinners, reducers and their application - and the development of painting skills. May be taken four times. 0949.00

450 Pinstriping, Flames, and Graphics (2)
Class hours: 16-18 lecture; 48-54 laboratory. Corequisite: Automotive Collision Refinishing Technology 400, 410, 420, or 430.
The art of design, graphics, pinstriping, and flame art. Students work with lines, colors, and comparison/contrast concepts to create special effects on passenger vehicles, using a wide range of different materials. May be taken four times. 0949.00

492A-H Special Topics: Automotive Collision Repair Technology (5-6)
Class hours: 16-18 hours/term lecture for each unit of credit. Selected lecture topics in automotive collision repair. May be taken four times, regardless of the unit combination; however, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites, based upon the content of the course. 0949.00

492LA-H Special Topics Laboratory: Automotive Collision Repair Technology (5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit. Selected laboratory topics in automotive collision repair. May be taken four times, regardless of the unit combination; however no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites, based upon the content of the course. 0949.00

Automotive Technology (AUTOTEC)

10 Service and Repair (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU.
Introduction to the automotive service industry. Basic principles of the operation of engines, transmissions, driveline, steering, suspension and braking systems, and heating and air conditioning systems. Scheduled and preventative automotive maintenance and minor services are performed. Students also develop a written career plan, outlining their educational, certification, and licensing goals. May be taken twice. 0948.00

15 Automotive Electricity and Electronics (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory. Transfer Credit: CSU.
Basic automotive electricity and electronics. Diagnosis of typical automotive electrical concerns using wiring diagrams/schematics and various testers. Emphasis on the use of digital multimeters for troubleshooting. Foundation course for electricity and electronics subjects matter found in other automotive technology courses. May be taken twice. 0948.00

28 Automotive Electrical Systems (5) [Cx]
Class hours: 48-54 lecture; 96-108 laboratory. Transfer Credit: CSU.
Operation and service of automotive electrical systems. Emphasis on reading wiring diagrams and using test equipment to diagnose and troubleshoot electrical/electronic systems. Course supports the Student Learning Outcomes of the Automotive Technology and the Smog Check Technician Training programs by preparing students to take the Automotive Service Excellence (ASE) A6 Technician Certification exam or the BAR California A6 Equivalent exam. May be taken twice. 0948.00

28A Automotive Electrical Systems A (2.5) [Cx]
Class hours: 24-27 lecture; 48-54 laboratory. Transfer Credit: CSU.
Equivalent to the first half of Automotive Technology 28. Operation and service of batteries, starters, alternators/generators, and related components, plus headlamp systems and headlamp aiming. Charging and starting system testing and diagnosis are stressed. This course – together with Automotive Technology 28B – supports the Student Learning Outcomes of the Automotive Technology and the Smog Check Technician Training programs by preparing students to take the Automotive Service Excellence (ASE) A6 Technician Certification exam, or the BAR California A6 Equivalent exam. May be taken twice. 0948.00

28B Automotive Electrical Systems B (2.5) [Cx]
Class hours: 24-27 lecture; 48-54 laboratory. Prerequisite: Automotive Technology 28A. Transfer Credit: CSU.
Equivalent to the second half of Automotive Technology 28. Operation and service of automotive lighting, accessories, and body electrical systems. Emphasis is on reading wiring diagrams and using test equipment to diagnose and troubleshoot systems. This course – together with Automotive Technology 28A – supports the Student Learning Outcomes of the Automotive Technology and the Smog Check Technician Training programs by preparing students to take the Automotive Service Excellence (ASE) A6 Technician Certification exam, or the BAR California A6 Equivalent exam. May be taken twice. 0948.00

400 Automobile Operation and Maintenance for Consumers (2)
Class hours: 24-27 lecture; 24-27 laboratory. Information needed to become informed consumers of automotive service. Students learn how to save money on automobile operation, maintenance, and repair, and have the option of performing selected maintenance operations on their own vehicles. Operations included: checking and topping-off fluid levels, determining condition of belts and hoses, changing engine oil, inspecting the cooling system and battery, rotating tires, and checking tires and brakes. May be taken four times. 0948.00

405 Service Advising (3)
Class hours: 48-54 lecture. Prerequisite: Business and Office Technologies 40A. Provides information and skills needed to become service advisors at new car dealers and other automotive service businesses. Topics include: overview of the auto service industry, customer relations and communications, regulations and legal requirements, ethics, consumer fraud and protection, telephone techniques, stress and time management. May be taken four times. 0948.00
417 Brakes (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory.  
Advisory: Completion of Automotive Technology 10 and 15.
Diagnosis, service, and repair of disc and drum brake systems and related hydraulic, mechanical, and electrical systems. Anti-lock brake operation is introduced. Course supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A5 Technician Certification exam. May be taken twice.

426A Basic Automotive Air Conditioning Systems (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory.  
Prerequisite: Automotive Technology 10 and 15.  
Operation, service, and repair of automotive heating, ventilation, and air conditioning systems, with emphasis on environmental protection, including refrigerant recycling. Course provides the information necessary to qualify for refrigerant recovery, recycling, and handling certification by the United States Environmental Protection Agency (EPA), and – together with Automotive Technology 426B – supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A7 Technician Certification exam. May be taken twice.

427 Engine Operation and Service (5) [Cx]
Class hours: 48-54 lecture; 96-108 laboratory.  
Prerequisite: Automotive Technology 10 and 15.  
Automotive engine operation, service, and repair. Includes engine design and components, the use of specialized equipment to diagnose and test engine conditions is emphasized. Course supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A8 Technician Certification exam. May be taken twice.

431A Engine Rebuilding - Lower Engine (5)
Class hours: 48-54 lecture; 96-108 laboratory.  
Prerequisite: Automotive Technology 422.  
Study of automotive engine design, focusing on the components and systems operation, testing, and regulations. This course, together with Automotive Technology 431B and ASE A6, A8, and L1 certifications - satisfies the educational requirements for the Advanced Emission Specialist license awarded by the California Department of Consumer Affairs, Bureau of Automotive Repair. May be taken four times.

435A High Performance Engine Blueprinting – Cylinder Heads (2.5)
Class hours: 24-27 lecture; 48-54 laboratory.  
Advisory: Completion of Automotive Technology 430 or sufficient automotive machine shop and high performance experience.
Students develop advanced skills in automotive machining operations, use of precision measuring tools, and high performance cylinder head modification and assembly techniques. Upon completion of this course, students will be able to "blueprint" cylinder heads to industry standards. May be taken four times.

43B8 High Performance Engine Rebuilding – Cylinder Blocks (2.5)
Class hours: 24-27 lecture; 48-54 laboratory.  
Advisory: Completion of Automotive Technology 431 or sufficient automotive machine shop and high performance experience.
Students develop advanced skills in automotive machining operations, use of precision measuring tools, high performance engine balancing, blueprinting, and cylinder block modification and assembly techniques. May be taken four times.

439 Automotive Engine Design and Performance (6)
Class hours: 96-108 lecture.  
Study of automotive engine design, focusing on the factors that affect performance. Topics include: compression ratios, crankshaft, connecting rod and piston design, cylinder head design, engine balancing, dynamometer, and intake and exhaust tuning and port design. May be taken four times.

443A Basic Clean Air Emission Control (2)
Class hours: 24-27 lecture; 24-27 laboratory.  
Prerequisite: Automotive Technology 423.  
Advisory: Training and/or experience equivalent to ASE certification in Electrical and Electronic Systems (A6), Engine Performance (A8), and Advanced Engine Performance and Emissions Systems (L1).
Basic engine management and emissions control systems operation, testing, and regulations. This course, together with ASE A6, A8, and L1 certifications - satisfies the educational requirements for the Advanced Emission Specialist license awarded by the California Department of Consumer Affairs, Bureau of Automotive Repair. May be taken four times.

443B Advanced Clean Air Emission Control (2)
Class hours: 24-27 lecture; 24-27 laboratory.  
Prerequisite: Automotive Technology 433A.  
Advisory: Training and/or experience equivalent to ASE certification in Electrical and Electronic Systems (A6), Engine Performance (A8), and Advanced Engine Performance and Emissions Systems (L1).
Advanced engine management and emissions control systems operation, testing, and regulations. This course, together with Automotive Technology 443B and ASE A6, A8, and L1 certifications - satisfies the educational requirements for the Advanced Emission Specialist license awarded by the California Department of Consumer Affairs, Bureau of Automotive Repair. May be taken four times.
Course Descriptions

450 General Automotive Technician A (12)
Class hours: 144-162 lecture; 144-162 laboratory
Designed for students who want the occupational training required for employment as an automotive service technician. Content is similar to other courses offered individually – such as Automotive Electrical Systems A; Fuel, Ignition and Emission Control Systems; and Basic Automotive Air Conditioning Systems – with more emphasis placed on development of marketable skills. May be taken twice. 0948.00

455 General Automotive Technician B (12)
Class hours: 144-162 lecture; 144-162 laboratory
Designed for students who want the occupational training required for employment as an automotive service technician. Content is similar to other courses offered individually – such as Automotive Electrical Systems A; Fuel, Ignition and Emission Control Systems; and Basic Automotive Air Conditioning Systems – with more emphasis placed on developing marketable skills. May be taken twice. 0948.00

471 Motorcycle Service, Tune-Up, and Maintenance (4)
Class hours: 48-54 lecture; 48-54 laboratory
Students develop the knowledge base and skills to perform motorcycle service, tune-ups, and maintenance. Topics include: service and tune-up schedules and their associated procedures; chassis and suspension systems; brakes, clutch, and drive systems; wheel care, including tires, wheel lacing, wheel truing, and balancing; general shop procedures; quality control, and safety procedures and protective equipment. May be taken four times. 0948.00

492A-H Special Topics: Automotive Technology (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit. Special interest lecture course in specific automotive technology areas. Topics vary and are determined by the instructor. See the schedule of classes for current term emphasis. May require prerequisites and/or corequisites based upon the content of the course. May be taken four times regardless of the unit combination, however, no single-subject, special-interest class may be repeated. 0948.00

492A-H Special Topics Laboratory: Automotive Technology (.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit. Special interest laboratory course in specific automotive technology areas. Topics vary and are determined by the instructor. See the schedule of classes for current term emphasis. May require prerequisites and/or corequisites based upon the content of the course. May be taken four times regardless of the unit combination, however, no single-subject, special-interest class may be repeated. 0948.00

496A,B,C,D  Internships in Automotive Careers
May be taken four times regardless of the unit combination. 0948.00

1 General Biology (4)
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC credit limitations. 0401.00

1 Environmental Biology (4)
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC. 0401.00

3 California Natural History (4)
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC. 0401.00

4 Field Botany (4)
Class hours: 32-36 lecture; 96-108 laboratory. Transfer Credit: CSU; UC credit limitations. See counselor. 0401.00

5 Introduction to Cell and Molecular Biology (4)
Class hours: 48-54 lecture, 48-54 laboratory. Transfer Credit: CSU; UC. 0401.00

10 Concepts in Biology (3)
Class hours: 48-54 lecture. Transfer Credit: CSU; UC credit limitations. See counselor. 0401.00

10L Elements of Biology Laboratory (1)
Class hours: 48-54 laboratory. Transfer Credit: CSU; UC credit limitations. 0401.00

11 Evolution, Sex, and Behavior (3)
Class hours: 48-54 lecture. Transfer Credit: CSU; UC. 0401.00

12 Introduction to Human Genetics (3)
Class hours: 48-54 lecture. Transfer Credit: CSU; UC. 0401.00

13 Drugs and Society (3)
Class hours: 48-54 lecture. Transfer Credit: CSU. The biological, social, and psychological implications of drug use, misuse, and abuse in the United States, past and present. 0401.00

14 Health Science (3)
Class hours: 48-54 lecture. Transfer Credit: CSU; UC. Human health and wellness. Topics include: mental health; nutrition; abuse of drugs, alcohol and tobacco; sexually transmitted diseases and other communicable and non-communicable 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. 0837.00

20 Human Anatomy (4)
Class hours: 48-54 lecture; 48-54 laboratory. Prequisite: Eligibility for Reading 450 as determined by the Chaffey assessment process, or completion of Reading 550. Optional: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450. Transfer Credit: CSU; UC. (CAN BIOL SEQ B = BIOL 20 + 22) A systematic study of the microscopic and macroscopic structures of the human body. Emphasis on cell structures, skeletal, muscular, respiratory, circulatory, nervous, digestive, excretory, endocrine, and reproductive systems. Includes clinical considerations and disorders of these systems. 0410.00

22 Human Physiology (4)
Class hours: 48-54 lecture; 48-54 laboratory. Prerequisite: Biology 20, and Chemistry 9 or 10 or 1 year of high school chemistry. Transfer Credit: CSU; UC. (CAN BIOL SEQ B = BIOL 20 + 22) 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. 0410.00

23 General Microbiology (3)
Class hours: 48-54 lecture. Prerequisite: Biology 22, or Biology 50 and Chemistry 10 or high school chemistry. Transfer Credit: CSU; UC. (CAN BIOL 14 = BIOL 23 + 23L) Introduction to microbiology, with strong emphasis on microorganisms pathogenic to humans. Topics include: microbial morphology, genetics, taxonomy,
metabolism, and relationship to disease; mechanisms of controlling microbes; and immunology. 0403.00

23L General Microbiology Laboratory (2)
Class hours: 96-108 laboratory.
Corequisite: Biology 23 (may be taken previously).
Transfer Credit: CSU; UC.
(CAN BIOL 14 = BIOL 23 + 23L)
Introduction to microbiology laboratory techniques. Methods of culturing, staining, biochemically analyzing, and classifying microorganisms. 0403.00

30 Beginning Medical Terminology (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Applied medical etymology including the origin, correct spelling, pronunciation, meaning, and current usage of common medical terms and their application to clinical records and reports. Emphasis on roots, prefixes, infixes, suffixes, medical abbreviations, symbols, and terms common in patients’ records and laboratory reports. 0401.00

50 Core Biology (4)
Class hours: 48-54 lecture, 48-54 laboratory.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 426.
Advisory: Completion of Chemistry 10.
Transfer Credit: CSU; UC.
(CAN BIOL 2)
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. 0401.00

52 General Botany (5)
Class hours: 48-54 lecture; 96-108 laboratory.
Prerequisite: Biology 50.
Transfer Credit: CSU; UC.
See counselor.
(CAN BIOL 6)
Introduction to the developmental and comparative morphology, function, heredity, physiology, and evolution of vascular plants and bryophytes. 0402.00

55 Vertebrate Zoology (5)
Class hours: 48-54 lecture; 96-108 laboratory.
Prerequisite: Biology 50.
Transfer Credit: CSU; UC.
See counselor.
Biology of vertebrate animals emphasizing evolutionary history, reproduction, growth and development, and a functional survey of organ systems. Laboratory includes sections on histology, embryology, and a comparative study of vertebrate systems. 0407.00

56 Invertebrate Zoology (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Biology 50.
Transfer Credit: CSU; UC.
See counselor.
Biology of invertebrate animals emphasizing anatomy, systematics, ecology, and evolutionary relationships. Laboratory is primarily a survey of the major invertebrate phyla. 0407.00

63 Population Biology (4)
Class hours: 48-54 lecture; 48-54 laboratory plus 8 hours special laboratory to be scheduled by the instructor.
Prerequisite: Biology 50.
Transfer Credit: CSU; UC.
See counselor.
Introduction to the principles, theories, and methods of population biology. 0401.00

90 Seminar: Biology (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Admission is by competitive written application closing Friday of week 14 of the preceding term.
Prerequisite: Biology 50.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Student-oriented discussions centered around individual presentations of previously selected biological concepts, subjects, and materials. May be taken three times, however, no single-subject, special-interest seminar class may be repeated. 0401.00

90A Biology Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Biology. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 0401.00

92A-H Special Topics: Biology (5-6)
Class hours: 16-18 hours/term for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Pursues certain specializations in the biological sciences. See class schedule for the current topic. May be taken three times regardless of the unit combination, however, no single-subject, special-interest topic may be repeated. May require prerequisites and/or corequisites, based on the content of the course. 0401.00

92LA-H Special Topics Laboratory: Biology (5-6)
Class hours: 48-54 hours/term for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Topics of special interest or specific areas of specialization in biology, with emphasis on laboratory skills, procedures, and techniques not covered in the regular curriculum. See class schedule for the current topic. May be taken three times regardless of the unit combination, however, no single-subject, special-interest topic may be repeated. May require prerequisites and/or corequisites, based on the content of the course. 0401.00

98A, B, C Independent Study: Biology (1, 2 or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.
For the student who is capable and has the desire to explore and develop an independent project in the biological sciences. Before registering, student and instructor must reach agreement concerning subject and scope of the project. Individual inquiry, special techniques, and selected readings apply. May be taken four times regardless of the unit combination, however, no project subject may be repeated. 0401.00

424 Anatomy and Physiology (3) [Cx]
Class hours: 48-54 lecture.
Advisory: Completion of Biology 30 and 500, or one year of high school biology.
Human anatomy and physiology with emphasis on the structures and functions of the organ systems. Course is primarily intended for students entering vocational programs. 0410.00

424L Anatomy and Physiology Laboratory (1)
Class hours: 48-54 laboratory.
Corequisite: Biology 424 (may be taken previously).
Advisory: Completion of Biology 30 and 500, or one year of high school biology.
Anatomy and physiology of organ systems from cell through system levels. Important concepts may be illustrated by means of computer simulations, laboratory equipment, and other diagnostic tools. Course is primarily intended for students entering vocational programs. 0410.00

500 Basic Biological Concepts (1)
Course is offered only on a credit/no credit basis.
Class hours: 16-18 lecture.
Not Degree Applicable.
Focus on basic biological concepts. Course is intended to prepare students for success in general education science courses or pre-health professional courses. Emphasis on study skills and test-taking strategies. 0401.00

BROADCASTING (BRDCAST)

3 Survey of Broadcasting and Electronic Media (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Survey of the history, development, and importance of radio and television broadcasting, including international events. Introduces the aesthetic, cultural, political, social, and technical aspects of telecommunications. Emphasis on theory, research, operations, legal and regulatory issues of commercial/noncommercial broadcasting, popular media, public access, Internet, and related emerging technologies. 0504.00

55 Broadcast Audio and Announcing (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Transfer Credit: CSU.
Principles of digital audio production, digital recording, microphone use and placement, sound effects, and music/audio mixing. Practical experience with microphones, multi-track digital/audio recording and mixing, and control-board cueing. Digitizing and mixing compact disc, DVD, audio/video, and analog sources with music, the spoken word, voice-over narration, and sound effects. Integration of audio into dance, film, music, radio, television, and theatre productions. Study of F.C.C. rules and regulations pertinent to the broadcast industry. 0604.00

60 Television Production (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Advisory: Knowledge of keyboarding is recommended.
Transfer Credit: CSU.
Principles of single-camera videography, videotape/disk recording, editing, audio recording, and mixing. Basic placement of video cameras, lighting, and sound equipment. Introduction to crew positions. Producing Electronic Field Production [EFP], Electronic News Gathering [ENG], documentary, event, commercial, public service announcement, and dramatic projects. Development of the fundamental and comprehensive skills needed to create various show types for television broadcast. 0604.20
Course Descriptions

62 Multi-Camera Television Production (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Advisory: Possession of basic computer skills.
Transfer Credit: CSU.
Multi-camera studio and event production, including television programming concepts, directing, scriptwriting, and studio and master control operations. Additional topics include: studio lighting equipment placement, lighting board operation, video signal engineering, multi-camera angle editing, multi-camera line switching techniques for live broadcasts, and critical and applied aspects of studio configured camera operations. Students coordinate cameras and on-screen performers, and collaborate with studio and master control-room personnel, to produce, direct, and edit studio and remote field productions. May be taken 4 times.
0604.20

65 Radio Production (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Advisory: Possession of basic computer skills.
Transfer Credit: CSU.
Production of various broadcast and automated media programming. Application of advanced techniques in the operation of streaming audio, digital multi-track recording, editing, and mixing. Study of current FCC rules and regulations. Students examine and explore advanced concepts, focusing on aesthetics, announcing, creativity, psychoacoustics, and sound design. May be taken four times.
0604.10

70 Applied Television Postproduction (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Broadcasting 62 or 65.
Transfer Credit: CSU.
Advanced television course, exposing students to actual television and film post-production situations and field experiences. Students prepare videotape materials for broadcast and distribution, in addition to specializing in particular production areas, such as camera, audio, production supervision, floor managing, switching, video control, videotape recording, editing, writing, storyboarding, or field production. Students from the photography, graphic arts, and theatre disciplines are encouraged to enroll and contribute to individual productions. May be taken four times.
0604.20

92A, B, C Independent Study: Broadcasting (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Designed for the capable and well-motivated student who wishes to pursue a special area of broadcasting, or a more advanced project in broadcasting than is offered in the regular program. Students who participate in this program must have completed introductory courses or have shown a skill greater than that necessary for completion of established curriculum offerings. The nature and extent of the project must be determined by the student and the instructor before the student registers, since the extent of the project determines the number of units allowed. May be taken twice, regardless of the unit combination.
0604.00

474 High-Definition Television Production (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Advisory: Basic computer skills are recommended.
Visual theory, techniques, and methodology of high-definition cinematography applied to the creation and refinement of dynamic television stories. Integration of Advanced Television Systems Committee (ATSC) broadcast technologies with widescreen cinematography. Emphasis on aesthetic enhancements in the filming and editing of widescreen television programming. Students collaboratively produce and/or edit a high-definition video project. May be taken four times.
0604.20

BUSINESS (BUS)
(ALSO SEE MANAGEMENT)

10 Introduction to Business (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
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.
0501.00

13 Professional Selling (3)
Class lecture: 48-54 lecture.
Transfer Credit: CSU.
Concepts and techniques used to sell ideas, products and services, especially the psychological and social aspects of persuasion. Effective tactics in prospecting, pre-apprach planning, securing appointments, preparing and making sales presentations, closing strategies, follow-up and maintaining customer relations, and managing a sales territory. Emphasis on problem-solving.
0504.40

26A Business Law I (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
(CAN BUS 8)
Introduction to principles of American law, the federal and state court systems, and due process. Comprehensive treatment of contracts; introduction to the Uniform Commercial Code, agency, ethics, torts, and criminal law in business.
0505.00

28B Business Law II (3)
Class hours: 48-54 lecture.
Prerequisite: Business 26A.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special applications of law in business. Comprehensive study of commercial paper, creditors' rights, secured transactions, agency and employment, partnerships, corporations, personal and real property, and governmental regulation of business. Students analyze laws and rules, then apply appropriate concepts to factual scenarios in written and oral arguments.
0505.00

40 Marketing Principles (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 10.
Transfer Credit: CSU.
Principles and methods of marketing as practiced by successfully managed business firms. Course is management-oriented, covering demand analysis, forecasting, product development, price determination, distribution channels, material handling, advertising, personal selling, and global and Internet marketing.
0509.00

45 Small Business Ownership and Management (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Concepts and techniques related to the ownership-management challenges of a small firm, from the viewpoint of a present or potential traditional and/or electronic commerce business owner. The basics of forming, financing, merchandising, buying, pricing, inventory and credit control, and public and personnel relations.
0506.40

49 Business Computations (3)
Class hours: 48-54 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, logistics management, and other discipline areas.
0501.00

55 Advertising (3)
Class hours: 48-54 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.
0509.10

60 Business Ethics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Exploration of various theories and commonly occurring business ethics issues. Systems approaches for making business decisions that are responsible, practical, and defendable. Benefits of implementing value-based business strategies to achieve competitive advantage and profits. Course focus is on systemic implementation of ethical and socially responsible tools, and the integration of ethics into workplace operations.
0506.00

61 Introduction to Global Business (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Overview of global business concepts and decision-making, with an emphasis on cultural differences. Analyze the social, cultural, legal, environmental, political, technological, and competitive trends within international business and examine the operation and performance of multinational corporations.
0508.00

104
402 Introduction to Import/Export (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 61 or equivalent business experience.
Importing and exporting, including essential terms and techniques, organizations, regulation, terms of access, documentation, shipment, and financing involved with international movement of merchandise. 0508.00

405 International Marketing (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 61 or equivalent business experience.
Theory and practices of international marketing to include market entry strategies, analysis of foreign market opportunities, export marketing, product design, pricing, distribution, promotion and sales. 0508.00

408 International Trade Finance (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 61 or equivalent business experience.
Sources and types of financing including trade finance support role of commercial banks, trade risks, tax savings, and the role of international trade organizations in international trade finance. 0508.00

410 International Business Law (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 28A and 61.
Legal aspects and ramifications of international trade. Multinational enterprises, sovereignty, technology transfer, arbitration, negotiation and diplomacy. 0508.00

430 Business Plan Preparation (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Accounting and Financial Services 408 and Business 45.
Overview of entrepreneurship. Emphasis on the practical aspects of developing a business plan and applying the necessary methods, techniques, and skills for starting and owning an enterprise. Topics include: identification of trends and opportunities, market analysis, promotional and sales tactics, evaluating business locations and e-commerce potential, and financial strategies. 0506.40

435 Marketing and the Law (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business 28A.
Introduction to the fundamentals of legal principles relevant to the marketing of goods and services. Impact of the law on core marketing activities such as product development, distribution, promotion, and sales. Effect of the law on current marketing trends. 0509.00

492A-H Special Topics: Business (1.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Specializations in business. See class schedule for current topics. May be taken only four times regardless of the unit combination. However, no single-subject, special interest class can be repeated. May require corequisites and/or prerequisites based on the content of the course. 0509.00

496A, B, C, D Internships in Business (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Limitation on Enrollment: Consent of Business program coordinator is required for registration. Corequisite: Concurrent enrollment in any Chaffey College course. Supervised internship in cooperation with private, public, and/or non-profit sector employers. Designed to apply knowledge and learn new skills, directly related to the student’s program of study, outside of the normal classroom environment. Placement is arranged through the instructor. Participation requirements may vary with the job setting. May be taken four times, for a maximum of six units credit. 0501.00

BUSINESS: PARALEGAL STUDIES (BUSPL)

400 Introduction to Paralegal Studies (3)
Class hours: 48-54 lecture.
Introduction to the roles and duties of a paralegal within the American legal system, and the relationships between paralegals, attorneys, and clients. Topics include: paralegal career options, ethical codes, law office investigations, litigation assistance, legal research and writing, computer use, and general office administration. 1402.00

401 Legal Research and Writing (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business: Paralegal Studies 400, and Business 88 or English 1A.
Fundamentals of legal research, writing, and analysis for the paralegal. Topics include: reading and analysis of statutes; research using primary authorities, secondary sources, and computer-assisted research tools; law office writings, including transmittal and client opinion letters, pleadings, law office memorandums, case briefs, and memoranda of law, and legal citation rules. 1402.00

402 Civil Litigation (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business: Paralegal Studies 400.
Fundamental aspects of substantive civil law and civil procedure, with emphasis on the roles of the paralegal in civil litigation. Topics include: evidence gathering and investigation, jurisdiction, venue identification of local courts, initiation of civil proceedings, drafting the complaint, filing a lawsuit, defending and testing a lawsuit, discovery procedures, settlement, trial preparation and trial assistance, post-trial practice, and alternative dispute resolutions. 1402.00

403 Evidence (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business: Paralegal Studies 400.
The Federal Rules of Evidence and a paralegal’s role in the analysis and application of the rules of civil and criminal evidence. Topics include: evidence gathering and investigation, admissibility of relevant evidence, methods and techniques of proving character, modern competency rules, impeachment, testimony by lay and expert opinions, hearsay and hearsay exceptions, constitutional constraints on the admissibility of evidence, and common law privileges. 1402.00

404 Law Office Operations (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business and Office Technologies 608 and Business: Paralegal Studies 400.
Introductory course for students pursuing careers as legal office professionals or individuals currently working in a law office wishing to improve their skills. State and federal court systems, legal terminology, preparation of court documents, and the concepts of civil procedures in various areas of the law operative in California are explored. Topics include: structure of the courts, practices and procedures of the law, terminology and vocabulary, preparation of court documents, an introduction to legal research, legal calendaring, and client contact. Hands-on projects include using Microsoft Word or Corel WordPerfect to prepare simulated legal writings and complete legal forms. 1402.00

BUSINESS AND OFFICE TECHNOLOGIES (BUSOT)

29 Fundamentals of Computer Keyboarding (1.5)
Class hours: 24-27 lecture.
Transfer Credit: CSU.
Basic, hands-on introduction to Microsoft Word for Windows. Document preparation and formatting of academic papers, reports, letters, and résumés. Develop skills and literacy in the Windows environment: creating, editing, formatting, saving, printing, and disk management. Highly recommended for all college students. 0514.00

30 Fundamentals of Microsoft Word (1.5)
Class hours: 24-27 lecture.
Advisory: Knowledge of keyboarding/typing is recommended.
Transfer Credit: CSU.
Basic, hands-on introduction to Microsoft Word for Windows. Document preparation and formatting of academic papers, reports, letters, and résumés. Develop skills and literacy in the Windows environment: creating, editing, formatting, saving, printing, and disk management. Highly recommended for all college students. 0514.00

40A Beginning Computer Keyboarding (3)
Class hours: 48-54 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. May be taken twice. 0514.00

40B Computer Keyboarding: Speed and Accuracy Development (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business and Office Technologies 40A.
Transfer Credit: CSU.
Develop computer literacy. Analyze, evaluate, and improve keyboarding speed and accuracy using touch-typing techniques and Windows applications. Intense review of letters, numbers, and symbols, and the production of basic reports, business letters, and memorandums. May be taken four times. Proficiency certificate issued after successful completion of course. 0514.00

50 Finding and Records Management (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Instruction and practice work involving basic filing principles, procedures, and systems. Emphasis on non-correspondence records, information storage and retrieval systems. Management aspects of records retention, disposition, and the operation of a records management program. 0514.40
60A Microsoft Office Word - Specialist (3) [Cx]
Class hours: 48-54 lecture.
Advisory: Completion of Business and Office Technologies 40A and completion of or concurrent enrollment in Business and Office Technologies 40B.
Transfer Credit: CSU.
Hands-on word processing using Microsoft Word for Windows. Develop personal and workplace job skills while building a foundation for other Windows software applications such as the Microsoft Office Suite. Create, edit, format, save, print, file management, the Internet, shortcuts, and retrieve documents. Customize and format academic papers, business reports, tables, columns, and graphics. Course helps prepare students for the Microsoft Office Specialist (MOS) Word certification testing. Computer assignments are a required part of this course. May be taken twice.

60B Microsoft Office Word - Expert (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business and Office Technologies 40A and 60A, and completion of or concurrent enrollment in Business and Office Technologies 40B.
Transfer Credit: CSU.
A hands-on approach to advanced concepts using Microsoft Word business applications: macros, bookmarks, clipart, borders, forms, table of contents, indexes, the Internet, tables and charts, sorts, columns, merge, styles, and shared documents. Course helps prepare students for the Microsoft Office Specialist (MOS) Word certification testing. Computer lab assignments are a required part of this course. May be taken twice.

61 Microsoft Office PowerPoint (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 40B and 60A.
Transfer Credit: CSU.
This module integrates the presentation application (PowerPoint) into the Microsoft Office suite. Hands-on introduction to concepts, terminology, and software program to create electronic presentations for support personnel and business managers. Formatting slide texts, charts, tables, and graphics as utilized in business reports and presentations. Computer lab assignments are a required part of this course. May be taken twice.

62 Microsoft Outlook (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 40B and 60A.
Transfer Credit: CSU.
This module integrates word processing (MS Word) and electronic information management in the MS Office suite. Write, send, and receive e-mail; calendar appointments electronically; and schedule conferences with multiple users. Link and integrate MS Office files including the Internet, launch other programs applications, and manage work flow of tasks. Advanced merge, tables, and graphics. Computer lab assignments are part of this course. May be taken twice.

63 Microsoft Office Excel - Comprehensive (3)
Class hours: 48-54 lecture.
Advisory: Completion of Business and Office Technologies 40B and 60A.
Transfer Credit: CSU.
This module integrates the spreadsheet application (MS Excel) into the MS Office suite. Full-featured spreadsheet application offering core and advanced concepts. Emphasis on creating formulas, using relative and absolute references, editing and formatting, working with templates and chart wizards, using IF functions, sorting and filtering records, creating pivot tables, and integrating with MS Office Suite programs (MS Word). Topics covered help prepare students for MOS (Microsoft Office Specialist) Excel certification testing. Computer lab assignments are a required part of this course. May be taken twice.

63A Microsoft Office Excel - Specialist (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 40B and 60A.
Transfer Credit: CSU.
This module integrates the spreadsheet application (MS Excel) into the MS Office suite. Hands-on introduction to the concepts, terminology, and software. A full-featured spreadsheet application software offering tools to enter, analyze, report, and chart business data. Computer assignments are a required part of this course. May be taken twice.

63B Microsoft Office Excel - Expert (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 63A.
Transfer Credit: CSU.
Full-featured spreadsheet MS Excel software application, offering core and advanced concepts in working with templates and functions, sorting and filtering records, using analysis tools, and integrating with MS Office Suite programs (MS Word). Topics covered will help prepare students for the MOS (Microsoft Office Specialist) Excel certification testing. Computer lab assignments are a required part of this course. May be taken twice.

64A Microsoft Office Access - Specialist (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 40B and 60A.
Transfer Credit: CSU.
This module integrates the database application (Access) into the Microsoft Office suite. Hands-on introduction to the concepts, terminology, and software programs used in electronic filing and records management. Create and use electronic databases in the paperless, electronic office. Create queries, design forms and reports. Computer assignments are a required part of this course. May be taken twice.

64B Microsoft Office Access - Expert (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 64A.
Transfer Credit: CSU.
Full-featured database MS Access software application, offering core and advanced concepts in working with databases, tables, reports, forms and mailing labels, refining queries, and integrating with MS Office Suite programs (MS Word). Topics covered will help prepare students for the MOS (Microsoft Office Specialist) Access certification testing. Computer lab assignments are a required part of this course. May be taken twice.

88 Written Communication for Business (3)
Class hours: 48-54 lecture.
Prerequisite: Business and Office Technologies 455, English 450, or English as a Second Language 450.
Transfer Credit: CSU.
Study and application of basic principles for producing clear, correct, and logically organized written business communication. Punctuation, capitalization, use of numbers, formats, and pronoun cases will be reviewed. Stressing proper writing fluency and professional tone in handling routine business communications including letters, memorandums, and directives as well as developing a personal resume.

89 Technical Report Writing for Business (3)
Class hours: 48-54 lecture.
Prerequisite: Business and Office Technologies 455, English 450, or English as a Second Language 450.
Advisory: Completion of Business and Office Technologies 88.
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.

98A,B,C Independent Study: Business and Office Technologies (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.
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 upon by both 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 taken three times, regardless of the unit combination.

400 Job Search and Interviewing Techniques (1.5)
Class hours: 24-27 lecture.
Strategies to organize a job search, prepare a marketable resume and letter of application, create a career portfolio, respond to frequently asked interview questions, and practice successful interviewing techniques.

410A Microsoft Office Publisher - Specialist (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 60A.
This module integrates the desktop publishing application (MS Publisher) into the Microsoft Office suite. Hands-on introduction to the concepts, terminology, software, hardware, and uses of desktop publishing for business. Emphasis on creating, editing, and printing text, tables, and graphics. May be taken twice.

410B Microsoft Office Publisher - Expert (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Business and Office Technologies 410A.
Full-featured desktop publishing MS Publisher software application offering core and advanced concepts. Emphasis on creating style sheets and master pages, special effects, templates, scanned images, and long documents. May be taken twice.

444 Concepts and Techniques of Data Entry (2)
Class hours: 32-36 lecture.
Advisory: Completion of Business and Office Technologies 60A and typing speed of 35 words per minute.
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. May be taken twice.

452 Office Financial Recordkeeping (3)
Class hours: 48-54 lecture.
Recordkeeping procedures used in small business offices. Broadens the skills of the office professional in handling business financial records and other supporting documents relevant to the operation of the business.
455 Fundamentals of English for Business (3)  
Class hours: 48-54 lecture.  
Study and review of grammar, punctuation, vocabulary, and sentence structure to prepare students for college-level and business writing courses. Overview of sentence structure, paragraphs, business vocabulary, and basic communication skills. Practice in applying basic tenets of communication and critical-thinking skills leading to understanding of business communications. 0514.00

460 Proofreading: Text-Editing Skills (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of or concurrent enrollment in Business and Office Technologies 404 and 455.  
Development of the essential skills needed to perform proofreading and text-editing functions for the automated office. Emphasis on formatting and accuracy of input, using word processing software and office reference manuals. 0514.00

462A Beginning Machine Transcription (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of or concurrent enrollment in Business and Office Technologies 404 and 460.  
Development of a marketable skill in machine transcription. Emphasis on increasing skills in punctuation, spelling, vocabulary, and production of marketable business correspondence and reports, using word processing software for the microcomputer. 0514.00

462B Advanced Machine Transcription (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Business and Office Technologies 455, 460, and 462A, and completion of Biology 30 for medical emphasis majors.  
Development of advanced production skills in machine transcription utilizing word processing software. Student selects an emphasis on the general or medical office. May be taken twice. 0514.00

465A Beginning Speedwriting and Notetaking (3)  
Class hours: 48-54 lecture.  
Advisory: Typing/keyboarding skills are recommended. Theory and principles of speedwriting (shorthand), an abbreviated writing system based on the letters of the alphabet. Practice and vocabulary development to take useful notes for the office and to take dictation at 60 words per minute for two minutes. May be taken twice. 0514.00

470 Electronic Office Procedures (3) (Cx)  
Class hours: 48-54 lecture.  
Advisory: Completion of Business and Office Technologies 406 and 460.  
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 on the electronic office, application software, time-management techniques, proper telephone skills, career planning, and job interviews. 0514.00

471 Administrative Office Management (3)  
Class hours: 48-54 lecture.  
Introduction to the study and application of basic principles for managing a business office. Strategies to maintain a sound, flexible, and dynamic office organization whose objectives correspond to those of the firm. Principles of management that pertain to objectives of the organization, scope and assignment of responsibilities, unity of functions, use of specializations, delegation of authority and responsibility, unity of command, span of control, and centralization or decentralization of managerial authority. 0514.00

475 Medical Office Procedures (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Biology 30, Business and Office Technologies 40A or 40B, and Business and Office 470. A study of the medical front office assistant’s career, meeting the patient, scheduling appointments, medical records, billing and collection, financial records, medical law, and ethics. 0514.20

492A-H Special Topics: Business and Office Technologies (5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
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. 0514.00

492LA-H Special Topics Laboratory: Business and Office Technologies (5-6)  
Class hours: 48-54 hours/term laboratory for each unit of credit.  
Special projects designed to allow capable, well-motivated students in the major to develop a project in, or report on, a facet of office technology. Student-instructor 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. 0514.00

496A, B, C, D Internships in Business and Office Technologies (1, 2, 3, or 4)  
Class hours: 60-120 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.  
Supervised internship in cooperation with private or public sector employers. Designed to apply knowledge and learn new skills, directly related to the student’s program of study, outside of the normal classroom environment. Placement is arranged through the program of study, outside of the normal classroom environment. May be taken four times, for a maximum of twelve units credit. 0514.00

420 Basic ICD-9-CM Coding (3)  
Class hours: 48-54 lecture.  
Prerequisite: Biology 30.  
Corequisite: Biology 424.  
Beginning coding class presents an overview of nomenclature and classification systems, with focus on coding clinical information from medical records. Introduction to the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), which contains instruction in coding diagnoses and procedures, sequencing, and coding conventions. Review of complications and co-morbidities. Coding software applications introduced. 0514.20

430 Intermediate Level ICD-9-CM and CPT4 Coding (3)  
Class hours: 48-54 lecture.  
Prerequisite: Business and Office Technologies: Medical Coding and Billing 410 and 420.  
Advanced coding class addressing more complex issues related to ICD-9-CM and CPT4 coding. Focus on using actual medical records in applying learning at a higher coding skill level. Computerized encoders and groupers emphasized. Coding software application introduced. Ambulatory Patient Classifications (APCs) and Resource-Based Relative Value Scales (RBRVs) also covered. 0514.20

440 Medical Billing, Reimbursement, and Compliance (3)  
Class hours: 48-54 lecture.  
Prerequisite: Business and Office Technologies: Medical Coding and Billing 430.  
Comprehensive study of medical health insurance billing procedures. Topics include: claims completion for all types of payers; reimbursement methodologies, including payment systems and their impact on financial stability of health care; and an introduction to healthcare data quality issues. 0514.20

410 Basic CPT-4 Coding (3)  
Class hours: 48-54 lecture.  
Prerequisite: Biology 30.  
Corequisite: Biology 424.  
Beginning coding class presents an overview of nomenclature and classification systems, with focus on coding clinical information from medical records. Introduction to the Common Procedural Terminology (CPT4) containing instruction in coding procedures, sequencing, and conventions. Review of procedural codes by body system. Coding software applications introduced. 0514.20

In the General Chemistry courses (Chemistry 21/21L/212L and Chemistry 22/22L/222L) having both lecture and laboratory components that must be taken concurrently, a minimum grade of C is required in all the corequisite-linked courses in order to meet course and program requirements. If satisfactory grades (A, B, or C) are earned in all of the components, the appropriate grade will be issued for each course. If an unsatisfactory grade (D or F) is earned in any of the linked courses, the lowest substandard grade will be issued for all three courses. If an incomplete (I) is earned in any of the linked courses, the incomplete will be issued for all three courses.

7 Chemistry in Context (4)  
Class hours: 48-54 lecture; 48-54 laboratory.  
Advisory: Completion of Math 410 or one year of high school algebra.  
Transfer Credit: CSU; UC credit limitations.  
See counselor

Introduction to the identification of sources and the occurrence of toxic chemicals in our environment, with an emphasis on understanding the nature of these chemicals in light of chemical principles and the interplay between chemical technology and society. Laboratory work exemplifies the principles and methods presented in lecture. NOTE: Students who have course credit in Chemistry 8 may not take Chemistry 7. 1905.00
Course Descriptions

8 World of Chemistry (3)
Class hours: 48-54 lecture.
Advisory: Completion of Math 410 or one year of high school algebra.
Transfer Credit: CSU; UC credit limitations.
See counselor.
An introduction to the identification of sources and occurrence of toxic chemicals in our environment, with an emphasis on understanding the nature of these chemicals in light of chemical principles and the interplay between chemical technology and society.
NOTE: Students who have course credit in Chemistry 7 may not take Chemistry 8.
1901.00

9 Health Science Chemistry (5)
Class hours: 54-72 lecture; 48-54 laboratory.
Prerequisite: Mathematics 410 or one year of high school algebra.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Introduction to the principles of chemistry, including inorganic chemistry, organic chemistry, and biochemistry. Topics covered include atomic structure, bonding and nomenclature, stoichiometry, gas laws, solutions, acids and bases, pH and equilibrium, organic and biochemical structure and reactions, and nuclear chemistry.
1901.00

10 Introductory Chemistry (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Mathematics 410 or one year of high school algebra.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Transfer Credit: CSU; UC credit limitations.
Introduction to the principles of chemistry and a study of some of the common elements. Topics covered include atomic structure, periodic table, gas laws, solutions, stoichiometry and chemical equilibrium.
1901.00

12 Elementary Organic and Biochemistry (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Chemistry 9 or 10
Transfer Credit: CSU; UC credit limitations.
See counselor.
Transfer Credit: CSU; UC credit limitations.
Survey course in organic and biochemistry emphasizing chemistry of cellular and organismal significance. Intended for, but not restricted to, transfer students, such as B.S. in nursing, who require a course in organic/biochemistry with laboratory. Not intended for science majors.
1901.00

21 General Chemistry (3)
Class hours: 48-54 lecture.
Prerequisite: Chemistry 9 or 10 or high school chemistry, and Mathematics 420 or two years of high school algebra.
Corequisite: Chemistry 21L1 and 21L2.
Transfer Credit: CSU; UC.
(CAN CHEM 2 = CHEM 21 + 21L1 + 21L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Introduction to the science of chemistry. Topics include: stoichiometry, nomenclature, atomic structure, gas laws, periodic properties, bonding in ionic compounds, bonding in covalent compounds (including valence shell electron pair repulsion, valence bond and molecular orbital theories), thermochemistry, solutions and reactions in solution, solids, liquids, and solution properties.
1901.00

21L1 General Chemistry Laboratory I (1)
Class hours: 48-54 laboratory.
Corequisite: Chemistry 21 and 21L2.
Transfer Credit: CSU; UC credit limitations.
(CAN CHEM 2 = CHEM 21 + 21L1 + 21L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific method of inquiry.
1901.00

21L2 General Chemistry Laboratory I (1)
Class hours: 48-54 laboratory.
Corequisite: Chemistry 21 and 21L1.
Transfer Credit: CSU; UC credit limitations.
(CAN CHEM 2 = CHEM 21 + 21L1 + 21L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific method of inquiry.
1901.00

22 General Chemistry (3)
Class hours: 48-54 lecture.
Prerequisite: Chemistry 21, 21L1, and 21L2.
Corequisite: Chemistry 22L1 and 22L2.
Transfer Credit: CSU; UC.
(CAN CHEM 4 = CHEM 22 + 22L1 + 22L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Continued study of the science of chemistry. Topics include: kinetics, equilibria, acids and bases, ionic equilibria of weak acids and bases and complexes, electrochemistry, chemistry of main group metallic and non-metallic elements, chemistry and metallurgy of transition metals, nuclear chemistry, and an introduction to organic chemistry.
1901.00

22L1 General Chemistry Laboratory II (1)
Class hours: 48-54 laboratory.
Corequisite: Chemistry 22 and 22L2.
Transfer Credit: CSU; UC credit limitations.
(CAN CHEM 4 = CHEM 22 + 22L1 + 22L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific method of inquiry.
1901.00

22L2 General Chemistry Laboratory II (1)
Class hours: 48-54 laboratory.
Corequisite: Chemistry 22 and 22L2.
Transfer Credit: CSU; UC credit limitations.
(CAN CHEM 4 = CHEM 22 + 22L1 + 22L2) (CAN SEQ A = CHEM 21 + 21L1 + 21L2 + 22 + 22L1 + 22L2)
Hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific method of inquiry.
1901.00

70 Quantitative Analysis (4)
Class hours: 32-36 lecture; 96-108 laboratory.
Prerequisite: Chemistry 22, 22L1, and 22L2.
Transfer Credit: CSU; UC.
(CAN CHEM 12)
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.
1901.00

75A Organic Chemistry (5)
Class hours: 64-72 lecture; 48-54 laboratory.
Prerequisite: Chemistry 22, 22L1, and 22L2.
Transfer Credit: CSU; UC.
(CAN CHEM 12)
Study of the chemistry of aliphatic and aromatic hydrocarbons including the theory of their structure, properties and reactions mechanisms. Laboratory work emphasizes the techniques of organic synthesis, purification and characterization.
1901.00

75B Organic Chemistry (5)
Class hours: 64-72 lecture; 48-54 laboratory.
Prerequisite: Chemistry 75A.
Transfer Credit: CSU; UC.
Continued study of the chemistry of aliphatic and aromatic hydrocarbons including the theory of their structure, properties and reactions mechanisms. Laboratory work emphasizes the techniques of organic synthesis, purification and characterization.
1901.00

90A, B Chemistry Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Chemistry. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.
1901.00

75A Organic Chemistry (5)
Class hours: 64-72 lecture; 48-54 laboratory.
Prerequisite: Chemistry 75A.
Transfer Credit: CSU; UC.
Continued study of the chemistry of aliphatic and aromatic hydrocarbons including the theory of their structure, properties and reactions mechanisms. Laboratory work emphasizes the techniques of organic synthesis, purification and characterization.
1901.00

92A-H Special Topics Laboratory: Chemistry (.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Topics of special interest or specific areas of specialization in chemistry not covered in the regular curriculum. May be taken only three times regardless of the unit combination. No single-subject, special-interest class may be repeated.
1901.00

92A-H Special Topics Laboratory: Chemistry (5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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.
1901.00

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CHILD DEVELOPMENT AND EDUCATION (CDE)

Students enrolled in two corequisite-linked courses consisting of one lecture and one work experience course (i.e. CDE-24 and CDE-24W) must achieve a minimum grade of “C” in both courses to meet course and program requirements.

1 Introduction to Principles and Practices in Early Childhood (3)
Class hours: 48-54 lecture
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
History and philosophy of the care of infants and young children, 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.
1305.00

2 Child Growth and Development (3) [Cx]
Class hours: 48-54 lecture
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Examination of the developmental years from birth to early adolescence. Social, emotional, intellectual, and physical growth are studied from relevant theoretical perspectives.
1305.00

3 Child Study and Observation (3)
Class hours: 48-54 lecture
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Current approaches for observing and recording the behavior of infants and young children, using various scientific techniques. Study and interpretation of young children's behavior from perspectives of child development theories. 1305.00

4 Child, Family, and Community (3)
Class hours: 48-54 lecture
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Study of society and its impact upon the behavior of young children. Topics include: family structure, understanding children as a product of their cultural heritage, and development of community resources relating to health, education, welfare, recreational, religious, and counseling organizations. 1305.00

5 Health and Safety of the Young Child (3)
Class hours: 48-54 lecture
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
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. 1305.40

12 Music for Young Children (1)
Class hours: 16-18 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Advisory: Cardio-Pulmonary Resuscitation (CPR) and first aid training is recommended.
Prerequisite: Corequisite: Child Development and Education 24W.
Transfer Credit: CSU.
Study of toddlers' musical behavior. Introduction to music activities for young children. Singing, use of instruments including the autoharp, and recordings. 1305.40

13 Dance and Rhythm for Young Children (1)
Class hours: 16-18 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Advisory: Cardio-Pulmonary Resuscitation (CPR) and first aid training is recommended.
Prerequisite: Corequisite: Child Development and Education 24W.
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. 1305.40

14 Storytelling for Young Children (1)
Class hours: 16-18 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
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. 1305.40

18 School-age Children: Curriculum for Before and After School Care (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Corequisite: Child Development and Education 25.
Prerequisite: Child Development and Education 24W.
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. 1305.40

23 Introduction to Children with Special Needs (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
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 equipment will be examined. 1305.50

24 Curriculum Theory I: Principles and Practices (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 1, 2, 3, and 4.
Corequisite: Child Development and Education 24W.
Transfer Credit: CSU.
Principles of early childhood growth and development as they apply to appropriate curriculum design. Curriculum planning and implementation of cognitive, physical, social, emotional, cultural, creative, and language arts lesson plans in developmentally appropriate environments. 1305.80

24W Curriculum Theory I: Supervised Occupational Work Experience Practicum (1)
Class hours: 80 hours supervised practicum in various community child development programs.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Corequisite: Child Development and Education 24.
Transfer Credit: CSU.
Supervised occupational work experience practicum demonstrating principles of early childhood growth and development to teaching. Curriculum planning and implementation of cognitive, physical, social, emotional, cultural, creative, and language arts lesson plans in developmentally appropriate environments. 1305.80

25 Curriculum Theory II: Advanced Principles and Practices (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 24.
Corequisite: Child Development and Education 25W.
Transfer Credit: CSU.
Advanced principles and practices of curriculum theory of early childhood growth and development and their application through student teaching. Emphasis on health and safety, language capability, cognitive development, and physical needs in the learning environment, as well as development of effective communication skills for teachers. Advanced curriculum planning and implementation of cognitive, physical, social, emotional, cultural, and creative and language arts lesson plans in developmentally appropriate environments, with focus on the creation of an unbiased curriculum and learning environment. 1305.80

25W Curriculum Theory II: Supervised Occupational Work Experience Practicum (1)
Class hours: 80 hours supervised practicum in various community child development programs.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Corequisite: Child Development and Education 25.
Transfer Credit: CSU.
Advanced, supervised application of the principles of early childhood growth and development to student teaching. Emphasis on health and safety, language capability, cognitive development, and physical needs in the learning environment, as well as development of effective communication skills for teachers. Advanced curriculum planning and implementation of cognitive, physical, social, emotional, cultural, and creative and language arts lesson plans in developmentally appropriate environments, with focus on the creation of an unbiased curriculum and learning environment. 1305.80

26 Community Internship Seminar: Child Development and Education (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 25 and 25W.
Transfer Credit: CSU.
Credit limitations.
Discussion and evaluation of the curriculum issues applicable to each of the varied types of child development sites. 1305.80
Course Descriptions

50 Administration of Child Development Programs (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 2 and 4.
Transfer Credit: CSU.
Principles, techniques, and methods necessary for the efficient administration of programs in early childhood education. Private nursery schools, church-sponsored schools, publicly funded day-care programs, Head Start, and related programs. Special emphasis on program development, budgeting, staff relationships, leadership/supervision, and governmental regulations, licensing, and certification. Required for Child Development Site Supervisor and/or Program Director Permit.
1305.80

58 Parent-Teen Interaction (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Transfer Credit: CSU.
Overview of the parent-child relationship from early elementary through adolescence. Topics include: stages of adolescent development, interpersonal communication, limits and guidelines for adolescent behavior, and alternative family social systems. Successful parenting practices are discussed.
1305.80

92A-H Special Topics: Child Development and Education (1.5-6)
Class hours: 16-18 hours/term for each unit of credit.
Transfer Credit: CSU.
Special interest lecture course for students wishing further exploration in specific areas of child development and education. Topics are determined by the instructor and cover the range of Child Development and Education curriculum. Consult the schedule of classes for current term emphasis. May be taken four times regardless of the unit combination, however no single-topic, special interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
1305.00

92A-H Special Topics: Child Development and Education (1.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU.
A series of special interest laboratory practicum courses designed to allow students to gain specific skills with children. Topics are determined by the instructor and cover the range of Child Development and Education curriculum. Consult the schedule of classes for current term emphasis. May be taken four times regardless of the unit combination, however no single-topic, special interest laboratory practicum class may be repeated. May require corequisites and/or prerequisites based on the content of the course.
1305.00

415 Dynamics of Play (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Analysis of the ways that play affects the social, emotional, and physical development of young children, including children with special needs. Methods of analyzing play activities, designing play environments, and facilitating enhanced play experiences are examined.
1305.00

416 Brain Research and the Implications for Classroom Teaching (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Advisory: Completion of Child Development and Education 2.
Introduction to brain physiology and functioning. Current brain research and its relevance to educational practices and the guidance of children. Current brain research findings in the areas of learning and memory, effects of stress and drugs, emotional and intellectual functioning, and gender differences in brain function and behavior. Implications of brain research on communicating and interacting with young children in ways that elicit positive behaviors.
1305.00

417 School-Age Children: Growth and Development (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Designed to meet the training needs of home-based childcare providers. Child development theories, as well as licensing requirements, business aspects of home-based childcare, record keeping, income tax requirements, liabilities, responsibilities, and health and safety requirements. Nutritional needs of children, appropriate discipline, and the recognition and reporting of child abuse are also covered.
1305.00

428 Home-Based Child Care (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Advisory: Completion of Child Development and Education 2.
Infant and toddler (birth through three years of age) development, as reflected in theory and research findings, including cognitive, language, and brain development. Course also includes creating partnerships with coworkers and the child’s family to provide inclusive developmentally appropriate practices.
1305.90

451 Advanced Administration of Child Development Programs (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 50.
Advanced study of issues facing directors of Child Development and Education programs. Examination and analysis of new and proposed state regulations. Introduction to policies specific to state-funded programs. Title 5 regulations, and evaluation of programs utilizing state mandates. Development of advocacy skills, proposals, and grant writing for funding. Emphasis on personnel administration, selection, supervision, and evaluation. This course is required for the Child Development Center Supervision permit.
1305.80

452 Administration and Supervision of Early Childhood Personnel (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 50, and 451.
Methods and principles of supervision of student teachers, assistant teachers, parents, and volunteers in early childhood classrooms. Role of classroom teachers who function as mentors.
1305.80

680 Parent-Child Relations (NC)
Class hours: Variable arranged.
Non-Credit Course
Development of competent teacher assisting skills in parents of preschool children who attend day-care centers. Emphasis on involvement in the educational process, knowledge of day-care programs and curriculum, the function of play in the developmental process, and familiarity with learning materials. May be taken four times.
1305.60

CHINESE (CHI)

1 Elementary Mandarin Chinese (4)
Class hours: 64-72 lecture.
Transfer Credit: CSU; UC.
Introduction to Mandarin Chinese, taught within the context of Chinese culture. Introduction to the customs, cultural practices, and geography of China through lectures, films, web activities, and reading assignments. Focus on the four major skills of language learning - listening comprehension, speaking, reading, and writing - and the grammar and vocabulary necessary to acquire these skills. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. This course corresponds to the first year of high school Chinese.
1107.00

2 Elementary Mandarin Chinese (4)
Class hours: 64-72 lecture.
Prerequisite: Chinese 1 or one year of high school Chinese.
Transfer Credit: CSU; UC.
Continuing study of Mandarin Chinese, taught within the context of Chinese culture. Customs, cultural practices, and geography of China are explored through lectures, films, web activities, and reading assignments. Focus on the further development of conversational, reading, and writing skills. Review of basic structures, and expanded knowledge of verbs, grammar, and vocabulary. Emphasis on the communicative approach to language acquisition, with emphasis on the appreciation of the culture. Fourteen hours of supplemental instruction in a Success Center that supports this course is required.
1107.00
20 Scriptwriting (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Comprehensive overview of scriptwriting for diverse media formats. Students employ writing theory and critical analysis of classical literature to formulate story ideas, develop storytelling techniques, enhance narrative structure, and write polished scripts. Scriptwriting software is used to outline, storyboard, and write dynamic stories for film, radio, television, and the performing arts. May be taken four times.
0610.00

25 Survey of World Cinema (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Historical introduction to motion pictures as an art form, through the study and analysis of significant filmmakers throughout the world of film. Development of film as an evolving art and its impact on commercial television and related visual media. Focus on the specific impact of world filmmakers, technical innovations, influences of visual media techniques of commercial filmmaking, and the methods of film criticism.
0612.10

26 Survey of American Cinema (3)
Class hours: 48-54 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, directors, stars, western, musical, gangster, science fiction, epic, experimental films, family melodrama, hard-boiled detective, small film, and film noir. Development of film as an evolving art and its impact on commercial television and related visual media. Further emphasis on commercial filmmaking and methods of film criticism.
0612.10

30 Cinema Production (3)
Class hours: 32-36 lecture; 48-54 laboratory
Transfer Credit: CSU.
Methodology, theory, and aesthetics of cinematography for motion-pictures and television. Classic filmmaking techniques are combined with digital and/or film cameras and other technologies to achieve a cinematic look to assigned projects. Focus on the traditional production phases of the filmmaking process, including the hiring of personnel, selection and use of tools and techniques, and the directional decisions involved to complete various types of cinematic productions. Students produce and edit projects.
0612.20

80 Producing for Broadcast and Cinema (3)
Class hours: 48-54 lecture.
Prerequisite: A minimum of 3 units in broadcasting or cinema coursework, or consent of the instructor.
Transfer Credit: CSU.
An in-depth exploration and discussion on producing content for the broadcast and cinema industries. Topics include various programming in the broadcasting and entertainment fields. Prepares students to plan and achieve career and educational goals in broadcasting and cinema industries.
0604.20

92A-H Special Topics: Cinema (1-5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
Special interest lecture course for students who wish further exploration in the field of cinema. Topics will vary and will be determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course.
0612.00

92A-H Special Topics Laboratory: Cinema (1-5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
Special interest laboratory course for students who wish further exploration in the field of cinema. Topics will vary and will be determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course.
0612.00

96A,B,C,D Internships in Cinema or Broadcasting (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Prerequisite: Completion of one Cinema or Broadcasting course listed in the Cinema or Broadcasting programs of study.
Advisory: Considerable cinema/broadcasting background and consent of instructor may substitute for prerequisite course, however completion of cinema or broadcasting coursework in the relevant area of internship is recommended.
Transfer Credit: CSU.
Supervised field experience in motion pictures, television, radio, cable station, or other business related to the field of broadcasting and/or cinema. Course is designed to apply knowledge and learn new skills outside of the normal classroom environment. Placement is arranged through the instructor. Participation requirements may vary with the setting. May be taken four times, for a maximum of twelve units credit.
0604.00

96A,B,C,D Independent Study: Cinema (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Designed for the capable and well-motivated student who wishes to pursue study of a specific cinema topic, or a more advanced project in cinema than is offered in the regular program. Students who participate in this program must have completed introductory courses or have shown a skill greater than that necessary for completion of the class offerings. The nature and extent of the project must be determined by the student and instructor before the student registers for the class, since the extent of the project determines the number of units allowed. May be taken twice, regardless of the unit combination.
0612.00

COMMUNICATION STUDIES (COMSTD)

2 Fundamentals of Effective Speaking (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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.
1506.00

4 Fundamentals of Interpersonal Communication (3)
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
(CAN SPCH 8)
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.
1506.00

6 Fundamentals of Small Group Communication (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
(CAN SPCH 10)
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. May be offered as an Honors course.
1506.00

8 Fundamentals of Speech Communication (3)
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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. Course includes theories of rhetoric and communication for the development of skills and understanding of verbal and nonverbal communications.
1506.00

12 Mass Communication and Society (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language.
Transfer Credit: CSU; UC.
(CAN JOUR 4)
Examination of the form, content, and consequence of mass communication. Historical overview and examination of mass mediated reality using theories or rhetoric and symbolic interaction. Special attention 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. May be offered as an Honors course.
0610.00

14 Oral Interpretation of Literature (3)
Class hours: 48-54 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 expertly the literature and of the critical skills required to evaluate oral interpretation performance. Recommended for students of speech communication studies, theatre, English, and the teaching professions.
1506.00
16 Communications Studies: Forensics (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Advisory: Completion of Communication Studies 8 and/or high school forensic experience.
Transfer Credit: CSU.
Preparatory procedures for intercollegiate forensic competition and/or public performance, including research methods and organizational formats appropriate to individual, team, and/or cast presentations. Presentation events include, but are not limited to, debate, persuasive speaking, extemporaneous speaking, oral interpretation of literature, and after-dinner speaking. Students are required to participate in intercollegiate speech tournaments or other performance activities. May be taken four times. 1506.00

72 Logic and Argumentation (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(CAN SPCH 6)
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, extensive writing requirements including advocacy papers, and analysis of refutations of arguments. 1506.00

74 Intercultural Communication (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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 of which are interrelated. Principles of communication theory as they apply to the intercultural setting. May be offered as an Honors course. 1506.00

76 Gender and Communication (3)
Class hours: 48-54 lecture.
Advisory: Completion of Communication Studies 2, 4, 6, or 8 and eligibility for English 1A as determined by the Chaffey assessment process or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU.
Examination of communication patterns existing between males and females. Designed to integrate theory and practice, and to heighten students’ awareness of the importance of gender as a communication variable. Emphasis on perception, verbal and nonverbal communication in interpersonal, small group and public settings. Communication problems relating to gender are addressed along with listening, assertiveness, negotiation and other conflict management strategies. 1506.00

90A Communications Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations
See counselor.
Honors component for Communication Studies. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 1506.00

92A-H Special Topics: Communication Studies (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special-interest course of varying length for students who wish in-depth exploration of specific areas of communication both in theory and skills. Topics will be determined by the instructor and will cover an appropriate area of concentration within the range of communication arts: communication theory, interpersonal communication, small group communication, rhetoric and persuasion. See class schedule for emphasis. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 1506.00

**COMPUTER INFORMATION SYSTEMS: CORE (CIS)**

1 Introduction to Computer Information Systems (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
(CAN CISCI 2)
Principles and applications of computers, including their role in business and society. Designed for both Computer Information Systems majors and non-majors. Fundamentals of hardware, applications software, storage, operating systems, communications, and the Internet. May be offered as a Honors course. 0702.00

4 Fundamentals of Microsoft Windows (1.5) [Cx]
Class hours: 24-27 lecture.
Transfer Credit: CSU.
Hands-on introduction to the terminology, application, and use of the graphical operating system. May be taken four times. 0702.00

15 Microsoft Access Database Design and Development (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 1.
Transfer Credit: CSU.
Microsoft Access database design and development for database administrators responsible for company-wide database access and control. May be taken four times. 0707.20

30A Introduction to Telecommunications (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
Transfer Credit: CSU.
Introduction to the fundamentals of telecommunication. Topics include: digital, analog, bandwidth, protocols, LANs, MANS, WANS, telephone systems and cabling, network service providers, laws, and standards. 0934.30

50 Introduction to Computer Networks (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 1.
Transfer Credit: CSU.
Introduction to networking fundamentals. Topics include: theory, terminology, Network Operating Systems, the OSI model, protocols, and security. Hands-on instruction in the installation, configuration, administration, diagnostics, and trouble-shooting of computer networks. 0708.10

50A Introduction to Computer Networks I (1.5) [Cx]
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 1.
Transfer Credit: CSU.
Introduction to basic networking terminology and theory, including Network Operating Systems, the OSI model, and protocols. 0708.10

50B Introduction to Computer Networks II (1.5) [Cx]
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 50A.
Transfer Credit: CSU.
Hands-on introduction to networking fundamentals including installation and configuration, administrative tools, diagnostics, and troubleshooting. 0708.10

68 Using the Internet (1.5)
Class hours: 24-27 lecture.
Transfer Credit: CSU.
Cruise the information superhighway. Topics include access, hardware, software, protocols, UNIX, e-mail, telnet, newsgroups, file transfer, mailing lists, World Wide Web, HTML, and others. Doing research and conducting business on the Internet are also covered. 0709.00

92A-H Special Topics: Computer Information Systems (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
Special interest lecture course for students who wish further exploration in specific areas of computer information systems. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0702.00

98A, B, C, D Independent Study: Computer Information Systems (1, 2, 3, or 4)
Limitation on Enrollment: Instructor signature and prior Computer Information Systems coursework is required for registration.
Transfer Credit: CSU credit limitations. See counselor.
Special project course designed for the capable, well-motivated student with previous coursework in the discipline. Student explores and develops a project or paper on an area of personal interest in Computer Information Systems. Nature and extent of the project must be determined by both the student and the instructor before the student registers, since the scope of the project determines the number of units awarded. May be taken four times regardless of the unit combination. 0702.00

420 Computer Security Basics (1.5)
Class hours: 24-27 lecture.
Introduction to security issues affecting individual computers and Internet access. Protection strategies from viruses, Trojan-Horse programs, e-mail attacks, and other forms of intrusion, Selection, installation, and use of anti-virus software. May be taken three times. 0701.00

431 Project Management for Information Technology (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 1.
Fundamentals of project management applied to the field of information technology using current project management software. Topics include: creating task lists, setting up resources, developing, formatting, and printing the project plan; organizing and formatting project details; tracking progress; measuring performance; and reporting project status. May be taken four times. 0702.10

435 Fundamentals of Microsoft Visio (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Computer Information Systems 1.
Fundamentals of the popular diagramming software used for business and information technology. Plan,
create, and customize flowcharts, project schedules, organization charts, office layouts, network and other IT diagrams, and templates. May be taken four times. 0702.10

470 Electronic Commerce (1.5)  
Class hours: 24-27 lecture.  
Advisory: Completion of Computer Information Systems 66.  
Introduction to the theory and practice of conducting business over the Internet. Topics include: electronic versus traditional commerce, electronic data transmission technologies, hardware, software, security, payment systems, electronic data interchange, and new technologies as they emerge. 0709.10

492A-H Special Topics: Computer Information Systems (5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
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 four times, however, no single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course. 0702.00

496A,B,C,D Internships in Computer Information Systems (1, 2, 3, or 4)  
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit. Limitation on Enrollment: Consent of the Computer Information Systems Program Coordinator is required. Corequisite: Concurrent enrollment in any Computer Information Systems course. Supervised internship in cooperation with private or public sector employers. Designed to apply knowledge and learn new skills directly related to the student's program of study outside of the normal classroom environment. Placement is arranged through the instructor. Participation requirements may vary with the job setting. May be taken up to four times, for a maximum of twelve units credit. 0702.00

**COMPUTER INFORMATION SYSTEMS: CISCO INTERNETWORKING (CISCO)**

1 Cisco Internetworking I (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems 1 or equivalent experience.  
Transfer Credit: CSU.  
First in a four-course sequence that qualifies students to take the Cisco CCNA examination. Topics include: network fundamentals review; WAN's and routers, router components and configuration, TCP/IP addressing, network protocols, access control lists (ACL's), and network troubleshooting. Students gain hands-on skills through configuring a router, managing Cisco IOS software, configuring routing protocols, and creating access lists. May be taken three times. 0708.00

2 Cisco Internetworking II (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 1 or equivalent experience.  
Transfer Credit: CSU.  
Second in a four-course sequence that qualifies students to take the Cisco CCNA examination. Topics include: network fundamentals review; WAN's and routers, router components and configuration, TCP/IP addressing, network protocols, access control lists (ACL's), and network troubleshooting. Students gain hands-on skills through configuring a router, managing Cisco IOS software, configuring routing protocols, and creating access lists. May be taken three times. 0708.00

3 Cisco Internetworking III (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 2 or equivalent experience.  
Transfer Credit: CSU.  
Third in a four-course sequence that qualifies students to take the Cisco CCNA examination. Switching basics and intermediate routing. Topics include: LAN switching and design; command line interface and configuration switching; Virtual LANs (VLANs), Virtual Trunking Protocol (VTP), and Spanning Tree Protocol (STP); advanced IP addressing techniques; Variable Length Subnet Masking (VLSM); intermediate routing protocols such as RIPv2, EIGRP, and OSPF; review of access control lists; and network management. May be taken three times. 0708.00

4 Cisco Internetworking IV (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 3 or equivalent experience.  
Transfer Credit: CSU.  
Final course in a four-course sequence that qualifies students to take the Cisco CCNA examination. Topics include: advanced addressing techniques; network protocols; network management; transport protocols; and routing protocols for the CCNA certification exam. May be taken three times. 0708.00

415 Cisco Internetworking V (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.  
Advanced routing configuration course. Topics include: overview of scalable internetworks; advanced IP address management; routing protocols overview; RIP/2, EIGRP, and OSPF in single and multiple areas; IS-IS; BGP; managing IP traffic; redistribution and route filtering; and voice-over IP (VOIP) fundamentals. Qualifies students to take the Cisco CCNP Level 5 examination. May be taken three times. 0708.00

416 Cisco Internetworking VI (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.  
Remote access course covering skills needed to incorporate branch locations, remote sites, and telecommuters into a network. Topics include: building Cisco remote access networks (BRCAN), asynchronous modems, X.25, ISDN, dial on demand routing (DDR), frame relay, broadband, virtual private networks (VPNs), and voice over IP (VOIP) technologies. Qualifies students to take the Cisco CCNP Level 6 examination. May be taken three times. 0708.00

417 Cisco Internetworking VII (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.  
Advanced switching course covering skills needed to build, maintain, and troubleshoot switched campus networks. Topics include building Cisco multilayer switched networks (BCM5), use of routing and switching technologies together, virtual LANs (VLANs), VTP, STP, multicasts, HSRP, redundancy, and access control. Quality of service issues (QoS) and voice/video (VOIP) applications. Qualifies students to take the Cisco CCNP Level 7 examination. May be taken three times. 0708.00

418 Cisco Internetworking VIII (4)  
Class hours: 64-72 lecture.  
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.  
Hands-on troubleshooting course covering skills needed to baseline and maintain Cisco routed and switched networks Layers 1-7, to include Cisco Internetwork Troubleshooting (CTT). Protocols and technologies include: Ethernet, Fast Ethernet, Token Ring, Frame Relay, ISDN, EIGRP, OSPF, IS-IS, and BGP. Quality of service (QoS), virtual private networks (VPNs) and voice over IP (VOIP) are also covered. Final course in a four-course series that qualifies students to take the comprehensive Cisco CCNP examination. May be taken three times. 0708.00

492A-H Special Topics: CIS Cisco Internetworking (.5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit. Special interest lecture course for students who wish further exploration in specific areas of Cisco Internetworking. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0708.00

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**COMPUTER INFORMATION SYSTEMS: GAME DEVELOPMENT (CISGAME)**

401 Fundamentals of Game Development (1.5)  
Class hours: 24-27 lecture.  
Advisory: Completion of Computer Information Systems 1.  
Introduction to game development. Topics include: history, hardware, graphics, sound, game genres, design elements, game generation software, game programming, and available careers in game development. May be taken four times. 0707.10

402 Fundamentals of Game Development II (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Computer Information Systems: Game Development 401.  
Game development using creation software and development tools. Topics include: game design methods; content development, including graphics and sound; game logic; programming concepts such as objects, properties, methods, and events; basic concepts of movement and collision; beta testing; and identifying and fixing bugs. May be taken four times. 0707.10

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Course Descriptions

403 Fundamentals of Game Programming (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Game Development 401.
Introduction to game programming using a popular computer game programming language. Fundamentals of planning, syntax, logic, testing, debugging, and documentation in the development of computer games. May be taken four times. 0707.10

420 Game Development Using Flash (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Game Development 401.
Advisory: Completion of Computer Information Systems: Internet and Web Development 420A.
Game development using Macromedia Flash. Topics include: fundamentals of games and logic, game development, positioning and movement of elements with Flash, collision detection and reaction, graphics, sound, animations, ActionScript for the creation of games and user interfaces, and testing and debugging projects. May be taken four times. 0708.20

492A-H Special Topics: CIS Hardware and Support (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Special interest lecture course for students who wish further exploration in specific areas of computer hardware and support. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0708.20

414 JavaScript Programming (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Internet and Web Development 401.
Prerequisites: Completion of Computer Information Systems: Game Development 420A.
Principles of JavaScript programming. Topics include: integrating JavaScript and HTML; creating pop-up windows; adding scrolling messages; validating forms; enhancing the use of images and form objects; working with cookies, arrays, and frames; and developing an electronic commerce shopping cart application. 0707.10

Computers Information Systems: Internet and Web Development (CISIWEB)
70 Creating Web Pages with HTML (1.5) [Cx]
Class hours: 24-27 lecture.
Advisory: Completion of Computer Information Systems 68.
Transfer Credit: CSU.
In-depth study of the HTML (Hypertext Markup Language) and its use in the development of Web content. Course also includes an introduction to the next generation of HTML, which is XHTML (Extensible Hypertext Markup Language). May be taken four times. 0707.10

92A-H Special Topics: CIS Internet and Web Development (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
Special interest lecture course for students who wish further exploration in specific areas of Internet and Web development. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0708.20

410 WebMaster Tools (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Tools used by the Webmaster to develop and administer an Intranet/Internet Website. Topics include: advanced HTML programming, JavaScript, Dynamic HTML, XML, Publishing, and others. May be taken three times. 0707.10

422 Web Development: Advanced Microsoft FrontPage (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems: Internet and Web Development 412A.
Advanced concepts in the use of Microsoft FrontPage. Topics include: managing the site on a server, source control, creating a discussion group, connecting to and querying a database, processing data, modifying HTML, and working with Microsoft Office components and Cascading Style Sheets (CSS). May be taken three times. 0709.00

423 Web Development: Dreamweaver (3)
Class hours: 48-54 lecture.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Principles of Web development using Macromedia Dreamweaver. Topics include: the Dreamweaver interface, the object panel and other tools, HTML integration and editing, images, text, linking, lists, tables, tracing images, layers, frames, rollovers, Cascading Style Sheets (CSS), Dynamic HTML, forms, publishing, Fireworks, and Flash files. May be taken four times. 0707.10

424A JavaScript Programming I (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems: Internet and Web Development 401.
Introduction to JavaScript programming. Topics include integrating JavaScript and HTML; creating pop-up windows; adding scrolling messages; validating forms; enhancing the use of images and form objects; working with cookies, arrays, and frames; and developing an electronic commerce shopping cart application. 0707.10

424B JavaScript Programming II (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems: Internet and Web Development 414A.
Using advanced concepts of the JavaScript programming language in the development of Web pages. Topics include: working with cookies, arrays, and frames; and the development of an electronic commerce shopping cart application. 0707.10

420A Web Development: Flash (3)
Class hours: 48-54 lecture.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Web development using Macromedia Flash. Topics include: Flash movie basics, the toolbox, symbols, libraries, buttons, tweening, masking, sound, publishing, and integration with HTML and other Web development tools. ActionScript programming, interactivity, form development, and use with other languages. May be taken four times. 0709.00

420B Web Development: Flash ActionScript Programming (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Internet and Web Development 420A.
Web development using ActionScript for Macromedia Flash, to create web-based applications and programs. Topics include: ActionScript and object oriented programming basics (variables, operators, conditionals, functions, methods, classes, inheritance); working with arrays, objects, and movie clips; user input; interactivity; Dynamic data exchange; server side scripting; and using XML with Flash. May be taken four times. 0707.10

423A Web Development: Dreamweaver I (1.5)
Class hours: 24-27 lecture.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Principles of Web development using Macromedia Dreamweaver. Topics include: the Dreamweaver interface, the object panel and other tools, HTML integration and editing, images, text, linking, lists, tables, tracing images, layers, frames, rollovers, Cascading Style Sheets (CSS), Dynamic HTML, forms, publishing, Fireworks, and Flash files. May be taken four times. 0709.00
Computer Information Systems: Networking (CISNTWK)

11 Microsoft Network Server (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
Transfer Credit: CSU.
In-depth study of Microsoft network server software and the administration of a network. Topics include: installation and configuration, active directory, file system management, and security. Helps prepare students for the Microsoft Certified Professional (MCP) and Microsoft Certified Systems Engineer (MCSE) exams. May be taken four times.

92A-H Special Topics: CIS Networking (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
Special interest lecture course for students who wish further exploration in specific areas of computer networking. Topics vary and are determined by the instructor. May be taken three times.

401 Network+ Examination Preparation (.5)
Class hours: 8-9 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
A practical course to prepare students for the CompTIA Network+ certification examination. Topics include: logical and physical topologies, TCP/IP and other protocols, network components, the OSI model, access, and general network troubleshooting. May be taken three times.

410 Microsoft Network Client (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
In-depth study of Microsoft network client operating system software. Topics include: installation and configuration, administration of users and groups, and services. Helps prepare students for the Microsoft Certified Professional (MCP) and Microsoft Certified Systems Engineer (MCSE) exams. May be taken four times.

412 Microsoft Network Directory Services (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
Overview of Microsoft network directory services, focusing on network security and resource management. Helps prepare students for the Microsoft Certified Professional (MCP) and Microsoft Certified Systems Engineer (MCSE) exams. May be taken four times.

413 TCP/IP (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
Study of Transmission Control Protocol/Internet Protocol (TCP/IP) and its implementation on various operating systems. Helps prepare students for the Microsoft Certified Professional (MCP), Microsoft Certified Systems Engineer (MCSE), and CompTIA exams. May be taken four times.

414 Managing a Microsoft Network Environment (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 411.
Advanced study of the management and support of a Microsoft network environment. Helps prepare students for the Microsoft Certified Professional (MCP), Microsoft Certified Systems Administrator (MCASA), and Microsoft Certified Systems Engineer (MCSE) exams. May be taken four times.

415 Administering a Microsoft Network Infrastructure (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 411.
Advanced study in designing, using, maintaining, and troubleshooting the Microsoft network infrastructure. Helps prepare students for the Microsoft Certified Professional (MCP), Microsoft Certified Systems Administrator (MCASA), and Microsoft Certified Systems Engineer (MCSE) exams. May be taken four times.

420 Installing a Home and/or Small Business Network (1.5)
Class hours: 24-27 lecture.
Basic hands-on course on installing a home and/or a small business network. Increase productivity by establishing a network to share hardware, software, and Internet connections. Additional topics include: remote access, network security, broadband, and wired versus wireless networks. May be taken three times.

430 Fundamentals of Linux (1.5)
Class hours: 24-27 lecture.
Prerequisite: Computer Information Systems 1.
Fundamental concepts of the Linux operating system. Topics include: design and philosophy of open-source software, installation and initial configuration, basic commands and concepts, managing file systems, editors and text tools, graphical user interfaces, and miscellaneous applications. May be taken three times.

440 Introduction to Network Security Administration (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems 50 or 50B.
Fundamentals of network security for the networking professional. Topics include: authentication, attack types, threats and countermeasures, intrusion detection systems, firewalls, physical security concepts, security policies, disaster recovery, and computer forensics. Helps prepare students for the CompTIA Security+ certification exam. May be taken three times.

441 Firewalls and Network Security Administration (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 440.
Introduction to firewalls and other network security components. Examination of firewalls in context with other elements needed for effective security throughout the network, including intrusion detection systems, proxy servers, encryption, and virtual private networks. May be taken three times.
442 Network Disaster Recovery Planning (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 11.
Response to system disasters and the subsequent restoration of normal operations. Step-by-step processes needed to develop, implement, and manage a disaster recovery plan. Topics include: risk assessment; identifying critical business activities and recovery priorities; establishing crucial contacts during disasters; developing interim procedures for the handling and protection of materials, resources, and documentation; and appropriate responses to computer crime and cyber attacks. May be taken three times. 0708.10

445 Windows Security Administration (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 11.
Comprehensive overview of security features in Windows Server. Security configuration, management, and networking functionality in stand-alone, large, and small network environments. Students learn to configure and support secure environments running Windows Server. Topics include: security risks, authentication protocols, domains, trees, PKI security enhancements, DNS and DHCP security features, remote access, and Internet usage policies. Helps prepare students for the Microsoft Security certification examinations. May be taken three times. 0708.10

447 Linux Security Administration (3)
Class hours: 48-54 lecture.
Prerequisite: Computer Information Systems: Networking 430.
Linux networking and security fundamentals, including firewalls, encryption, and network intrusion detection. Focus on problem-solving through hands-on experience. May be taken three times. 0708.10

492A-H Special Topics: CIS Networking (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Special interest lecture course for students who wish further exploration in specific areas of computer networking. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0708.10

492A-H Special Topics: CIS Programming (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Special interest lecture course for students who wish further exploration in specific areas of computer programming. Topics vary and are determined by the instructor. See the schedule of classes for current term emphases. May be taken four times regardless of the unit combination, however, no single-subject, special interest class may be repeated. May require prerequisites and/or corequisites based upon the content of the course. 0708.10

492A-H Special Topics: CS Programming (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Introduction to the concepts, terminology, syntax, and uses of the C++ programming language. May be taken three times. 0708.10

492A-H Special Topics: Computer Science (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
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. 0706.00

COMPUTERS
(See art, business and office technologies, computer information systems, and computer science)

CONSUMER STUDIES (CONSUM)
(See also nutrition and food)

11 Housing and Environment (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Planning, evaluation, and purchasing housing to meet family and individual needs in relation to design and current social, economic, and environmental factors. 1301.00

40 Life Management (3)
Class hours: 48-54 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. 1301.00

50 Consumer Economics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Management of income and expenditures for the individual and family throughout the life cycle, to include advertising, consumer protection, buying skills, budgeting, and savings for financial security. 1301.00

92A-H Special Topics: Consumer Studies (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
Special emphasis courses 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. 1301.00

98A, B, C Independent Study: Consumer Studies (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.

98A, B, C Independent Study: Consumer Studies (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.

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 taken three times, regardless of the unit combination. 1301.00

Course Descriptions
COOPERATIVE EDUCATION

(WORK EXPERIENCE COURSES ARE ALSO LISTED IN SOME INDIVIDUAL DEPARTMENTS.)

92A-H Special Topics: Cooperative Education (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU credit limitations. See counselor.
Special-interest 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.
4932.00

96A.B.C.D Cooperative Education: Career Field Studies (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Corequisite: Employment directly related to major and 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.
4932.00

98 Independent Study: Cooperative Education (1)
Limitation on Enrollment: 2.0 GPA and instructor signature is required for registration.
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 twice.
4932.00

497A-D Cooperative Education: General Work Experience (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Corequisite: Enrollment in at least seven units including General Work Experience.
Supervised employment which 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 sixteen units, regardless of the unit combination.
4932.00

CORRECTIONAL SCIENCE (CRSCI)

While most Correctional Science courses may be challenged for Credit-by-Examination, a limitation to the number of challenges may apply. Contact the office of the Dean of Social and Behavioral Sciences for more information.

1 Introduction to Correctional Science (3) [Cx]
Class hours: 48-54 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: 48-54 lecture.
Transfer Credit: CSU.
Dynamics of inmate supervision in a correctional institution, security procedures, contraband control, and prison atmosphere. Staff responsibilities and their application to inmate culture and institution characteristics. Past and present methods of controlling inmates.
2105.10

3 Correctional Law (3) [Cx]
Class hours: 48-54 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: 48-54 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 placement services. Designed for both pre-service and in-service personnel.
2105.10

5 Crime and Delinquency (3) [Cx]
Class hours: 48-54 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 on society and victims.
2105.10

6 Correctional Interviewing and Counseling (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Role of basic interviewing and counseling processes using appropriate techniques and theories in confinement building which may be used by the correctional employee in client interviews and counseling. Stress 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: 48-54 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 post-sentence report, determinate versus indeterminate sentencing, the variety of roles of the probation and parole officer, and the legal decisions affecting probation and parole practice. Review of the relevant research in probation and parole.
2105.20

8 Ethnic Group Relations (3) [Cx]
Class hours: 48-54 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: 48-54 lecture.
Transfer Credit: CSU.
Violence in America's past, including lynching mobs, feuds, and vigilantes. Family violence including wife and child abuse. Types of violent homicide, including mass murder, assassination, and rape. A goal of the course is to replace common stereotypes of the violent offender with a more realistic understanding of these criminals.
2105.10

409 The Female Victim/Offender (3)
Class hours: 48-54 lecture.
Study of women involved in the criminal justice system both as victims and as offenders. Major theories of female victimization and criminality are presented.
2105.10

410 Street Gangs and Subcultures (3)
Class hours: 48-54 lecture.
Introductory course exploring the history and development of gangs, current gang activity, and trends affecting the evolution of established gangs and the development of future gangs. Efforts by police, probation, and parole agencies in the prevention, intervention, and suppression of gangs. Motivational theories on why young people join gangs and the relationship between street and prison gangs.
2105.10

411 Juvenile Corrections (3)
Class hours: 48-54 lecture.
Study of the juvenile justice system from arrest through juvenile court, probation, juvenile halls, and short-term county treatment facility, and programs and procedures of the California Youth Authority.
2105.10
Course Descriptions

DANCE (DANCE)

1 Survey of Dance (3)
Class hours: 48-54 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

2 Stage Movement (3)
(Also available as Theatre 2)
Class hours: 48-54 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. 1008.00

4A Ballet IA (1.5)
(Replaces Dance 3A)
Class hours: 48-54 studio.
Transfer Credit: CSU; UC credit pending.
Skill acquisition and practice of fundamental classical ballet barré and center technique at the beginning level. Study of ballet theory, history, and vocabulary. May be taken twice. 1008.00

4B Ballet IB (1.5)
(Replaces Dance 3B)
Class hours: 48-54 studio.
Transfer Credit: CSU; UC credit pending.
Skill improvement in fundamental classical ballet barré and center technique at the advanced beginning level. Continued study of ballet theory, history, and vocabulary. May be taken twice. 1008.00

6A Ballet IIA (1.5)
(Replaces Dance 5A)
Class hours: 48-54 studio.
Transfer Credit: CSU; UC credit pending.
Skill improvement and added complexity in classical ballet barré and center technique. Development and practice of intermediate skill level combinations with modifications and complications. Continued study of ballet theory, history, and vocabulary. May be taken twice. 1008.00

6B Ballet IIB (1.5)
(Replaces Dance 5B)
Class hours: 48-54 studio.
Transfer Credit: CSU; UC credit pending.
Skill improvement in increasingly complex classical ballet barré and center technique. Further development and practice of intermediate/advanced skill level combinations with modifications and complications. Continued study of theory, history, and vocabulary. May be taken twice. 1008.00

10A Jazz Dance I (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic jazz dance, vocabulary, and dance technique. May be taken twice. 1008.00

10B Jazz Dance I (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic jazz dance, vocabulary, and dance technique. May be taken twice. 1008.00

20A Modern Dance (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic modern dance vocabulary and dance techniques. May be taken twice. 1008.00

20B Modern Dance (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic modern dance vocabulary and dance techniques. May be taken twice. 1008.00

30A Tap Dance I (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic tap dance technique and routines. May be taken twice. 1008.00

30B Tap Dance I (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Basic tap dance technique and routines. May be taken twice. 1008.00

42 Dance Workshop (3)
Class hours: 144-162 laboratory.
Limitation on Enrollment: Students must show nominal proficiency in dance by audition, or obtain consent of the instructor. 1008.00

50A Jazz Dance II (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Intermediate jazz dance techniques and vocabulary. May be taken twice. 1008.00

50B Jazz Dance II (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Intermediate jazz dance techniques and vocabulary. May be taken twice. 1008.00

May be taken twice.

60A Tap Dance II (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Intermediate tap dance technique and routine. May be taken twice. 1008.00

60B Tap Dance II (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Intermediate tap dance technique and routines. May be taken twice. 1008.00

DENTAL ASSISTING (DA)

Student must furnish their own uniform and pay for a physical examination.

In courses having both lecture and laboratory components that must be taken concurrently (i.e. Dental Assisting 403 and 403L), a minimum grade of C is required in both the lecture and lab component in order to meet course and program requirements.
401 Dental Anatomy (2) [Cx]
Class hours: 32-36 lecture.
Tooth morphology, embryology, and histology. Emphasis on individual characteristic and functions of teeth and the anatomy of the head and neck.
1240.10

402 Occupational Health and Safety (1) [Cx]
Class hours: 16-18 lecture.
Knowledge and skills required to work safely within the dental care environment. Topics include: infection control procedures and protocols, health and safety issues, and hazardous materials management. Procedures and recommendations from the American Dental Association (ADA) and the Occupational Safety and Health Administration (OSHA) are covered.
1240.10

403 Dental Materials (1)
Class hours: 16-18 lecture.
Corequisite: Dental Assisting 403L.
Study of the chemical and physical properties of dental materials as applied in laboratory, preventative, and restorative procedures. Includes instruction on laboratory equipment utilization and maintenance.
1240.10

403L Dental Materials Lab (0.5)
Class hours: 24-27 laboratory.
Corequisite: Dental Assisting 403.
Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

404 Chairsides Procedures (4)
Class hours: 64-72 lecture.
Corequisite: Dental Assisting 404L.
Instruments, dental equipment, and procedures used in general and specialty areas of dentistry. Study of medical and dental emergencies and their treatment in the dental office. Roles of operator, assistant, and patient.
1240.10

404L Chairsides Procedures Lab (2)
Class hours: 96-108 laboratory.
Corequisite: Dental Assisting 404.
Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

405 Professional Dental Assistant (1)
Class hours: 16-18 lecture.
Introduction to the professional dental environment. Topics include: history of the profession, licensing, professional ethics and demeanor, legal considerations, and community dental issues. May be taken twice.
1240.10

405L Professional Dental Assistant Laboratory (.5)
Class hours: 24-27 laboratory.
Limitation on Enrollment: Application for admission to the Dental Assisting program must be submitted to program coordinator/Instructor.
Prerequisite: Dental Assisting 405.
Students are assigned to offsite clinical facilities, including both general and specialty dental practices. Focus is on observation and application of four-handed dentistry concepts, auxiliary utilization, direct patient care, office procedures, and participation in community health projects. Instructor signature required.
1240.10

407 Dental Radiology I (1)
Class hours: 16-18 lecture.
Corequisite: Dental Assisting 407L.
Study of dental radiography history, basic principles of X-ray production, physics, and biological effects of radiation. Radiation safety procedures and monitoring of film exposure. Film types, identification, and processing techniques. The relationship of dental anatomy and facial structure to the exposure and mounting of films. Paralleling technique, followed by pre-clinical and clinical application.
1240.10

407L Dental Radiology I Lab (1)
Class hours: 48-54 laboratory.
Corequisite: Dental Assisting 407.
Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

410 Dental Hygiene (3)
Class hours: 32-36 lecture.
Anatomy and physiology, microbiology, and nutrition as they relate to dentistry and dental disease.
1240.10

411 Biomedical Sciences (2) [C]
Class hours: 32-36 lecture.
Dental Assisting 411L Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

412 Dental Office Procedures (1)
Class hours: 16-18 lecture.
Corequisite: Dental Assisting 412L.
Development of the essential skills needed to work in the business office of a dental practice. Topics include: scheduling appointments, billing and collection, insurance forms and financial arrangements, letter writing, bookkeeping basics, and computer applications.
1240.10

412L Dental Office Procedures Lab (1)
Class hours: 48-54 laboratory.
Corequisite: Dental Assisting 412.
Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

413 Oral Pathology and Pharmacology (1)
Class hours: 16-18 lecture.
Study of oral pathology observed in the dental practice. Development of a working knowledge of the drugs and medications that are commonly used in dentistry.
1240.10

414 Dental Radiology II (1)
Class hours: 16-18 lecture.
Prerequisite: Dental Assisting 407.
Corequisite: Dental Assisting 414L.
Development of additional techniques in dental radiology, anatomical landmarks and dental anatomy pertaining to dental radiography, exposure, and processing faults. Types and techniques of inter-oral and extra-oral film exposure, with emphasis on film quality evaluation. Processing and maintaining automatic processors. Knowledge of panoramic techniques and other related radiographic equipment. Upon successful completion of course, student receives the California State Radiation Safety Certificate.
1240.10

414L Dental Radiology II Lab (1)
Class hours: 48-54 laboratory.
Prerequisite: Dental Assisting 407L.
Corequisite: Dental Assisting 414.
Laboratory application and practice of the concepts and skills learned in the corequisite course.
1240.10

418 Registered Dental Assistant (RDA) Functions and Specialties (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Completion of one semester of the Dental Assisting Program with a minimum grade of C in all dental assisting courses is required.
Corequisite: Dental Assisting 418L.
Emphasis on the functions designated for the Registered Dental Assistant in California. Helps prepare the student for the state board examination.
1240.10

418L Registered Dental Assistant (RDA) Functions and Specialties Lab (1.5)
Class hours: 72-81 laboratory.
Limitation on Enrollment: Completion of one semester of the Dental Assisting program with a minimum grade of C in all dental assisting courses is required.
1240.10

420 Laboratory and Clinical Application (2)
Class hours: 234-261 laboratory.
Corresponding with and extending to the laboratory and clinical practice of the Dental Assisting program with a minimum grade of C in all dental assisting courses is required.
1240.10

421 Supervised Clinical Experience (5.5)
Class hours: 264-297 laboratory.
Limitation on Enrollment: Completion of one semester of the Dental Assisting Program with a minimum grade of C in all dental assisting courses is required.
Students are assigned to extramural (off-site) clinical facilities, including both general and specialty dental practices. Focus is on application of four-handed dentistry concepts, auxiliary utilization, direct patient care, and office procedures. Students are expected to participate in various community and professional development activities as they arise during the term.
1240.10

451 Preparation for Registered Dental Assistant (RDA) Exam (1)
Class hours: 48-54 laboratory.
Written and practical review to prepare for the RDA State Board examination. May be taken twice.
1240.10

453 California Radiation Safety Certificate (1)
Class hours: 48-54 laboratory.
Basic knowledge in dental anatomy, x-ray film mounting, radiation safety and correct exposure, and evaluation of full mouth dental x-ray.
1240.10

461 Temporary Crown/Bridge/Oral Appliances (.3)
Class hours: 16 laboratory.
Construction of temporary crowns and bridges, mouthguards, nightguards, and bleaching trays. Course is intended to give working dental assistants hands-on experience. Continuing education credit is given for each topic covered. May be taken three times.
1240.10

463 Coronal Polishing/Ultrasonic Scaling (.6)
Class hours: 32 laboratory.
Limitation on Enrollment: Student must possess a valid registered dental assistant license, or be currentlv enrolled in a board-approved registered dental assistant program.
Performance of coronal polishing and ultrasonic scaling procedures, in compliance with State of California guidelines. Class gives licensure to the RDA upon completion of the course with a 75% or higher score. May be taken three times.
1240.10

487 Advanced Clinical Applied Technology (1) [Cx]
Class hours: 48-54 laboratory.
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.
1240.10

492A-H Special Topics: Dental Assisting (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
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.
1240.10

492A-H Special Topics Laboratory: Dental Assisting (.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
A series of special topic laboratories for students who desire in-depth exploration in specialized areas of dental assisting. May be taken four times regardless of the unit combination.
1240.10
Course Descriptions

496A, B, C, D Occupational Work Experience: Dental Assisting (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit. 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. 1240.10

522A, B Basic Skills for Job Readiness (1, 2)
Course is offered only on a credit/no credit basis. Class hours: 48-54 hours/term self-paced laboratory for each unit of credit.
Not Degree Applicable. Basic skills in reading, writing and mathematical concepts applied to job training and independent living. May be taken four times, regardless of the unit combination. 4930.30

530 Basic Computer Skills for Students with Disabilities (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Individualized prescriptive course providing disabled students with the knowledge of computer software needed to build keyboarding skills, using a screen reading program. Students create effective documents utilizing adaptive software and hardware and develop transferable skills for use in mainstream courses and/or the work force. May be taken four times. 4930.30

532 Cognitive Retraining for Students with ABI/Stroke (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Individualized prescriptive instruction in independent life skills, prevocational skills, cognitive retraining, and community/social integration for students with ABI/Stroke, using alternative methods of teaching and adaptive equipment. Appropriate evaluation assessments are used to determine students’ entry and exit levels. May be taken four times. 4930.30

534 Self Advocacy/Empowerment for Students with Disabilities (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Prescriptive instruction emphasizing self advocacy and personal empowerment, individual and group survival skills, independent life skills, prevocational skills, and community/social integration. May be taken four times. 4930.30

550 Basic Study Skills for Students with Disabilities (2)
Course is offered only on a credit/no credit basis. Class hours: 32-36 lecture.
Not Degree Applicable. Skills in text reading, vocabulary development, note-taking, test-taking, and research paper preparation. Designed to provide useful alternative methods and techniques as appropriate to compensate for disabilities. May be taken four times. 4930.30

575 Problem Solving for Job Readiness (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Open-entry/open-exit, self-paced laboratory course for job training and independent living. Students apply basic skills of reading, writing, and mathematical concepts to interpret and respond to specific vocational and/or practical living situations. Hands-on learning experiences aid in the development of appropriate work behaviors, social skills, and entry-level job skills. May be taken four times. 4930.30

592A-H Special Topics: Disability Programs and Services (.5-6)
Course is offered only on a credit/no credit basis. Class hours: 16-18 hours/term lecture for each unit of credit.
Not Degree Applicable. Special interest course for students with disabilities who require more intensive instruction in specific areas of knowledge and concept comprehension. Topics are determined by the instructor. See the schedule of classes for current term emphasis. May be taken four times. 4930.30

637 Basic Prevocational Education for Students with Disabilities (NC)
Class hours: Variable arranged Non-Credit Course.
Self-paced, open-entry/open-exit course offering individualized instruction in job development, job search techniques, job holding skills, work and disability payments, and the utilization of community rehabilitation resources for students with developmental, learning, and/or physical disabilities. Work experience, support employment, and/or job placement and follow-up services are provided as a practicum for applying learned skills in a real work environment. 4930.31

651 Job Placement Practicum for Students with Disabilities (NC)
Class hours: Variable arranged Non-Credit Course.
Self-paced, open-entry/open-exit course offering individualized instruction in job development, job search techniques, job holding skills, work and disability payments, and the utilization of community rehabilitation resources for students with developmental, learning, and/or physical disabilities. Work experience, support employment, and/or job placement and follow-up services are provided as a practicum for applying learned skills in a real work environment. 4930.31

657 Vocational Skills for Students with Disabilities (NC)
Class hours: Variable arranged Non-Credit Course.
Self-paced, open-entry/open-exit course for adults with developmental disabilities, teaching the skills and attitudes that lead to increasing levels of production, independent participation in vocational areas, community-based activities, and independent living. Students learn acceptable behaviors and skills necessary to progress in vocational and independent living environments. Classes are held off-campus at facilities such as workshops, work activity, and occupational improvement programs. Students learn the basic academic skills (including reading and math) and health and safety. Dependent upon the type of facility a student attends, and whether it is a day or evening program, additional curriculum may include: job search skills, job retention, basic sign language, training in interpersonal relationships and socialization, leisure and recreational activities, critical living skills, and work skills in janitorial and light clerical jobs. May be repeated. 4930.31

DISABILITY PROGRAMS AND SERVICES (DPS)

For all DPS courses: Students with specific disabilities and educational limitations should have a physician’s recommendation/release for class activities. This provides the instructor with the information necessary to tailor a program to the needs and capabilities of the individual student. Students meeting criteria identified in Title 5, Section 56029, may repeat courses more than the stated number of times.

For DPS-656 and 657: Student must be identified under Title V regulations as a student with a verifiable disability. Student should have the willingness to work in large and small groups, individualized and/or laboratory settings, and the desire to develop vocational work skills, reading, and money handling as related to a vocation and independent living. Student must not be injurious to self or others.

500A Basic Skills for Students with Disabilities (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Individualized prescriptive instruction in mathematics, language mechanics, and reading for students with disabilities, using alternative methods of teaching and adaptive equipment. Appropriate criterion referenced and/or standardized assessments are used to determine students’ entry and exit level. May be taken four times, regardless of unit combination. 4930.30

505 Assessment of Learning Abilities and Limitations (5)
Course is offered only on a credit/no credit basis. Class hours: 24-27 self-paced, open-entry/exit laboratory.
Not Degree Applicable. An assessment of learning strengths and limitations designed for students having difficulties in courses, or desiring assessment for possible inclusion in the learning disabilities portion of Disability Programs and Services. Perceptual, cognitive, and achievement testing is provided as a part of the course. May be taken twice. 4930.32

521 Basic Skills for Job Placement (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Basic skills in reading, writing and mathematical concepts for job placement. Topics include: job search skills, on-the-job work performance expectations, and social behaviors necessary for competitive employment. May be taken four times. 4930.30

522A, B Basic Skills for Job Readiness (1, 2)
Course is offered only on a credit/no credit basis. Class hours: 48-54 hours/term self-paced laboratory for each unit of credit.
Not Degree Applicable. Basic skills in reading, writing and mathematics concepts applied to job training and independent living. May be taken four times, regardless of the unit combination. 4930.30

530 Basic Computer Skills for Students with Disabilities (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Individualized prescriptive course providing disabled students with the knowledge of computer software needed to build keyboarding skills, using a screen reading program. Students create effective documents utilizing adaptive software and hardware and develop transferable skills for use in mainstream courses and/or the work force. May be taken four times. 4930.30

532 Cognitive Retraining for Students with ABI/Stroke (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Individualized prescriptive instruction in independent life skills, prevocational skills, cognitive retraining, and community/social integration for students with ABI/Stroke, using alternative methods of teaching and adaptive equipment. Appropriate evaluation assessments are used to determine students’ entry and exit levels. May be taken four times. 4930.30

534 Self Advocacy/Empowerment for Students with Disabilities (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Prescriptive instruction emphasizing self advocacy and personal empowerment, individual and group survival skills, independent life skills, prevocational skills, and community/social integration. May be taken four times. 4930.30

550 Basic Study Skills for Students with Disabilities (2)
Course is offered only on a credit/no credit basis. Class hours: 32-36 lecture.
Not Degree Applicable. Skills in text reading, vocabulary development, note-taking, test-taking, and research paper preparation. Designed to provide useful alternative methods and techniques as appropriate to compensate for disabilities. May be taken four times. 4930.30

575 Problem Solving for Job Readiness (1)
Course is offered only on a credit/no credit basis. Class hours: 48-54 self-paced laboratory.
Not Degree Applicable. Open-entry/open-exit, self-paced laboratory course for job training and independent living. Students apply basic skills of reading, writing, and mathematical concepts to interpret and respond to specific vocational and/or practical living situations. Hands-on learning experiences aid in the development of appropriate work behaviors, social skills, and entry-level job skills. May be taken four times. 4930.30
DRAFTING (DRAFT)

20 Computer-Aided Drafting and Design (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Drafting 20 or one year of high school drafting.
Transfer Credit: CSU.
Introduction to Computer Aided Drafting and Design (CADD) technology, terminology, and application, using an industry-standard program. Input using the keyboard and mouse; output to a printer or plotter; and create blocks with attributes, then extract that information into tables. Emphasis on two-dimensional working drawings. May be taken four times.
953.00

21 Mechanical Design I (3) [Cx]
Class hours: 16-18 lecture; 96-108 laboratory.
Prerequisite: Drafting 20 or one year of high school drafting or engineering courses.
Transfer Credit: CSU.
Use and care of equipment; freehand lettering, geometric construction, orthographic projection, dimensioning, isometric, oblique drawing, sectioning practices, single auxiliary views; and decimal dimension. Assignments may be completed on the CAD system.
953.40

22 Mechanical Design II (3) [Cx]
Class hours: 16-18 lecture; 96-108 laboratory.
Prerequisite: Drafting 21 or one year of high school drafting or engineering courses.
Transfer Credit: CSU.
Review of the basic concepts of technical drawing. Precision dimensioning and geometric tolerancing per Ansi 14.5Y standards emphasized. Additional experience in single and double auxiliary gained. Intersections and developments covered. The final drawing will require detail, assembly, and pictorial drawing knowledge. Assignments may be completed on the CAD system.
953.40

41 Computer-Aided Drafting and Design:
Mechanical (4)
Class hours: 32-36 lecture; 96-108 laboratory.
Prerequisite: Drafting 20.
Transfer Credit: CSU.
Advanced drafting techniques using the computer, with focus on mechanical applications. Emphasis on the creation of symbol libraries, bills of material, customizing menus, and other advanced topics. Use of paper and model space, referencing other drawings into an existing drawing, sheet sets, and advanced plotting techniques. Introduction to 3-dimensional CAD applications, and to other CAD software programs and applications. May be taken four times.
953.40

43 Three-Dimensional Computer Modeling and Solids Modeling (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Drafting 20.
Transfer Credit: CSU.
Advanced concepts and development of three-dimensional visualization skills. Drawing techniques for solid modeling and solid assembly modeling, using a CAD solid modeling program. Technical for changing a three-dimensional solid model drawing into an industrial standard orthographic projection drawing. May be taken three times.
953.00

50 Architectural Design I (3) [Cx]
Class hours: 32-36 lecture; 48-54 laboratory
Prerequisite: Drafting 20 or one year of high school drafting.
Transfer Credit: CSU.
Theory and methods of architectural drawings, incorporating the fundamentals of good residential design. Topics include: line conventions, projection representation, dimensions, layout and traffic pattern accommodation, and the impact of building codes and UBC and FHA regulations. Student drawings will reflect the integration of topics concepts and the various plans needed for a complete set of working drawings, including a plot plan, foundation plan, floor plan, sections, details, and stairs.
953.10

51 Architectural Design II (3) [Cx]
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Drafting 50.
Transfer Credit: CSU.
Design issues associated with more complex buildings and settings, including the impact of zoning, local codes, and challenges on site. Topics include: multiple story structures, split levels, complicated roof and foundation design, exterior embellishments, Title 24 and AHDA compliance issues, heat loss and gain, energy costs calculation, and environmental impact. Students' projects include presentation elevation perspectives and model construction for design study, presentation, and promotion.
953.10

53 Architectural Applications of CAD (4)
Class hours: 32-36 lecture; 96-108 laboratory.
Prerequisite: Drafting 20 and 51.
Transfer Credit: CSU.
The use of computer-aided drafting software for architectural plans, including site plans, floor plans, elevations, construction details and other drawings as needed. Techniques in creative symbol libraries will be explored. May be taken three times.
953.10

77 Industrial Design Applications (4) [Cx]
Class hours: 32-36 lecture; 96-108 laboratory.
Prerequisite: Drafting 22 or four years of high school mechanical drafting.
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) [Cx]
Class hours: 32-36 lecture; 96-108 laboratory.
Prerequisite: Drafting 22 or four years of high school drafting.
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

92A-H Special Topics: Drafting (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
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

98A,B,C Independent Study: Drafting (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU.
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or paper in 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 taken three times, regardless of the unit combination.
953.00

410 Building Trades Blueprint Reading (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Blueprint reading and sketching with emphasis on answering practical, technical questions related to residential and commercial architectural buildings. Not open to students who have completed Drafting 50 or 51.
953.10

413 Machine Trades and General Blueprint Reading (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Blueprint reading and sketching with emphasis on industrial drawings of machine parts and assemblies. Orthographic projection and dimensioning. Introduction to ANSI Y 14.5M.
953.00

442 Production Computer Aided Drafting (1.5)
Class hours: 16-18 lecture; 24-27 laboratory.
Prerequisite: Drafting 20.
Practice, competence, and increased speed in using the CAD program. Inclusion of notes and revisions on drawings; plotting of drawings at various scales; adjuncts to standard views, including the drafting and placing of auxiliary and sections; use of attributes and cross-references; and streamlined drawing techniques. May be taken four times.
953.00

452 Light Commercial Construction Design (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Drafting 51.
Design and detailing of small business and manufacturing buildings. Emphasis on building codes, materials, layout, and functional equipment. Particular attention will be paid to environmental design.
953.10

DRAMA (SEE THEATRE ARTS)

EARTH SCIENCE (ESC)
(SEE ALSO GEOLOGY)

1 Earth Science (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Geology, oceanography, meteorology, and planetology aspects of the physical environment; designed for general education and earth science majors. 1930.00
1L  Earth Science Laboratory (1)
Class hours: 48-54 laboratory.
Corequisite: Earth Science 1 (may be taken previously).
Transfer Credit: CSU; UC.
Optional laboratory for Earth Science 1. Hands-on study of material presented in Earth Science 1; includes use of instruments, maps, models, videos, etc. 1930.00

5 Oceanography (3)
Class hours: 48-54 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. 1919.00

5L Oceanography Laboratory (1)
Class hours: 48-54 laboratory.
Corequisite: Earth Science 5 (may be taken previously).
Transfer Credit: CSU; UC.
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) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
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. 1930.00

90A Earth Science Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Earth Science. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 1930.00

92A-H Special Topics: Earth Science (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations. See counselor.
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. 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. 1930.00

**ECONOMICS (ECON)**

1 Introduction to Economics (3) [Cx]
Class hours: 48-54 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, the environment, deregulation, inflation, interest rates, price discrimination, and labor unions. 2204.00

2 Principles of Macroeconomics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC. (CAN ECON 2)
Origins of the U.S. economic system and institutions. Brief survey of economic systems, including capitalism and socialism. Theories and policies concerning economic growth and development, business cycles, unemployment, full employment, inflation, taxation, deficits, the national debt, and public choice. Discussion of money, banking, interest rates, and international finance. Survey of competing economic views, including classical, Keynesian, post-Keynesian, monetarist, institutional, and radical. 2204.00

4 Principles of Microeconomics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC. (CAN ECON 4)
Origins of the market institutions that form the basis of our national economy. How households decide what and how much to consume. Topics include: competition; monopoly and non-monopoly markets; price discrimination and regulation; microeconomic foundations of the economy; labor markets; pricing policies and practices; effects of taxes on individuals and businesses; income distribution and poverty; poverty reduction programs, environmental economics; economics of race, gender, and culture; trade policies; and benefits derived from international trade. May be offered as an Honors course. 2204.00

8 History of Economic Ideas (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Historical development of the institutions and ideas related to our present economic 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. 2204.00

90A Economics Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Economics 1. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. May be taken four times with change in topic emphasis. 1930.00

92A-H Special Topics: Economics (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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. 2204.00

**EDUCATION (ED)**

10 Introduction to Education and Teaching (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative TB test within past 24 months is required. 0801.00

12 Introduction to Education and Teaching II (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative TB test within past 12 months is required. Fingerprinting may also be required for fieldwork placement. Prerequisite: Education 10.

400 Exploring Careers in Education (3)
Class hours: 48-54 lecture.
Overview of the philosophical and historical foundations of education in America, effective teaching practices, and challenges of the diverse public school environment. Topics include: literacy, learning styles, special populations, assessment, legal and ethical guidelines for teachers, and applied use of technology as a resource for professional development. Students gain experience in diverse public school settings by performing 15 hours of tutoring in a K-12 classroom. The tutoring is in addition to the regular class meetings; arranged placements are made by the Gateways to Teaching coordinator. 0801.00

10 Introduction to Education and Teaching (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative TB test within past 24 months is required. 0801.00

12 Introduction to Education and Teaching II (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: Proof of a negative TB test within past 12 months is required. Fingerprinting may also be required for fieldwork placement. Prerequisite: Education 10.

400 Exploring Careers in Education (3)
Class hours: 48-54 lecture.
Overview of the philosophical and historical foundations of education in America, effective teaching practices, and challenges of the diverse public school environment. Topics include: literacy, learning styles, special populations, assessment, legal and ethical guidelines for teachers, and applied use of technology as a resource for professional development. Students gain experience in diverse public school settings by performing 15 hours of tutoring in a K-12 classroom. The tutoring is in addition to the regular class meetings; arranged placements are made by the Gateways to Teaching coordinator. 0801.00

400 Exploring Careers in Education (3)
Class hours: 48-54 lecture.
Overview of the philosophical and historical foundations of education in America, effective teaching practices, and challenges of the diverse public school environment. Topics include: literacy, learning styles, special populations, assessment, legal and ethical guidelines for teachers, and applied use of technology as a resource for professional development. Students gain experience in diverse public school settings by performing 15 hours of tutoring in a K-12 classroom. The tutoring is in addition to the regular class meetings; arranged placements are made by the Gateways to Teaching coordinator. 0801.00

400 Exploring Careers in Education (3)
Class hours: 48-54 lecture.
Overview of the philosophical and historical foundations of education in America, effective teaching practices, and challenges of the diverse public school environment. Topics include: literacy, learning styles, special populations, assessment, legal and ethical guidelines for teachers, and applied use of technology as a resource for professional development. Students gain experience in diverse public school settings by performing 15 hours of tutoring in a K-12 classroom. The tutoring is in addition to the regular class meetings; arranged placements are made by the Gateways to Teaching coordinator. 0801.00
ELECTRICITY
(SEE INDUSTRIAL ELECTRICAL TECHNOLOGY)

ENGINEERING (ENGIN)

10 Introduction to Engineering (1) [Cx]
Class hours: 8-9 lecture; 24-27 laboratory.
Transfer Credit: CSU; UC.
Introduction to the engineering profession. Education- 
al requirements and four-year schools will be covered. 
The various types of engineering jobs will be present-
ed by guest speakers and field trips. 0901.00

26 Engineering Graphics and CAD (3) [Cx]
Class hours: 52-66 lecture; 48-54 laboratory
Prerequisite: Mathematics 430 or Drafting 21.
Transfer credit: CSU; UC.
(ENGR 2)
Principles of orthographic projection, pictorial views, 
sections and auxiliary views, dimensioning, and the 
four fundamental views of description geometry. 
Emphasis on graphic communication used for manu-
facturing, construction, and product design for parts 
and assemblies. The use of CAD is incorporated 
to assist in the solving of industry-related problems. 
0953.00

30 Engineering Application of Digital Computation 
(3) [Cx]
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Mathematics 65A.
Transfer Credit: CSU; UC.
Structured programming concepts applied to engi-
nering problem types, such as center of mass, ballet-
tics, column buckling, design, and reduction of 
experimental data. Structured approach used, with 
applications to flow charts and computer program-
mapping. Mathematical techniques include iterative 
solution, bisection, Raphson-Newton, statistics, and 
matrix operations. Computer techniques include for-
matted input and output, selection, loops, functions, 
pointers, arrays, and characters. 0901.00

34 Elementary Surveying (3)
Class hours: 24-27 lecture; 72-81 laboratory.
Prerequisite: Mathematics 21.
Transfer Credit: CSU; UC.
(ENGR 10)
Theory and practice of plane surveying. Traditional 
surveying equipment and total stations. Topographic 
mapping project. 0957.30

50 Engineering Statics (3)
Class hours: 48-54 lecture.
Prerequisite: Physics 45 and Mathematics 65A.
Transfer Credit: CSU; UC.
(ENGR 8)
Vector treatment of statics of Particles and Rigid Bod-
ies. Free body diagrams application to problems of 
Equilibrium (two and three dimensions) with systems 
of forces in trusses, frames and machines. Principles 
of Friction, Distributed Forces, Centroid and Centers 
of Gravity and Moments of Inertia. 0901.00

60 Materials of Engineering (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Chemistry 21, 21L1, and 21L2.
Transfer Credit: CSU; UC.
Properties of materials as they relate to atomic and 
crystal structure. Topics include: atomic structure and 
 bonding; crystalline structures; phases and phase dia-
grams; metals, polymers, ceramics, and composites; 
mechanical deformation and fracture; electrical, mag-
netic, and optical properties; corrosion; and process 
methods. 0901.00

70 Circuit Analysis (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Physics 46.
Corequisite: Mathematics 85.
Transfer Credit: CSU; UC.
Modeling and analysis of electrical networks. Basic 
 network theorems. Sinusoidal steady state and tran-
sient analysis of RLC network. Response as a function 
of frequency. Current, voltage, and power relations-
ships. 0901.00

410 Principles of Engineering (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Advisory: Mathematics 430.
Exploration of technology systems and engineering 
processes that demonstrate the benefits of math, sci-
cence, and technology. Topics include the design 
process, communication and documentation, engi-
nereering systems, statics, properties of materials, qual-
ity assurance, materials testing, and engineering for 
reliability. 0924.00

412 Introduction to Engineering Design (4) 
(First offered in Spring 2007)
Class hours: 48-54 lecture; 48-54 laboratory.
Advisory: Mathematics 430.
Survey of the design process as applied to engineering 
and related fields, with emphasis on 3-D computer 
modeling software used in industry. Additional topics 
include: design sketching, visualization, geometric 
relationships, assembly modeling, and model docu-
mentation. 0924.00

492A-H Special Topics: Engineering (.5-6)
Class hours: 16-18 hours/term lecture for each unit of 
credit. Pursues certain specializations in engineering. 
See class schedule for the current topic. May be taken only 
four times regardless of the unit combination. Howev-
er, no single-subject, special-interest class may be 
repeated. 0901.00

ENGLISH (ENGL)

1A Composition (3)
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 1A as determined 
by the Chaffey assessment process, or completion of 
English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
(ENGL 2) (ENGL SEQ A = ENGL 1A + ENGL 1C)
Foundation course in the study of literature introduces 
the central literary genres: novel, short story, poem, 
and play. Close reading of the literature guides inexpe-
rienced readers toward greater understanding and 
appreciation of imaginative literature, and provides 
more experienced readers with new perspectives 
through the analysis of the techniques and purposes 
of specific writers. Students are taught how to orga-
nize and compose the literary essay. May be offered as 
An Honors course. 1501.00

1C Introduction to Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(ENGL 4) (ENGL SEQ A = ENGL 1A + ENGL 1C)
Foundation course in the study of literature introduces 
the central literary genres: novel, short story, poem, 
and play. Close reading of the literature guides inexpe-
rienced readers toward greater understanding and 
appreciation of imaginative literature, and provides 
more experienced readers with new perspectives 
through the analysis of the techniques and purposes 
of specific writers. Students are taught how to orga-
nize and compose the literary essay. May be offered as 
An Honors course. 1501.00

7A Creative Writing: Short Fiction (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by 
the Chaffey assessment process, or completion of 
English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
Seminar in short fiction writing. Students study the 
underlying principles of this form of literature, write 
short stories, and analyze each other’s work. 1507.00

7B Creative Writing: Fiction (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by 
the Chaffey assessment process, or completion of 
English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
Seminar in fiction writing. Students study the underly-
ing principles of this form of literature, write short sto-
ries or several chapters of a novel, analyze and critique 
each other’s work, edit/revise/rewrite to ready for pub-
lication, and research potential markets for submis-
sion. 1507.00

7D Creative Writing: Poetry (3)
Class hours: 48-54 lecture.
Advisory: Eligibility for English 1A as determined by 
the Chaffey assessment process, or completion of 
English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
Writing seminar focusing on analysis of methods, 
forms, and meanings of poetry with emphasis on the 
elements of figurative language, sound, rhythm, and 
tone. Students develop critical standards for judging 
the worth of a poem, give their critical estimates of 
professional and student work, and write their own 
poetry. 1507.00

7E Creative Writing: Nonfiction (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC credit pending.
Course in creative nonfiction writing. Review of 
the principles employed in writing creative nonfiction such as 
memos, personal essays, review, profiles, nature 
articles, and reportage. Students create essays, ana-
lyze and respond to student and professional writing, 
craft works intended for publication, and research 
potential markets for submission. 1507.00

30 Introduction to the Short Story (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Survey of the short story including a comprehensive 
selection of American, British, and translated short 
stories. 1503.00

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32 Introduction to the Novel (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Survey of the novel, using selections drawn from multiple cultures and influences of the last three centuries, including translated novels of established merit.
1503.00

33 Introduction to Poetry (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Survey of poetry written in English from the Middle Ages through the present day. Increases students’ knowledge of poetry and its history and acquaints them with techniques of analysis. Special attention is given to poetic voice, syntax, figures of speech, sonics, and form. NOTE: English 33 is not a creative writing course for poetry.
1503.00

35 Literary Magazine Production (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Advisory: Strong word processing skills.
Transfer Credit: CSU; UC credit pending.
Concepts and practices of magazine production, including the design and maintenance of a web version. Acting as editors and assistants for The Chaffey Review, students master the fundamentals of editorial evaluation and selection, copyediting, proofreading, layout and design, production, promotion, and distribution. May be taken three times.
1507.00

61A,B,C Newspaper Production (1, 2, or 3)
(Available also as Journalism 61A,B,C)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Advisory: Typing and/or computer skills, and the ability to take black-and-white photographs is recommended.
Transfer Credit: CSU.
Experience in planning, editing, and producing a weekly or bi-weekly newspaper. Students cover campus and community events; write news and feature stories, editorials, news releases, and headlines; edit copy using the departments’ computer for typesetting; typeset copy; take, print, and edit photos; paste up page flats or printing; and distribute finished paper on campus. May be taken four times regardless of the unit combination.
0602.00

68 Mythology (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Major myths, especially in relation to the culture in which they arose, with a special emphasis on Greek myths. Broad comparison of the myths of many cultures and their influence on subsequent literature.
1503.00

70B World Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
Chronological survey of significant authors and texts of world literature from the mid-1600’s through the twentieth century. Extensive reading and discussion of works reflecting diverse cultural viewpoints. Examination of the relationship between historical events and literary works, and the impact of works upon their age and ensuing eras. Strong writing component with emphasis on textual analysis.
1503.00

71 Folklore (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Various forms of folklore - myths, legends, fairy tales, fables, epics, and tall tales. Through close reading of selected works, students develop criteria for assessing the literary value of these stories and determine their significance as the primary source of themes, motifs, metaphors, and allusions that are encountered throughout literature.
1503.00

74 Asian-American Literature (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
1503.00

75A American Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(CAN ENGL 14) (CAN ENGL SEQ C = ENGL 75A + 75B)
Chronological survey of significant authors and texts of American literature from the Old English to the Neoclassic periods. Extensive reading and discussion of works. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis.
1503.00

75B American Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(CAN ENGL 14) (CAN ENGL SEQ C = ENGL 75A + 75B)
Chronological survey of significant authors and texts of American literature from the colonial period to the 1860’s. Extensive reading and discussion of works reflecting the diversity of the United States. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis.
1503.00

75A World Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
Chronological survey of significant authors and texts of world literature from earliest times through the mid-1600’s. Extensive reading and discussion of works reflecting the diversity of thought in the world. Examination of the relationship between historical events and literary works, and the impact of works on their age and ensuing eras. Strong writing component with emphasis on textual analysis.
1503.00

75B American Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
1503.00

79 Native American Literatures (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Introductory analysis of the literary, social, and cultural aspects of novels, short stories, essays, and poetry reflecting Native American societies. Contributions of Native Americans to literature and how they use the various literary forms to express their worldviews and cultures. Relationship to Western culture, including cultural norms and the changing view of the Indians of yesteryear and today.
1503.00

80A Survey of British Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(CAN ENGL 10) (CAN ENGL SEQ B = ENGL 80A + 80B)
Chronological survey of major authors and texts of British literature from the Old English to the Neoclassic periods. Extensive reading and discussion of works. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis.
1503.00

80B Survey of British Literature (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Transfer Credit: CSU; UC.
(CAN ENGL 10) (CAN ENGL SEQ B = ENGL 80A + 80B)
Chronological survey of major authors and texts of British literature from the Romantic period to the present. Extensive reading and discussion of works. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis.
1503.00

81 Shakespeare (3)
Class hours: 48-54 lecture.
Advisory: Completion of English 1A and 80A.
Transfer Credit: CSU; UC.
Intensive reading, along with oral and written discussion, of a selected group of Shakespearean plays.
1503.00

92A-H Special Topics: Literature (1-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special interest class of varying length for students who seek further development in specific areas of literature and criticism. Wide variety of topics offered, with particular emphasis left up to the instructor. See class schedule for emphasis. May be taken four times, however, no single-subject, special interest class may be repeated.
1501.00

98A,B,C Independent Study: Literature (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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 two times regardless of the unit combination.
1503.00
450 Fundamentals of Composition (3)
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 450 as determined by the Chaffey assessment process, or completion of English 550 or Business and Office Technologies 455.
Careful study and practice of expository writing techniques and the frequent writing of integrated paragraphs and essays, with the ultimate goal of writing an essay using sources. Prepares the student for English 1A. Five arranged hours of supplemental instruction in a Success Center that supports this course is required, plus tutoring or other activities as recommended by instructor. NOTE: Students who have successfully completed English as a Second Language 450 may not take English 450.
1501.00

500A, B, C Preparation for College Writing (1, 2, 3)
Course is offered on a credit/no credit basis only.
Class hours: 16-18 hours/term lecture for each unit of credit.
Prerequisite: Eligibility for English 500 as determined by the Chaffey assessment process.
Not Degree Applicable.
Introduces the entry-level writer to the elements of the composing process (prewriting, drafting, revising, and editing). Modularized to meet individual skills levels. Includes strategies for developing compositions, organizing ideas, and building vocabulary. May be taken three times.
4930.21

550 Introduction to College Writing (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 550 as determined by the Chaffey assessment process, or completion of English 500C.
Not Degree Applicable.
Prepares the inexperienced writer for college level academic writing by focusing on critical thinking, reading, writing, and study skills necessary to succeed at the academic level. Five hours of supplemental instruction in a Success Center that supports this course is required, plus tutoring or other activities as recommended by instructor.
4930.21

ENGLISH AS A SECOND LANGUAGE (ESL)

450 Fundamentals of Composition for ESL Students - Level 7 (3)
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL level 6 course.
Corequisite: English as a Second Language 452 with the same instructor.
Careful study and practice of expository writing techniques and the frequent writing of compositions, with the ultimate goal of writing the total essay. Prepares the student for English 1A.
NOTE: Students who have successfully completed English 450 may not take English as a Second Language 450.
4930.81

452 Fundamentals of Composition Lab for ESL Students - Level 7 (.75)
Class hours: 32-36 laboratory.
Corequisite: English as a Second Language 450 with the same instructor.
Required laboratory providing additional scheduled hours of instructor assistance with English as a Second Language writing assignments. Focus is on practicing and reinforcing lecture material as well as self-editing and revision exercises.
4930.81

506 Computer-Based Multiple Skills English Levels 2 - 5 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL course.
Not Degree Applicable.
A multimedia-enriched computer course designed to improve reading, listening comprehension, speaking, and writing production. The course provides students with the basic computer literacy needed for success in English as a Second Language and English writing courses, or beginning Computer Information Systems courses. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Designed for the non-native speaker of English. May be taken twice.
4930.80

508 Pronunciation of American English (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test at Level 4 or higher in any assessment area, or satisfactory completion of any ESL Level 3 course.
Not Degree Applicable.
Intensive instruction in the oral production of American English, targeted to intermediate and advanced ESL students. Focus on speaking and pronunciation skills to improve fluency and minimize accent impact imparted by the speaker’s native language. Topics include: sound systems of consonants and vowels, pitch and intonation patterns, rhythm and phrasing, and sound reductions. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice.
4930.80

513 Beginning Communicative Grammar Skills I - Level 1 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test.
Not Degree Applicable.
A multiple skills approach to learning basic grammar through reading, writing, speaking, and listening. Skills emphasized: basic verb tenses including past and present progressives, pronoun use, prepositional phrases, modals, word order, and agreement. Prepares students for English as a Second Language 533 in Level 3. May be taken twice.
4930.80

515 American Culture and Intensive Writing I (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test.
Not Degree Applicable.
Beginning course in English as a Second Language, and a continuation of English as a Second Language 515. Continued focus on basic language skills and common aspects of American culture. Instruction in basic, common language patterns of listening, speaking, vocabulary, and reading. Pronunciation, conversation, dialogue, and listening are practiced extensively. Students learn about common American customs, values, and holidays. Prepares students for Level 3 courses. May be taken twice.
4930.80

527 Introduction to Writing - Level 2 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 1 course.
Not Degree Applicable.
High-beginning course designed to strengthen and increase writing ability. Focus is on common grammar and spelling patterns, personal writing, and writing for general communication. Prepares students for English as a Second Language 537 in Level 3. May be taken twice.
4930.80

529 Introduction to Reading - Level 2 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 1 course.
Not Degree Applicable.
High-beginning course designed to strengthen and increase reading ability. Focus on decoding skills, word parts, common grammar patterns, reading for meaning and details, and word attack skills. Prepares students for English as a Second Language 539 in Level 3. May be taken twice.
4930.80

519 Introduction to Reading I - Level 1 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test.
Not Degree Applicable.
Beginning course designed to build basic reading ability in English. Focus on decoding skills, phonics patterns, word parts, reading for meaning, and improvement of reading vocabulary. Prepares students for English as a Second Language 529 in Level 2. May be taken twice.
4930.80

523 Beginning Communicative Grammar Skills II - Level 2 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 1 course.
Not Degree Applicable.
A multiple-skills approach to improving basic grammatical skills through reading, writing, speaking, and listening. Skills emphasized: basic verb tenses including past and present progressives, pronoun use, prepositional phrases, modals, word order, and agreement. Prepares students for English as a Second Language 533 in Level 3. May be taken twice.
4930.80

525 American Culture and Intensive Conversation Level 2 (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 1 course.
Not Degree Applicable.
Beginning course in English as a Second Language, and a continuation of English as a Second Language 515. Continued focus on basic language skills and common aspects of American culture. Instruction in basic, common language patterns of listening, speaking, vocabulary, and reading. Pronunciation, conversation, dialogue, and listening are practiced extensively. Students learn about common American customs, values, and holidays. Prepares students for Level 3 courses. May be taken twice.
4930.80

508 Introduction to College Writing (3)
Course is offered only on a credit/no credit basis.
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 550 as determined by the Chaffey assessment process.
Not Degree Applicable.
Prepares the inexperienced writer for college level academic writing by focusing on critical thinking, reading, writing, and study skills necessary to succeed at the academic level. Five hours of supplemental instruction in a Success Center that supports this course is required, plus tutoring or other activities as recommended by instructor.
4930.21
533 Intermediate Communicative Grammar Skills I - Level 3 (3)
Course is offered only on a credit/no credit basis. Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 2 course.
Not Degree Applicable.
Concentrates on building grammar skills and idiomatic usage to help students express their ideas on many personal topics, in both speech and writing. Focus on verb tenses through the perfect tenses, comparisons and superlatives, agreement, word order, compound and complex sentences, tag questions, and modals. Prepares students for English as a Second Language 543 in Level 4. May be taken twice. 4930.80

535 Intermediate Listening and Speaking I - Level 3 (3)
Course is offered only on a credit/no credit basis. Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 2 course.
Not Degree Applicable.
A conversational approach to learning English. Conversations and the language used in reading, writing, and communicative grammar skills form the basis of the course. Pronunciation, conversation skills, and practice dialogues help students build overall fluency and comprehension. Prepares students for English as a Second Language 555 in Level 5. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.80

537 Intermediate Writing I - Level 3 (3)
Course is offered only on a credit/no credit basis. Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 2 course.
Not Degree Applicable.
An intermediate-low level writing course. Focus is on developing fluency through writing activities. Skills learned: use of many types of sentences, spelling conventions, basic mechanics, the writing process, and personal writing. Prepares students for English as a Second Language 547 in Level 4. May be taken twice. 4930.80

539 Intermediate Reading and Vocabulary Development I - Level 3 (3)
Course is offered only on a credit/no credit basis. Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 2 course.
Not Degree Applicable.
An intermediate-low level reading course. Emphasis is on independent reading, comprehension, reading for details, vocabulary development, scanning, skimming, and summarizing. Prepares students for English as a Second Language 549 in Level 4. May be taken twice. 4930.80

543 Intermediate Communicative Grammar Skills II - Level 4 (3)
Course is offered only on a credit/no credit basis. Class hours: 48-54 lecture.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 3 course.
Not Degree Applicable.
Concentrates on strengthening grammar skills and idiomatic usage to help students express ideas on many academic and personal topics in both speech and writing. Focus on conditionals, perfect modals, passives, complex sentence construction, tense shift-
Course Descriptions

567 Writing and Paragraph Structure - Level 6 (3)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 lecture.  
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 5 course.  
Not Degree Applicable.  
An advanced writing course. Focus is on the many types of paragraph development and other expository writing, as preparation for writing essays. Skills emphasis: audience, purpose, point of view, advanced sentence structures, tone, advanced paragraph structures, and rhetorical modes. Prepares students for English as a Second Language 450 in Level 7. May be taken twice.  
4930.80

569 Critical Thinking, Reading, and Vocabulary - Level 6 (3)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 lecture.  
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 5 course.  
Not Degree Applicable.  
An advanced level reading course designed to improve the student's reading efficiency by focusing on vocabulary enrichment, comprehension development, critical thinking skills, and study skills. Through reading a wide variety of materials, discussing them in class, and completing written assignments, the student practices and develops whole language facility and critical thinking skills. May be taken twice.  
4930.80

575 Academic Listening, Speaking, and Notetaking - Level 7 (3)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 lecture.  
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of any ESL Level 6 course.  
Not Degree Applicable.  
Provides listening and speaking skills for high advanced students whose primary language is not English. Focus on listening, giving oral presentations, critical thinking, advanced conversation, argument, and academic skills needed for successful transition to non-ESL college course work. May be taken twice.  
4930.80

592A-H Special Topics Lecture: English as a Second Language (5-6)  
Courses are offered only on a credit/no credit basis.  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Not Degree Applicable.  
Special-interest lecture course offering specializations in basic language acquisition skills. Topics are determined by the individual instructor and cover a range of subject areas relevant to the field of English as a Second Language. Refer to instructor syllabus and class schedule for current term emphasis and requirements. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May have a recommended preparation, or require prerequisites and/or corequisites, based on the content of the course.  
4930.80

592A-H Special Topics Laboratory: English as a Second Language (5-6)  
Courses are offered only on a credit/no credit basis.  
Class hours: 48-54 hours/term self-paced laboratory for each unit of credit.  
Not Degree Applicable.  
Special-interest laboratory course offering specializations in basic language acquisition skills. Topics are determined by the individual instructor and cover a range of subject areas relevant to the field of English as a Second Language. Refer to instructor syllabus and class schedule for current term emphasis and requirements. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. May have a recommended preparation, or require prerequisites and/or corequisites, based on the content of the course.  
4930.80

FASHION DESIGN (FASHD)

16 Principles of Costume Design and Production (3)  
(Also available as Theatre Arts 16)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
Business and technical aspects of the theatrical costume design process. Topics include: research, design, sourcing of materials, budgets, and working relationships between the designer, director, and the entire production team.  
1303.00

20 History of Fashion (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
Origin and evolution of apparel styles through history, from Egyptian to contemporary periods. Sociological, economic, political, and physical factors affecting apparel choices through the centuries. Trends of recurring styles throughout the fashion cycle.  
1303.00

40 Beginning Clothing Construction (2) [Cx]  
Class hours: 16-18 lecture; 48-54 laboratory.  
Transfer Credit: CSU.  
Principles and techniques for developing fundamental skills in clothing construction using woven fabrics. May be taken three times.  
1303.10

42 Advanced Clothing Construction (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Prerequisite: Fashion Design 40.  
Transfer Credit: CSU.  
Techniques of couture sewing, tailoring, and the handling of specialty fabrics. May be taken three times.  
1303.10

45 Basic Design and Creativity (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
Identification and utilization of the elements and principles of design common to fashion design, while encompassing all arts including painting, sculpture, interiors, and architecture. Emphasis on creative expression through utilization of good design principles and elements.  
1303.10

61 Basic Patternmaking (3)  
Class hours: 32-36 lecture; 48-54 laboratory.  
Prerequisite: Fashion Design 40.  
Transfer Credit: CSU.  
Theory and practice in developing flat patterns for ready-to-wear and custom dressmaking, using industry standards and half-scale blocks. Instruction is given in interpreting a style and translating the design to paper patterns. The first working pattern is then cut and sewn in muslin for testing fit, exactness of techniques, and performance. Corrections are made, based on individual and team evaluations.  
1303.10

65 Fashion Illustration (2) [Cx]  
Class hours: 16-18 lecture; 48-54 laboratory.  
Transfer Credit: CSU.  
Introductory fashion sketching, leading to more advanced fashion figure drawing and descriptive rendering for fashion designers, illustrators, and merchandisers. Development of original designs and the uses of techniques of drawing for retail fashion advertising. May be taken twice.  
1303.00

72 Fashion Draping (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Prerequisite: Fashion Design 40.  
Transfer Credit: CSU.  
Three dimensional draping in muslin and translation of the drape to a hard pattern.  
1303.10

415 Textile Surface Design (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Embellishment, enhancement, and alterations of existing textile surfaces for incorporation into the design and construction of ready-to-wear apparel and accessories.  
1303.10

421 Cultures and World Fashion (3)  
Class hours: 48-54 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

428 Computer-Aided Fashion and Costume Design (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Advisory: Basic computer skills are recommended.  
Introductory course using computer-assisted fashion design software to create flat sketches, colorize designs, assemble story boards, design textiles, and compute cost and specification sheets. Adobe Illustrator is the primary software vehicle for these processes, with ancillary CAD programs including SnapFashion. Scanning techniques and the effective use of program features to create and alter shapes, manipulate text, and create cost estimates are emphasized. May be taken twice.  
1303.10

441 Intermediate Clothing Construction (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Prerequisite: Fashion Design 40.  
Intermediate apparel construction using more difficult fabrics. Emphasis on bridge and designer quality garment techniques. May be taken twice.  
1303.10
Course Descriptions

442 Industrial Sewing (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Corequisite: Fashion Design 40 (may be taken previously).
Industrial construction techniques and assembly of apparel utilizing industrial sewing machines. May be taken twice.
1303.30

445 Fitting and Alterations of Patterns and Apparel (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prerequisite: Fashion Design 40.
Analysis of personal figure variations and application of pattern adjustments for customized dimensions and proper fit. Topics include: determining feasibility of garment modification, ready-to-wear alterations, incorporating proper fit into new garment construction, and industry tips for the correct fitting of pants. Employment opportunities in fashion related fields discussed, including pricing, skills and equipment requirements, and client management issues affecting small businesses in the alterations field. Students may have the opportunity to visit an apparel alterations facility.
1303.30

470 Apparel Production (3)
Class hours: 48-54 lecture.
Prerequisite: Fashion Design 61.
The design, development, pricing, sourcing, sample making, manufacturing, and marketing of a line of clothing.
1303.30

471 Advanced Patternmaking (3)
Class hours: 32-36 lecture; 48-54 laboratory.
Prerequisite: Fashion Design 61.
Theory and practice in developing flat patterns for tailored garments, suits, linings, and knitwear. Research of design details in more complicated garments and interpretation of this detail into full-scale patterns. Patterns are cut and corrected first in muslin, then in designer fabric, with the final pattern being 100% correct for entering into production.
1303.30

472 Computer-Aided Patternmaking (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prerequisite: Fashion Design 61.
Advisory: Basic computer skills are recommended.
Begining study of computer applications in patternmaking, including terminology and operation of the software programs. Topics include master pattern creation, flat-pattern manipulation, pattern grading sizing, pattern file storage, and reports to apparel contractors and managers. Use of pattern technologies current to the industry to produce preproduction and production documents. May be taken twice.
1303.30

480 Design Collection (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prerequisite: Fashion Design 42 and 61.
Preparation of a collection of garments for use in a runway show. Students must sketch, design, draft, or drape pattern, select designer fabrics, and construct garments in collection.
1303.30

482 Industry Internship: Fashion Design (1)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Corequisite: Fashion Design 42 (may be taken previously).
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.
1303.30

492A-H Special Topics: Fashion Design (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Pursues specializations in Fashion Design. See class schedule for the current topics. May be taken four times regardless of the unit combination, however, no single-subject, special-interest class may be repeated.
1303.10

498A,B.C Independent Study: Fashion Design (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
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. May be taken three times, regardless of the unit value.
1303.00

FASHION MERCHANDISING (FASHM)

10 Introduction to the Fashion Industry (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC
Basic study of the fashion design and merchandising industry including leading designers and geographical centers, distribution, textile and apparel production, fashion cycles, retail outlets, merchandising techniques, and employment opportunities.
1303.20

11 Retail Merchandising and Management (3)
(Available also as Management 11)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
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.
1303.20

12 Visual Merchandising (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU
Store design and space planning to maximize fashion sales. Visual display of store windows and vignettes using proper techniques and art principles.
1303.20

15 Image and Fashion Selection (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Clothing choices for the professional workplace and California lifestyles. Analysis of body composition and proportions, individual coloring, and personality in the selection of a trendy, sophisticated, comfortable, and budget-appropriate wardrobe.
1303.20

60 Textiles (3) (Ct)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC
Study of the textile fibers, yarns, weaves, and finishes which give the consumer and designer a background for intelligent selection, use, and care of modern fabrics. Special emphasis on man-made fibers, their manufacture, properties, and use.
1303.20

482 Industry Internshps: Fashion Merchandising (1)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Prerequisite: Fashion Merchandising 11.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Industry internship in cooperation with area private and public sector employers providing new or expanded learning opportunities directly related to fashion design merchandising and readying the student for employment.
1303.20

492A-H Special Topics: Fashion Merchandising (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Pursues specializations in Fashion Merchandising. See class schedule for the current topic. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated.
1303.20

498A,B.C Independent Study: Fashion Merchandising (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Specialized study in fashion merchandising, through research and documentation or applications in design and production. Independent work and study will be supervised by appointed instructor. May be taken three times, regardless of the unit value.
1303.20

FINE ARTS (FINART)

50 Introduction to Fine Arts (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC
Introduction to the development of drama, music, the visual arts, and film, including war and the arts, religion and the arts, television, dance, and/or principles of art criticism.
1001.00

90A Fine Arts Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Fine Arts. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.
1001.00

FIRE TECHNOLOGY (FIRETEC)

1 Fire Protection and Organization (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU
Overview of fire protection and emergency services, including the philosophy, history, evolution, organizational structure, and functions of public and private fire protection services. Topics include: fire departments as a part of local government; applicable laws and regulations; scientific terminology; specific protection functions; loss analysis; basic fire chemistry and physics; an introduction to fire protection systems, strategies, and tactics; and career opportunities in fire protection and related fields.
2133.00

2 Fire Behavior and Combustion (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Theory and fundamentals of fire causation, spread, and control. In-depth study of fire chemistry and physics, characteristics of combustible and flammable substances, unique dangers of hazardous materials, types of extinguishing agents, and fire control techniques.
2133.00
3 Fire Protection Systems (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Design features and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers.
2133.00

4 Building Construction for Fire Protection (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Components of building construction relating to fire safety. Effects of construction and structural design as key factors in building inspection, fire operations pre-planning, and fire site operations. Evolution of building and fire codes, developed in response to historical fires, in residential, commercial, and industrial occupancies.
2133.00

5 Fire Prevention (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
History and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, and the identification and correction of fire hazards. The relationship of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.
2133.00

6 Fire Apparatus and Equipment (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Introduction to the mechanized equipment operated by fire service personnel and the regulations pertaining to its use. Topics include: driving laws and techniques, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance.
2133.00

7 Strategies and Tactics (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Principles of fire control, through utilization of manpower, equipment, extinguishing agents, and fire command and control procedures. Use of information on building construction types in fire control. Pre-fire planning and the organized approach to decision-making on the fireground.
2133.00

8 Fire Ground Hydraulics (3)
Class hours: 48-54 lecture.
Transfer credit: CSU
Principles of hydraulics, hydraulic measurements, engine and hose appliance calculations, discharge and velocity flow calculations, and engine and nozzle pressure determination in field situations.
2133.00

402 Basic Incident Command Systems – ICS-200 (1)
Class hours: 16-18 lecture.
Provides a working knowledge of the Incident Command System (ICS) function, organization, features, facilities, resources, and responsibilities.
2133.50

403 Intermediate Incident Command Systems – ICS-300 (1.5)
Class hours: 24-27 lecture.
Prerequisite: Fire Technology 402.
Provides current and potential public safety managers/supervisors with the knowledge necessary to perform in a management/supervisory capacity at an incident or event being managed within the organizational guidelines, defined terminology, and common responsibilities and roles of the Incident Command System.
2133.50

405 Hazardous Materials First Responder Operations (1)
Class hours: 16-18 lecture.
Provides current and potential public safety workers, who are likely first responders, with improved capability to respond to events involving hazardous materials in a safe and competent manner, within the typical resource and capability limitations at the operational level. Meets OSHA requirements under Title 8 CCR 5192 and 29 CFT 1910.120.
2133.50

410 Fire Command 1A (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Must show certification as a firefighter.
Prerequisite: Fire Technology 402.
Provides fire company officers with information and experience in command and control techniques used at the scene of an emergency. Emphasized topics include: organizational structure, authority, command, pre-planning, decision-making, personnel issues, and training techniques. May be taken twice.
2133.50

411 Fire Command 1B (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Must show certification as a firefighter.
Prerequisite: Fire Technology 410.
Provides fire company officers with information and experience in hazardous materials incident management skills. Emphasizes utilization of command principles, identification, assessment, special techniques, and emergency planning. May be taken twice.
2133.50

412 Fire Command 1C (2)
Class hours: 32-36 lecture.
Limitation on Enrollment: Must show certification as a firefighter.
Prerequisite: Fire Technology 411.
Responsibilities of the fire company officer at a wildland/urban interface incident. May be taken twice.
2133.50

417 Fire Management I (2)
Class hours: 40 lecture.
Advisory: Course assumes familiarity with firefighting procedures and protocols, as it is designed for certified fire personnel. Non-firefighters are permitted to take the course, however they are ineligible to apply for the State Fire Marshall CFTES certificate upon successful completion of the course.
2133.00

420 Fire Prevention 1A – Fire Prevention Practices (2)
Class hours: 40 lecture.
Advisory: Course assumes familiarity with firefighting procedures and protocols, as it is designed for certified fire personnel. Non-firefighters are permitted to take the course, however they are ineligible to apply for the State Fire Marshall CFTES certificate upon successful completion of the course.
2133.00

421 Fire Prevention 1B – Code Enforcement (2)
Class hours: 40 lecture.
Prerequisite: Fire Technology 420.
Advisory: Course assumes familiarity with firefighting procedures and protocols, as it is designed for certified fire personnel. Non-firefighters are permitted to take the course, however they are ineligible to apply for the State Fire Marshall CFTES certificate upon successful completion of the course.
2133.00

422 Fire Prevention 1C – Flammable Liquids and Gases (2)
Class hours: 40 lecture.
Prerequisite: Fire Technology 421.
Advisory: Course assumes familiarity with firefighting procedures and protocols, as it is designed for certified fire personnel. Non-firefighters are permitted to take the course, however they are ineligible to apply for the State Fire Marshall CFTES certificate upon successful completion of the course.
2133.00

FRENCH (FR)

1 Elementary French (4)
Class hours: 64-72 lecture.
Transfer Credit: CSU; UC.
(CAN FREN SEQ A = FR 1 + 2)
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 French-speaking peoples. Films and an audiovisual program containing cultural presentations and further practice in comprehension supplement the textbook. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. This course corresponds to the first year of high school French
1102.00

2 Elementary French (4)
Class hours: 64-72 lecture.
Prerequisite: French 1 or one year of high school French.
Transfer Credit: CSU; UC.
(CAN FREN SEQ A = FR 1 + 2)
Continued 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 French-speaking peoples. Films and an audiovisual program containing cultural presentations and further practice in comprehension supplement the textbook. Fourteen hours of supplemental instruction in a Success Center that supports this course is required.
1102.00

3 Intermediate French (4)
Class hours: 64-72 lecture.
Prerequisite: French 2 or two years of high school French.
Transfer Credit: CSU; UC.
(CAN FREN SEQ B = FR 3 + 4)
Reviews basic grammar and presents more elaborate constructions as a preparation for advanced reading and writing. Affords opportunity for speaking and writing French on an increasingly advanced level. Includes reading, discussing, and writing about selections from French literature of increasing difficulty. Fourteen hours of supplemental instruction in a Success Center that supports this course is required.
1102.00
Course Descriptions

4 Intermediate French (4)
Class hours: 64-72 lecture.
Prerequisite: French 3.
Transfer Credit: CSU; UC.
(CAN FREN 10) (CAN FREN SEQ B = FR 3 + 4)
Focuses on complex constructions and syntax. Opportunity for speaking and writing French on an advanced level. Includes reading, discussing, and writing about sophisticated selections from French literature. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 1102.00

15 French Conversation (2)
Class hours: 32-36 lecture.
Prerequisite: French 1 or one year of high school French.
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 twice.

1102.00

92A-H Special Topics: French Literature, Language and Culture (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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. 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.

2206.00

Geographic Information Systems (GIS)

1 Introduction to Geographic Information Systems (GIS)
Class hours: 48-54 lecture; 48-54 laboratory
Advisory: Completion of Computer Information Systems 4.
Transfer Credit: CSU; UC credit limitations.
Interdisciplinary course to explore the fundamentals and introduce the Geographic Information System (GIS) used for management, analysis, and communication of spatial data. Includes a brief introduction to basic cartographic principles, including maps, scales, coordinate systems, and map projections. Various applications of GIS technology used in environmental science, business, and government. Specific topics include GIS terminology, working with spatial data, and spatial analysis. Laboratory work reinforces lecture topics with hands-on experience using the ArcView software. May be taken twice. NOTE: Students who have completed GIS-1A twice may not take GIS-1A.

2206.10

401 Introduction to ArcView for Geographic Information Systems (1)
Class hours: 16-18 lecture.
Advisory: Completion of Computer Information Systems 4.
Introduction to Geographic Information Systems (GIS) using ArcView. Conceptual overview and basic functions. Use of ArcView GIS software and the Geographical User Interface to create, edit, query, and display geographical and tabular data. Course developed and taught by ESRI-certified Introduction to ArcView instructor. May be taken twice.

2206.10

1A Introduction to Geographic Information Systems (1)
Class hours: 24-27 lecture; 24-27 laboratory
Advisory: Completion of Computer Information Systems 4.
Transfer Credit: CSU; UC credit limitations.
Equivalent to the first half of GIS-1. Interdisciplinary course to explore the fundamentals and introduce the Geographic Information System (GIS) used for management, analysis, and communication of spatial data. Includes a brief introduction to basic cartographic principles, including maps, scales, coordinate systems, and map projections. Various applications of GIS technology used in environmental science, business, and government. Specific topics include GIS terminology, working with spatial data, and spatial analysis. Laboratory work reinforces lecture topics with hands-on experience using the ArcView software. May be taken twice. NOTE: Students who have completed GIS-1A twice may not take GIS-1A.

2206.10

1B Introduction to Geographic Information Systems (2)
Class hours: 24-27 lecture; 24-27 laboratory
Prerequisite: Geographic Information Systems 1A.
Transfer Credit: CSU; UC credit limitations.
Equivalent to the second half of GIS-1. Interdisciplinary course to explore the fundamentals and introduce the Geographic Information System (GIS) used for management, analysis, and communication of spatial data. Includes a brief introduction to basic cartographic principles, including maps, scales, coordinate systems, and map projections. Various applications of GIS technology used in environmental science, business, and government. Specific topics include GIS terminology, working with spatial data, and spatial analysis. Laboratory work reinforces lecture topics with hands-on experience using the ArcView software. May be taken twice. NOTE: Students who have completed GIS-1B twice may not take GIS-1B.

2206.10

18 Introduction to Geographic Information Systems II (2)
Class hours: 24-27 lecture
Prerequisite: Geographic Information Systems 1A.
Transfer Credit: CSU; UC credit limitations.
A regional survey of California’s natural and human resources, focusing on the influence of physical features, climate, water, and biogeography and their interactions with human population, migration, settlement, industries, economics, urban development, and social and cultural diversity. Examination of current issues and future challenges.

2206.10

19 Physical Geography (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
(CAN GEOG 2)
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: 48-54 laboratory.
Corequisite: Geography 4 (may be taken previously).
Transfer Credit: CSU; UC.
Field observation and analysis of physical environments to accompany Geography 4. Laboratory is held in the field for on-site interpretation of climate, soils, landforms, plant, and animal distribution.

2206.00

6 Environmental Geography (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
(CAN GEOG 4)
Global perspectives on environmental geography. Geographical approach to the biosphere: environmental principles, economics and environment, human impact, extinction and biodiversity, food/population crises, the social environment, global tampering, and contemporary values in global environmental issues.

2206.00

10 Cultural Geography of North America (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
(CAN GEOG 4)

2206.00

11 World Cultures (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Geographical 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

Geography (GEOG)

1 World Regional Geography (3)
Class hours: 48-54 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


**GEOLOGY (GEOL)**

*(SEE ALSO EARTH SCIENCE)*

1 **Physical Geology (4)**
   - Class hours: 48-54 lecture; 48-54 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. Laboratory activities include experiments testing sediment porosity and permeability, seismic stick/slip theory, alluvial fan development, and other geologic principles.
   - 1914.00

2 **Historical Geology (4)**
   - Class hours: 48-54 lecture; 48-54 laboratory.
   - Prerequisite: Geology 1.
   - Transfer Credit: CSU; UC. (CAN GEOL 4)
   - History of the earth and its life forms. Changes in tectonic plates and life forms through time and study of fossils. Eight-hour field trip required in addition to normal class meetings.
   - 1914.00

6 **Geology of National Parks and Monuments (3)**
   - Class hours: 48-54 lecture.
   - Transfer Credit: CSU.
   - Geology and history of selected national parks and monuments throughout the United States with emphasis on the geological processes which formed them. Eight-hour field trip required in addition to normal class meetings.
   - 1914.00

10 **Environmental Geology (3)**
   - Class hours: 48-54 lecture.
   - Transfer Credit: CSU; UC.
   - Application of geological principles to understanding environmental 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: 48-54 lecture; 48-54 laboratory.
   - Advisory: Completion of Geology 2 and Biology 10.
   - 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 meetings.
   - 1914.00

30 **Geology of California (5)**
   - Class hours: 48-54 lecture.
   - Transfer Credit: CSU; UC.
   - Physical and historical geology of California, including the development of the twelve geomorphic divisions. Eight-hour field trip required in addition to normal class meetings.
   - 1914.00

30T **Geology of California Field Trip (1.5)**
   - Class hours: 72-81 laboratory.
   - Corequisite: Geology 30 (may be taken previously).
   - Transfer Credit: CSU; UC.
   - Field investigation of California, with emphasis on areas north and west of the Mojave Desert. Instruction during camping trip, may be taken twice.
   - 1914.00

70 **California Field Trip (2)**
   - Class hours: 16-18 lecture; 48-54 laboratory.
   - Corequisite: Any geology course or Earth Science 1 (may be taken previously).
   - Transfer Credit: CSU; UC credit limitations.
   - See counselor.
   - Geologic investigation of an area within California. Camping trip of varying length (approximately 1 week). May be taken four times as trip sites change.
   - 1914.00

75A, B **Out-of-State Field Trip (2, 3)**
   - Geologic investigation of an area within California. Hiking safety, group responsibilities, and cultural sites of interest are included. May be four times with change in trip sites.
   - 1914.00

80 **Mineralogy I (4) [Cx]**
   - Class hours: 32-36 lecture; 96-108 laboratory.
   - Prerequisite: Geology 1.
   - Crystallography and physical, chemical, and descriptive mineralogy. Mineral assemblages and genesis emphasized. Forty-eight hours of field trip required in addition to normal class meetings.
   - 1914.00

85 **Petrology I (5) [Cx]**
   - Class hours: 56-63 lecture; 72-81 laboratory.
   - Prerequisite: Geology 1.
   - Advisory: Completion of Chemistry 10 or high school chemistry, and Mathematics 430 or high school geometry.
   - Transfer Credit: CSU; UC.
   - Hand-specimen petrology: igneous, metamorphic and sedimentary. Forty-eight hours of field trip required in addition to normal class meetings.
   - 1914.00

90A **Geology Honors Seminar (1)**
   - Class hours: 16-18 lecture.
   - Transfer Credit: CSU; UC credit limitations.
   - See counselor.
   - Honors component for Geology. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.
   - 1914.00

92A-H **Special Topics: Geology (.5-6)**
   - Class hours: 16-18 hours/term lecture for each unit of credit.
   - Transfer Credit: CSU; UC credit limitations.
   - See counselor.
   - Hand-specimen petrology: igneous, metamorphic, and sedimentary.Forty-eight hours of field trip required in addition to normal class meetings.
   - 1914.00

92A, B, C **Independent Study: Geology (1, 2, or 3)**
   - Prerequisite: Geology 1.
   - Limitation on Enrollment: Instructor signature is required for registration.
   - Transfer Credit: CSU; UC credit limitations.
   - See counselor.
   - For the student who is capable and has the desire to explore and develop a problem in physical geography. Before registering, the student must sign an agreement with the instructor concerning subject and intended limits of the project. Individual inquiry, special techniques, and selected reading. 2206.00

**GERMAN (GER)**

1 **Elementary German (4)**
   - Class hours: 64-72 lecture.
   - Transfer Credit: CSU; UC. (CAN GERM SEQ A = GER 1 + 2)
   - A systematic presentation of language patterns and guided listening, speaking, and writing activities facilitate competence in basic communication skills, and convey various cultural aspects of German-speaking countries. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. This course corresponds to the first year of high school German.
   - 1103.00

2 **Elementary German (4)**
   - Class hours: 64-72 lecture.
   - Prerequisite: German 1 or one year of high school German.
   - Transfer Credit: CSU; UC. (CAN GERM SEQ A = GER 1 + 2)
   - Continued systematic presentation of language patterns and guided listening, speaking, and writing activities that lead to greater competence in basic communication skills and convey further cultural aspects of German-speaking countries. Fourteen hours of supplemental instruction in a Success Center that supports this course is required.
   - 1103.00

92A-H **Special Topics: German Literature, Language and Culture (.5-6)**
   - Class hours: 16-18 hours/term lecture for each unit of credit.
   - Transfer Credit: CSU; UC credit limitations.
   - See counselor.
   - 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. Variety of topics offered, with particular emphasis determined by the instructor. See class schedule for emphasis. May be taken four times. However, no single-subject, special-interest class may be repeated.
   - 1103.00

11 **Introduction to Gerontology (3)**
   - Class hours: 48-54 lecture.
   - Transfer Credit: CSU.
   - Interdisciplinary overview of the diverse characteristics, strengths, and needs of the increasing number of older persons. Topics include: aging services and community resources, occupations and career preparation in gerontology, information on aging and old age, laws and regulations governing work with the elderly, and ethical and policy issues.
   - 1309.00
18 Sociology of Aging (3)
(Available also as Sociology 18)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Social, cultural, and policy issues for an aging society.
Diversity in the experience of aging: cultural, economic, gender, and ethnic differences. Age and aging as social constructs. Life-long age status and role expectations. Society's response to an increasingly aged population. May be offered as an Honors course.
1309.00

21 Developmental Psychology: Adulthood and Aging (3)
(Available also as Psychology 21)
Prerequisite: Psychology 1.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Study of the psychology of human development in adulthood with particular emphasis on biological and social influences. Environmental, cognitive, and physical changes are examined in light of contemporary psychological research and theory. Designed to help persons of all ages understand the aging process from a psychological perspective.
1309.00

22 Dying and Death (3)
(Available also as Social Science 22)
Class hours: 48-54 lecture.
Advisory: Completion of any introductory course in psychology, sociology, anthropology, religion, or philosophy.
Transfer Credit: CSU; UC
1309.00

31 Fitness and Wellness for Older Adults (3)
(Available also as Physical Education: Lecture 31)
Class hours: 48-54 lecture.
Transfer Credit: CSU
Training for people who teach older people the exercises and wellness practices 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. Provides experience in body conditioning exercises, as well as safety precautions and accident prevention for the elderly during physical exercise. Chair and bed exercises for people with limited mobility.
1309.00

404 Health and Wellness for Older Adults (3)
 Formerly Gerontology 415)
(Also available as Health Science 404)
Class hours: 48-54 lecture.
Understanding healthy aging as well as chronic conditions of later life. Health behaviors and lifestyle factors that contribute to good health in later life. Wellness practices that contribute to disease prevention.
1309.00

405 Resources and Services for Older Adults (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Provides students with skills needed to access community resources and services for older adults. An introduction to resources, services, eligibility requirements, and funding. An overview of strategies to locate resources through direct contact as well as Internet research. Students acquire a basic understanding of applications pertinent to gerontological service settings, and learn to locate resources on the Internet.
1309.00

422A Dementia Care: Understanding Dementia Illnesses (1)
Class hours: 16-18 lecture.
Caring for the needs of persons with dementia: understanding dementia illnesses. Topics include: normal aging versus dementia; Alzheimer's disease and other dementias; assessment and treatment; medical and social models of care; the influence of environmental design; ethical issues; cultural differences that affect the experience of illness and care; and community resources.
1309.00

422B Dementia Care: Understanding Difficult Behaviors (1)
Class hours: 16-18 lecture.
Caring for the needs of persons with dementia: understanding difficult behaviors. Topics include: common behavior problems and strategies for working with them; communication skills to enhance caregiving; caregiver stress; the influence of environmental design on care providers and recipients; ethical issues; the importance of cultural differences; and community resources.
1309.00

422C Dementia Care: Planning Meaningful Activities (1)
Class hours: 16-18 lecture.
Caring for the needs of persons with dementia: planning meaningful activities. Topics include: communication skills; identifying what is meaningful; failure-free activities for persons with dementia; the importance of environmental design; ethical issues; cultural differences important in the design and delivery of activities; and community resources.
1309.00

462 Activity Coordinator Training (4)
Class hours: 64-72 lecture.
State-certified training for those working as an activity director in a skilled nursing facility. Practice in documenting and familiarization with Title 22 requirements, OBRA regulations, job description, basic medical terminology, and skills necessary for an activity director. Organizing, implementing and evaluating activities programs. Geriatric drugs, psycho-social needs, and other aging issues. Producing activity calendars, maximizing patient interests and participation. Therapeutic and bedside activities. Styles of leadership, and an overview of the functions of the interdisciplinary team.
1309.00

463 Social Work Designee Training (3)
Class hours: 48-54 lecture.
Defines the responsibilities of the person in a nursing home (long term care facility) designated as social worker. The social work designee is responsible for identifying and meeting the medically-related social and emotional needs of the patients. Designed to provide the student with the tools, theory, and skills needed to carry out these functions.
1309.00

482 Internships in Gerontology (1)
Class hours: 60 hours/term unpaid on-site work experience.
Limitation on Enrollment: In the Fall and Spring terms, students must be enrolled in a total of seven units or more, including this course. In the Summer term, students must be enrolled in at least one other course in addition to this one. Coursework at any accredited high school or college may be used to meet this requirement. Additional participation requirements may be required - including verification of fingerprinting - prior to working at some agencies.
Corequisite: Concurrent enrollment in any Chaffey Gerontology course
Supervised work experience in public and private agencies, facilities, and organizations. Designed to apply gerontological knowledge, learn new skills, and provide career-related work experience in community situations. Placement is arranged through the instructor. May be taken four times.
1309.00

482H Special Topics: Gerontology (.5-6)
Class hours: 16-18 hours/term for each unit of credit. Various specialized interests in the study of aging. See class schedule for the current topic. May be taken four times regardless of the unit combination. However, no single-subject, special-interest topic may be repeated.
1309.00

GUIDANCE (GUID)

2 Essentials of Student Success (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU.
Designed to increase student proficiency and retention in college. Topics include: learning styles, study and time management techniques, motivation, library research methods, critical thinking, memory and reading strategies, and exploration of college services. Helps students develop the personal and interpersonal communication skills critical to becoming responsible learners. Introduces students to the various segments of higher education in California.
4930.10

3 Career Exploration and Planning (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Designed for students seeking direction about a career and/or a major. Topics include: life problem-solving; evaluation of values, interests, skills, and personality; intensive career investigation; analysis and evaluation of employment trends; job research; and self-marketing skill development. Understanding physical, psychological, and social issues that impact career and life choices will also be addressed.
4930.10

503 Orientation to College (2)
Course is offered only on a credit/no credit basis.
Class hours: 32-36 lecture.
Not Degree Applicable.
Designed to increase student proficiency and retention in college and develop the student's learning style, study techniques, motivation, and library usage skills. In-depth exploration of available college services. Introduces students to the multiple segments of higher education in California.
4930.10
504 Educational Planning (.5)
Course is offered on a credit/no-credit basis only.
Class hours: 6-9 lecture.
Advisory: Completion of assessment and orientation is recommended.
Not Degree Applicable.
Prepares students to develop a successful educational plan. Topics include: requirements for degrees, certi-
ficates, and preparation for transfer to other educational institutions; academic policies and regulations; dates and deadlines for academic procedures; programs of study; student support services; study skills; and other relevant facts about the college.
4930.10

506 College Success (2)
Class hours: 32-36 lecture.
Not Degree Applicable.
Designed for returning and continuing students to develop critical learning skills necessary for college success. Various personal and learning assessment tools are employed to identify and evaluate student preparation and attitude for a successful college experience. Positive growth and self-motivation strategies and topics are explored, with a special focus on develop-
ing realistic educational and life goals. Continued development of effective learning skills, including study techniques, time management, test-taking skills, note-taking, learning styles, and the utilization of college support systems.
4930.10

511 College Success Seminar (1)
Class hours: 16-18 lecture.
Corequisite: Guidance 506.
Not Degree Applicable.
Supplemental seminar designed to help students apply principles and concepts explored in the corequi-
site course. Students complete a comprehensive self-
evaluation of their existing learning skills and preparedness for college, develop and implement a personal plan for success, connect with campus sup-
port programs and services, and develop a student educational plan that outlines a timeline for goal accomplishment.
4930.10

592A-H Special Topics: Guidance (.5-6)
Course is offered only on a credit/no credit basis.
Class hours: 16-18 hours/term lecture for each unit of credit.
Not Degree Applicable
Opportunity to explore guidance-related topics in greater depth. Emphasis selected by the instructor from variety of topics. See class schedule for emph-
sis. May be taken twice.
4930.10

650 Supervised Tutoring (NC)
Class hours: Variable and arranged; based on student need as determined by assessment, diagnostic instru-
ments, and/or instructor recommendation.
Limitation on Enrollment: Referral by course instructor or academic counselor is required.
Non-Credit Course
Open-entry/open-exit supervised tutoring course that facilitates study skills development and provides stu-
dents assistance in understanding college course assignments. Individualized tutoring is conducted out-
side of class time in a learning assistance center, and is structured to help students achieve specific course objectives or improve learning and study skills in spe-
cific subject matter. The content of this course varies according to the course for which tutoring is sought. May be repeated.
4930.09

HEALTH SCIENCE (HS)
(SEE ALSO BIOLOGY)
Students enrolled in two corequisite-linked courses (i.e. Health Science 11 and 11L) will have the lower of the two grades earned assigned to both courses when either course grade is less than a “C”.

11 Introduction to Health Science Informatics (2)
[Cr]
Class hours: 32-36 lecture.
Corequisite: Health Science 11L.
Advisory: A course in basic computer information sys-
tems concepts.
Transfer Credit: CSU.
Basic Internet skills and resources. Use of research data and information to enhance professional problem solving and client case management. Review of ethics considerations in the use of information systems within in the health science field.
1223.00

11L Introduction to Health Science Informatics Lab (1)
[Cr]
Class hours: 48-54 laboratory.
Corequisite: Health Science 11.
Advisory: A course in basic computer information sys-
tems concepts.
Transfer Credit: CSU.
Resource development and practice in the acquisition and use of Internet data and information to enhance professional problem solving and client case manage-
ment.
1223.00

400 Success in Nursing (1) [Cr]
Class hours: 16-18 lecture.
Nursing in the twenty-first century in a multicultural community. Exploration of personal resources, inter-
personal traits, and technology in development of nursing skills.
1230.00

401 Basic ECG and Dysrhythmia Interpretation (2)
[Cr]
Class hours: 32-36 lecture.
Study of basic electrocardiogram (ECG) waveforms in relation to atrial, junctional and ventricular dysrhyth-
rias. Designed to assist health care workers with recognition and treatment of basic cardiac dysrhyth-
rias.
1230.00

404 Health and Wellness for Older Adults (3)
(formerly Health Science 412)
Also available as Gerontology 404
Class hours: 48-54 lecture.
Understanding healthy aging as well as chronic condi-
tions of later life. Health behaviors and lifestyle factors that contribute to good health in later life. Wellness practices that contribute to disease prevention.
1309.00

405 Computer Applications for Health Science (1)
Class hours: 48-54 laboratory.
Limitation on Enrollment: Must be enrolled in one of the Health Science programs or have permission of program director.
A basic understanding of micro-computer functions and an introduction to computer applications used in Health Sciences, such as SAMIS, Dentrix, and MSRADS. Students will learn the skills necessary to utilize specific computer software programs associat-
ed with health care clinical sites and learn to access resources on the Internet.
1223.00

425 Intravenous Therapy (3)
Class hours: 48-54 lecture.
Legal and ethical issues in intravenous therapy; fluid and electrolyte balance; parental fluids, equipment and techniques for peripheral intravenous therapy and blood withdrawal, complications of intravenous thera-
py and administration of intravenous medication. Skills performance in patient care setting required.
1230.00

428 Basic Pharmacology (3) [Cr]
(Also available as Nursing: Vocational 428)
Class hours: 48-54 lecture.
Advisory: Completion of Mathematics 401 and Biology 424.
Basic concepts of pharmacology with emphasis on the role of the nurse in drug administration. Drugs affect-
ing body systems; drugs used in neoplastic diseases, infectious diseases and in skin disorders; immunolog-
ic agents, diagnostic agents, toxicology, fluids and electrolytes, and vitamins. Principles and factors for managing medication regimen in a home setting. Course is recommended for students enrolled in a nursing program and as Continuing Education credit for RN’s and LVNs, BRN #00426.
1230.00

450 Laboratory Tests and Diagnostic Procedures (1)
Class hours: 16-18 lecture.
Advisory: Concurrent enrollment in another Health Science Course or current employment in a health pro-
fession. Common laboratory testing reviewed with diagnostic procedures. Preparation of patient interventions dur-
ing testing and interpretation of test results. May be taken twice.
1230.00

460 Medical Information Systems (.5)
Class hours: 24-27 laboratory.
Limitation on Enrollment: Concurrent enrollment in a Chaffey College Health Science program or current employment in a health profession is required.
Introduction to the medical charting system at local area hospitals. Topics include: admission, personal data entry, patient assessment and medication admin-
istration documentation, information retrieval, and security, confidentiality, privacy, and ethics issues associated with patient information. Complete hospital simulations are presented. May be taken four times.
1223.00

470 Hand-Held Computers in Healthcare Environ-
ments (2)
Class hours: 32-36 lecture.
Advisory: Basic computer skills and health science background or education.
Patient management through the use of hand-held computers (HHC’s). Point-of-patient care applications and data management. Topics include: retrieving and using Internet resources; downloading patient data, including ethical, privacy, and security issues; learn-
ing research; reports; and time management. May be taken twice.
1223.00

492A-H Special Topics: Health Science (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Selected special topics in a Health Science field for students who desire an extensive exploration of a spe-
cialized 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.
1230.00
Course Descriptions

492LA-H Special Topics Laboratory: Health Science (1-5)  
Class hours: 48-54 hours/term laboratory for each unit of credit.  
Selected special topics laboratory for students who desire an extensive exploration of a specialized Health Science subject. May be taken four times regardless of the unit combination, however, no single-subject, special-interest course may be repeated.  
1230.00

500 Health Sciences Skills Development I (1)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 self-paced laboratory.  
Not Degree Applicable.  
Application of appropriate health science skills in a simulated laboratory setting. Skills taught correspond to skills levels in current health science program. May be taken four times.  
1230.00

510 Health Sciences Skills Development II (1)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 self-paced laboratory.  
Not Degree Applicable.  
Use of computers to improve test-taking skills, critical thinking skills, and technical skills in conjunction with current health sciences courses. May be taken four times.  
1230.00

History (HIST)

1 World History: Pre-Civilization to 1500 (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN HIST 14) (CAN HIST SEQ C = HIST 1 + 2)  
Comparative, integrative study of the world's major civilizations, from pre-history to 1500, including those in Eurasia (Mesopotamia, Egypt, Hebrews, Greece, Rome, India and China), Africa, and the Americas. Emphasis on the similarities and differences between these civilizations, and on their influences on the unfolding of human history. May be offered as an Honors course.  
2205.00

2 World History: 1500 to Present (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN HIST 16) (CAN HIST SEQ C = HIST 1 + 2)  
Cross-cultural study of all the major civilizations of the world since 1500. The unifying theme is understanding the causes of the rise of the West, the reaction of the non-Western world to it, and the ongoing dynamics of the “West versus the Rest” dialectic. May be offered as an Honors course.  
2205.00

4 History of Slavery (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of English 1A.  
Transfer Credit: CSU; UC.  
Survey of slavery from ancient times to the present. The origins of slavery in human societies, development as an institution, and the impact on the course of world history.  
2205.00

5 Early Western Civilizations (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN HIST 2)  
Development of the cultural foundations of Western peoples from prehistoric times, through the rise and diffusion of civilization in the era of Middle Eastern dominance and the Middle Ages, and culminating with the Renaissance and Reformation periods in Western Europe.  
2205.00

6 Modern Western Civilizations (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN HIST 4)  
Development of the cultural foundations of Western peoples from the Commercial Revolution and the development of the nation-state in Europe through the French Revolution, and the Industrial Revolution. Changes created in Western society by mass politics, world wars and their aftermath, as seen in the modern world.  
2205.00

7 History of the Middle East (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Survey of the history of the Middle East from earliest times to the present, focusing on the period from the birth of the Prophet Mohammad in 570 and the Treaty of Versailles in 1920.  
2205.00

9 History of Asian Civilizations I (3)  
Class hours: 48-54 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: 48-54 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. Focuses particularly on the response of those cultures in terms of socioeconomic and political developments.  
2205.00

16 Westward Movement and the Indian Wars 1840-90 (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Survey of the westward movement of the American frontier and the Indian Wars of 1840-1890. Historical significance of the people and events that comprise this crucial period in the formation of the American identity are studied from the perspectives of Native Americans and other ethnic groups, as well as Anglo-Americans.  
2205.00

17 History of the United States (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for READ-550 or higher as determined by the Chaffey assessment process, or completion of READ-530.  
Transfer Credit: CSU; UC.  
(CAN HIST 8) (CAN HIST SEQ B = HIST 17 + 18)  
Survey of United States history from its colonial foundations through the Reconstruction Era (1865). Satisfies the California State University requirement in American History. May be offered as an Honors course.  
2205.00

18 History of the United States (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for READ-550 or higher as determined by the Chaffey assessment process, or completion of READ-530.  
Transfer Credit: CSU; UC.  
(CAN HIST 10) (CAN HIST SEQ B = HIST 17 + 18)  
Development of the United States from the Reconstruction Era (1865) through the present. Satisfies the California State University requirement in American History. May be offered as an Honors course.  
2205.00

20 Contemporary History of the United States from 1945-Present (3)  
Class hours: 48-54 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: 48-54 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: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Survey of women in U.S. history from the colonial era to the present. Course is taught in a seminar format.  
2205.00

40 Retrospective on the 20th Century: World War II (3)  
(Also available as Social Science 40)  
Class hours: 48-54 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: 48-54 lecture.  
Transfer Credit: CSU; UC.  
African-American experience from the seventeenth-century African heritage to the American Civil War. Focuses on two great transitions: from Africa to New World slavery and from slavery to emancipation.  
2203.00

51 African-American History II (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
African-American experience from emancipation to the present. Focuses on the transition from a rural to an urban milieu.  
2203.00

70 Chicanos: Mexican History as it Relates to the United States (3)  
Class hours: 48-54 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, border raiding, the 1910 Mexican Revolution, subsequent Mexican immigration to the United States, and present-day border problems.  
2203.00

71 Chicanos: The Chicano Minority in the United States (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Historical development of a Mexican-American community and the emergence of a Chicano cultural identity. Issues and conflicts affecting the Chicano minority from the nineteenth century to the present.  
2203.00
90 Seminar in History (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC credit limitations.

See counselor.

90A History Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.

Honors component for History. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.

92A-H Special Topics: History (1-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.

Special-interest course of varying length for students who wish further exploration in specific areas of history. 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.

98A,B.C Independent Study: History (1, 2, or 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.

Special project course designed for the capable, well-motivated student. Student explores and develops a project or paper on an area of personal interest within the discipline area. The nature and extent of the project must be decided by both the 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 taken three times, regardless of the unit combination. However, no single-subject project or paper may be repeated.

Course Descriptions

10 Introduction to Hospitality Management (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.

Introduction to the hospitality industry and interrelationships between the hotel, restaurant, travel, and leisure segments. Examination of management functions including franchising, organizational structures, guest services, employee recruitment and retention, use of computer technology, and marketing tactics. Historical development of the service industry, it's economic and social influences, future trends, and career opportunities at the local, regional, and national levels are also explored.

12 Hotel and Food Service Accounting (3)
Class hours: 48-54 lecture.
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.

14 Quantity Food Production Management (3)
Class hours: 48-54 lecture.
Advisor: Completion of or concurrent enrollment in Hotel and Food Service Management 16.
Transfer Credit: CSU.

In-depth introduction to management concerns unique to quantity food production in institutional settings. Real-world exercises in record keeping, staffing, standardizing recipes, terminology and nomenclature use, storage requirements, quality control, emergency protocols, and Hazardous Analysis Critical Control Points (HACCP) procedures. Prepares students for entry-level positions in institutional food service.

16 Principles of Food Preparation (2) [Cx]
Class hours: 32-36 lecture.
Corequisite: Hotel and Food Service Management 16.
Transfer Credit: CSU.

Principles and techniques in professional food preparation, including professional demeanor, science and lore of the kitchen, food service safety and sanitation policies and procedures, recipe specifications, food cost calculations, and kitchen equipment use and maintenance. Basic culinary concepts — including mise en place, dry and moist cookery, and appropriate use of produce, dairy and dry goods — are examined.

16L Principles of Food Preparation Laboratory (1) [Cx]
Class hours: 48-54 laboratory.
Corequisite: Hotel and Food Service Management 16.
Transfer Credit: CSU.

Hands-on application of professional food preparation techniques. Students plan, prepare, and produce food items following basic or converted recipes that employ moist and dry heat cooking methods. Collaboration, teamwork, and proper kitchen safety and sanitation procedures are emphasized.

18 Sanitation, Safety and Equipment Management (2) [Cx]
Class hours: 32-36 lecture.
Transfer Credit: CSU.

Safety, sanitation, and proper equipment management issues in the food service industry. In-depth coverage of industry-based sanitation and safety standards that prevent contamination and food-borne illness, food-stall on-the-job accidents and injuries, and preclude equipment misuse and damage. Disaster planning fire prevention, and basic first aid procedures are highlighted. Special emphasis on the local, state, and federal agencies and programs — such as OSHA, HACCP, and ServSafe — having regulatory oversight in food service workplaces.

20 Purchasing, Cost Controls, and Menu Planning (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU.

Principles, policies, and procedures associated with the procurement and conveyance of food and beverages in the food service industry. Focus on systems for selecting product, appropriate receipt and storage, inventory controls, menu item specification development, commercial menu costing strategies, and descriptive menu design and marketing.

422 Hotel Operations (3)
Class hours: 48-54 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. Maintenance and engineering operations.

424 Dining Systems and Restaurant Operations (3)
Class hours: 24-27 lecture; 72-81 laboratory.

Limitation on Enrollment: Proof of a current negative tuberculosis test is required.
Prerequisite: Hotel and Food Service Management 14 and 436A.

Dynamic, hands-on application of food service skills in a commercial dining facility. Using guided practice and peer mentoring, students assume the various service, culinary, and management stations involved in CC’s Cafe operation, practicing the real-world professional skills essential to workplace success. At each station, students analyze their professional and technical performances as they relate to guest satisfaction, personal goals, and team achievements. May be taken three times.

428 Human Resource Management (3)
Class hours: 48-54 lecture.
Advisor: Completion of Hotel and Food Service Management 10.

Management theory applied to on-the-job realities in the hotel and food service industry, focusing on the knowledge and skills needed for effective personnel management. Topics include: recruitment, selection, and hiring; employee development and motivation; benefits and compensation issues; productivity and performance evaluations; labor relations and legal considerations; and conflict resolution. Emphasis on the crucial importance of effective communication and multicultural sensitivity to successful hospitality management practices.

430 Hospitality Marketing Management (2)
Class hours: 32-36 lecture.

Marketing strategies applied to hotel-motel industries, restaurant and institutional food service. Identification of the hospitality industry market, image development, advertising, sales promotions, public relations, and administering and control of a marketing plan.

432 Hospitality and Healthcare Law (3) [Cx]
Class hours: 48-54 lecture.

Legal aspects of the hospitality and healthcare industries, including an introduction to Title 22 and hospitality law. Topics include licensing; labor laws; safety, liability, and risk management; rights of employees, residents, and guests; and legal records and documentation.

434 Catering and Banquet Organization (3)
Class hours: 24-27 lecture; 72-81 laboratory.

Limitation on Enrollment: Proof of a current negative tuberculosis test is required.
Prerequisite: Hotel and Food Service Management 14 and 436A.

Introduction to banquet operations, one of the fastest growing and lucrative areas of the food service industry. Topics include: marketing, packaging and pricing strategies; contracts and licensing; staffing, payroll and bookkeeping; party planning and wedding coordination; on- and off-premise venues; food preparation; beverage service; niche cuisines; equipment costs; set-up and breakdown procedures; and transportation needs. Participation in the planning, production, and analysis of a series of public events (plated dinner, buffet luncheon, cocktail party) is a required part of the course. May be taken three times.

Home Economics
(See Consumer Studies)

Hotel and Food Service Management (HOTFS)

10 Introduction to Hospitality Management (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.

Introduction to the hospitality industry and interrelationships between the hotel, restaurant, travel, and leisure segments. Examination of management functions including franchising, organizational structures, guest services, employee recruitment and retention, use of computer technology, and marketing tactics. Historical development of the service industry, its economic and social influences, future trends, and career opportunities at the local, regional, and national levels are also explored.
436A Culinary Arts I (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Limitation on Enrollment: Proof of a current negative tuberculosis test is required.
Prerequisite: Hotel and Food Service Management 16 and 18.
Advisory: Completion of Mathematics 510.
Introduction to the culinary arts, including a historical and contemporary exploration of cultural cuisines. Practical application of culinary theory and technique that provides students with a realistic experience of professional cooking and kitchen culture. Focus on basic and intermediate knife skills; the production of stocks, soups and sauces; vegetable and starch identification, fabrication, and cookery; egg and breakfast convectibles; and the cold kitchen, including salad, cold sauce, and sandwich preparation. Kitchen safety and sanitation rules are revised and practiced. May be taken three times. 1306.30

436B Culinary Arts II (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Limitation on Enrollment: Proof of a current negative tuberculosis test is required.
Prerequisite: Hotel and Food Service Management 436A.
Intermediate study of the culinary arts. Continuing exploration of its foundations, principles, and practical skills, with focus on meat, poultry, fish, and shellfish identification, fabrication, and cookery. Examination of the history and modern interpretations of the art of garde manger, including hors d’oeuvres, patés, terrines, and charcuterie. Production of European, Asian, and American regional cuisines, with special consideration to development, plating, and presentation. Kitchen safety and sanitation rules are reinforced and practiced. May be taken three times. 1306.30

436C Culinary Arts III (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Limitation on Enrollment: Proof of a current negative tuberculosis test is required.
Corequisite: Hotel and Food Service Management 16 (may be taken previously).
Effective and attractive food presentation methods, including the creation and use of garnishes. Introduc- tion to basic principles of bakeshop production and ingredient selection. Preparation of yeast doughs, quick breads, cookies and cakes, pies and fillings, savory and sweet baked goods, and pastries. May be taken three times. 1306.30

492A-H Special Topics: Hotel and Food Service Management (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Special-interest lecture course of varying length for students who wish further information in specific areas of hotel and food service management. Topics and course content determined by the individual instructor; see class schedule for current term emphasis. May be taken four times regardless of the unit combination, however no single-subject, special-interest class may be repeated. 1307.00

496A, B, C, D Work Experience: Hotel and Food Service Management (1, 2, 3, or 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Limitation on Enrollment: Instructor or program coordinator signature is required prior to enrollment. 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 four times for a maximum of 16 units. 1307.00

Humanities (Human)
5 Arts and Ideas: Antiquity to Renaissance (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective. 4903.30

6 Arts and Ideas: Renaissance to Modern (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective. 4903.30

20 The Holocaust: History and Philosophy (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Examination of the philosophical underpinnings and historical developments leading to the rise of Nazi Germany and the implementation of a policy of destruction for European Jewry. 4903.30

70 Museum and Gallery Field Study (1)
(Also available as Art 70 and Photography 70)
Class hours: 16-18 lecture.
Advisory: Completion of any art or photography course.
Transfer Credit: CSU.
Issues in contemporary art, photography, art history, and photo history are investigated through direct observation of museum and gallery exhibitions. Readings, research, and class discussion provide the foundation for student understanding and analysis of art (including drawing, painting, photography, mixed media, sculpture, installation, and new media) in a museum setting. Field trips are a required part of this course. May be taken four times. 4903.10

90A, B Humanities Honors Seminar (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for the Humanities. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 4903.00

92A-H Special Topics: Humanities (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special-interest course of varying length for students who wish further exploration in specific areas of humanities. 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. 4903.00

Industrial Electrical Technology: Core (IET)
401A Introduction to Electricity (2.5) [Cx]
Class hours: 32-36 lecture; 24-27 laboratory
Advisory: Completion of Mathematics 410 or a higher level mathematics course.
Principles of basic electricity. Ohms Law, series and parallel circuits, conventional current theory, current flow, conductors and insulators, combination circuits, and power ratings. 0934.40

401B Industrial Basic Controls (2.5) [Cx]
Class hours: 32-36 lecture; 24-27 laboratory
Prerequisite: Industrial Electrical Technology 401A.
Advisory: Completion of Mathematics 410 or a higher level mathematics course.
Study of batteries and other sources of electricity; magnetism, magnetic induction, direct current generators, measuring instruments, resistive and capacitive circuits. 0934.40

403A Electrical Motors and Controls I (2.5)
Class hours: 32-36 lecture; 24-27 laboratory
Prerequisite: Industrial Electrical Technology 403A.
Applications of motor controls. Topics include: resistive-ductive parallel circuits, resistive-inductive capacitive parallel circuits, three-phase circuits, single- and three-phase transformers, single- and three-phase motors, and three-phase alternators. 0934.40

405 National Electric Code (3)
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 405A.
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective. 4903.10

407 Electrical Blueprints (3)
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 407A.
Basic ladder diagrams, one line diagrams, electrical symbols, hydraulic symbols and diagrams, floor plans, elevation plans, pictorials, and orthographic projections. 0934.40

409 Static Devices (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 409B.
Basic static devices, diodes, transistors, field effect transistors, silicon controlled rectifiers, and other solid state devices used in industry. 0934.40

411 Programmable Logic Controllers (3) [Cx]
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 411B.
Ladder diagrams, common computer terms, and operation of the programmer. Verifying and programming of timers and counters. May be taken twice. 0934.40
413 Intermediate Programmable Logic Controllers (3)
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 411.
PLC advanced ladder diagrams; operations of the program; verifying, editing, and programming of timers, counters, master control relays, and jump instructions, using a computer. May be taken four times.
0934.40

415 Advanced Electricity Laboratory (2)
Class hours: 16-18 lecture; 48-54 laboratory
Prerequisite: Industrial Electrical Technology 405, 407, 409, and 411.
Application and integration of concepts and skills covered in the prerequisite lecture courses. Topics include: designing motor control systems, translating information from blueprint to ladder diagrams and employing it into the PLC program, and applying assignments into a hardwire system. May be taken four times.
0934.40

417 Electrical Troubleshooting (3)
Class hours: 40-45 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology 411.
Applying the knowledge learned on DC/AC motor controls and blueprint reading, and developing troubleshooting skills. May be taken four times.
0934.40

419 DC Variable Speed Drive (1.5)
Class hours: 16-18 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology 415.
Function and controls of a DC variable speed drive and its application on the field, including adjustments, settings, tuning, and configuration. May be taken twice.
0934.40

421 AC Variable Frequency Speed Drive (1.5)
Class hours: 16-18 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology 419.
Function and controls of an AC variable frequency drive and its application on the field, including parameter setting, setting, tuning, and configuration. May be taken twice.
0934.40

422 OSHA Construction Safety Training (2)
Class hours: 32-36 lecture
Construction industry safety and health standards, taught in accordance with Occupational Safety and Health Administration (OSHA) requirements. Course is targeted to entry-level workers. Upon successful completion, students receive the OSHA (30-hour) card.
0956.70

458 Fundamentals of Cable Networking: The Physical Layer (3)
Class hours: 48-54 lecture.
Tool use and construction techniques. The characteristics of various industry standards. Troubleshooting and repair for entry-level technicians in the network cabling industry. A certificate is issued by C-Tech Associates upon successful completion of this course.
0934.40

459 Fundamentals of Fiber Optic Cabling: The Physical Layer (3)
Class hours: 48-54 lecture.
Prerequisite: Industrial Electrical Technology 458.
Fiber optic theory, tool use, and construction techniques. The characteristics of various fiber optic components. Troubleshooting and repair for entry-level technicians in the network cabling industry, with emphasis on fiber optics. A certificate is issued by C-Tech Associates upon successful completion of this course.
0934.40

470 FCC License Preparation (3) [Cx]
Class hours: 48-54 lecture.
Corequisite: Industrial Electrical Technology 470L. Designed for students preparing for FCC licensing. A comprehensive review of the essential topics in electronics and communications currently covered on the FCC GROL exam. An up-to-date coverage of rules and regulations, semiconductor theory, and digital circuits. May be taken three times.
0934.00

470L FCC License Preparation Laboratory (1)
Class hours: 48-54 laboratory.
Corequisite: Industrial Electrical Technology 470. Laboratory course designed for students preparing for FCC licensing. Hands-on coverage of the essential topics in general electronics, semiconductors, digital circuits, and communications currently covered on the FCC GROL exam. May be taken three times.
0934.00

492A-H Special Topics: Industrial Electrical Technology (5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
A special topics lecture for students who desire in-depth exploration in specialized areas of industrial electrical technology. Topics vary, and are determined by the instructor. See schedule of classes for current emphasis. May require prerequisites and/or corequisites, based on the content of the course. May be taken four times regardless of the unit combination.
0934.40

492A-H Special Topics Laboratory (5-6)
Class hours: 24-27 lecture; 24-27 laboratory.
0935.00

492LA-H Special Topics Laboratory: Industrial Electrical Technology (5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
A special topics laboratory for students who desire in-depth exploration in specialized areas of industrial electrical technology. Topics vary, and are determined by the instructor. See schedule of classes for current emphasis. May require prerequisites and/or corequisites, based on the content of the course. May be taken four times regardless of the unit combination.
0934.40

496A, B, C, D, Internship in Industrial Electricity (1, 2, 3, 4)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit. Limitation on Enrollment: Instructor signature is required prior to enrollment.
Prerequisite: Industrial Electrical Technology 401A. Corequisite: Internship in any industrial electricity course.
Supervised industry internship in cooperation with private or public sector employers. Provides students expanded, hands-on learning opportunities to apply knowledge and learn new skills directly related to their industrial electricity systems program of study, outside of the classroom environment. Placement is arranged by/approved by the instructor. Participation requirements may vary with the job setting. May be taken up to four times for a maximum of 12 units credit.
0934.40

430 Hydraulic Fundamentals (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory.
Introduction to hydraulic fundamentals, demonstration of hydraulic power, basic circuits, functional circuits, and troubleshooting.
0935.00

432 Electrical Control of Hydraulic Systems (2)
Class hours: 24-27 lecture; 24-27 laboratory.
0935.00

434 Hydraulic Applications with Programmable Logic Controllers (2)
Class hours: 24-27 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology 411. Principles of electrical control of hydraulic systems, electrical concepts of ladder diagrams, functional systems of electrical/hydraulic applications, demonstrating servo controls, proportional controls, and programmable logic controllers. May be taken twice.
0935.00

436 Pneumatics Fundamentals (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory.
Introduction to pneumatics and familiarization with basic concepts of pressure, volume, force, directional speed control, pilot valves, and pneumatic motor circuits and performance.
0935.00

438 Electrical Control of Pneumatics Systems (2)
Class hours: 24-27 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology: Electromechanical Technology 436. Electrical control of pneumatics, concepts, functional systems, industrial-type electro-pneumatic circuits, and troubleshooting in electrical control and electro-pneumatic circuits.
0935.00

440 Sensors for Hydraulics and Pneumatics Training Systems (1.5)
Class hours: 16-18 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology: Electromechanical Technology 430. Electrical control sensors for hydraulic systems, photoelectric and proximity switches representative of what can be found in the fluid power industry.
0935.00

IET: INSTRUMENTATION TECHNOLOGY (IETIT)

441 Flow Process Fundamentals (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory.
Introduction to flow process fundamentals. Understanding how current flow responds to changes and the terminology (dead time, rise time, and settling time) used to describe the response. Operation and calibration of the instruments used to control the process.
0943.00

442 Flow Measurement and Control (2)
Class hours: 24-27 lecture; 24-27 laboratory.
Prerequisite: Industrial Electrical Technology: Instrumentation Technology 441. Notch and open-loop tuning of a flow process. Operation and troubleshooting of flow measurement channel and control processes. Operation and calibration of a variable speed drive. Monitoring and evaluating the reactions of a process disturbance on a chart recorder.
0943.00

IET: ELECTROMECHANICAL TECHNOLOGY (IETELMT)

430 Hydraulic Fundamentals (2) [Cx]
Class hours: 24-27 lecture; 24-27 laboratory.
Introduction to hydraulic fundamentals, demonstration of hydraulic power, basic circuits, functional circuits, and troubleshooting.
0935.00
10 Introduction to Interior Design (3) [CxD]
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Overview of the interior design field. Examination of floor plans, furniture arrangement, design elements and principles, furniture history and types, as well as the effect of color, lighting, and floor, wall and window treatments. Examination of good interior design for residential and commercial installations. 1302.00

11 History of Western Architecture and Interiors I (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Furniture, interior and architectural styles of ancient Egypt, Greece, and Rome; the European Middle Ages, the Renaissance, and the French periods to 1820. 1302.00

12 History of Western Architecture and Interiors II (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Furniture, interior and architectural styles of the English, Anglo-American, and late nineteenth and twentieth century Western periods. 1302.00

13 Non-European Architecture and Design (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Architecture and design of China, Japan, Africa, the Middle East, pre-Columbian Mesoamerica, and the American Indian, including: African sculpture; Navajo rugs and blankets; Southwest American Indian architecture and pottery; Chinese and Japanese traditional architecture, furniture, and ceramics; “Oriental” rugs; and Balinese architecture and art. 1302.00

15 Drafting for Interior Designers (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Line quality, lettering, conceptual presentation, working drawings, elevations, sections, details, dimensioning, schedules, lighting, electrical, and reflected ceiling plans. Organization of project. Completion of a set of plans. 1302.00

16 Quick Sketching for Interior Designers (2.5)
Class hours: 32-36 lecture; 16-18 studio.
Transfer Credit: CSU.
Freehand sketching techniques for illustrating interiors in three dimensions. Includes perspective, shading, textures, and use of materials. Emphasis on quick presentation of ideas for designer or client. 1302.00

17 Introduction to Lighting (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Basic principles of lighting and their application. Visual perception, properties of light and color, sources and luminaires, lighting design elements and techniques, and elementary calculations. Energy efficient lighting practices and applicable codes and regulations. Written and graphic design documents. 1302.00

18 Perspective Drawing (3) [Cx]
Class hours: 32-36 lecture; 48-54 laboratory.
Transfer Credit: CSU.
Theory and skills necessary for drawing furnished interiors for both residential and commercial design projects. Theory of one-, two-, and three-point perspective. Isometric and axonometric drawing. Principles of light and shadow. 1302.00

21 Space Planning (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Furniture layouts and space planning for residential and commercial interiors. Elevations, lettering, furniture layouts, partition plans, reflected ceiling plans, electrical plans, schedules. Human factors and behavioral needs. Barrier free access. Bubble diagrams and adjacencies. Set of working drawings of residential and commercial. 1302.00

22 Interior Design Materials (3)
Class hours: 48-54 lecture.
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: 32-36 lecture; 48-54 laboratory.
Prerequisite: Interior Design 18.
Transfer Credit: CSU.
Addition of color to perspective views of furnishings and interiors. Experimentation with a variety of techniques and media used in the illustration of furnishings, accessories, and backgrounds. Rendering of various hard and soft textures. 1302.00

25 Interior Design Management (2)
Class hours: 32-36 lecture.
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 documents. 1302.00

30 Advanced Design Studio (3.5)
Class hours: 48-54 lecture; 16-18 studio.
Prerequisite: Interior Design 16, 21, and 22.
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

92A-H Special Topics: Interior Design (.5-6)
Class hours: 16-18 hours/term for each unit of credit.
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

427 Computer Aided Design for Set and Interior Design (3)
(Also available as Theatre Arts 427)
Class hours: 48-54 lecture.
Advisory: Basic familiarity with Macintosh or Windows computers.
Computer aided design using professional software, such as AutoCAD, Revit, Architectural Desktop, and ArchCAD. Floor plans, furniture layouts, elevations, lighting plans, 3-D perspectives, and renderings. Use of various printers and plotters. May be taken 3 times. 1302.00

482 Industry Internship: Interior Design (1)
Class hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Prerequisite: Interior Design 30.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Supervised industry internship in cooperation with private sector design, architectural, and product distribution firms. Provides students expanded, hands-on learning opportunities to apply knowledge and learn new skills, directly related to their program of study, outside of the classroom environment. Placement is arranged by/approved by the instructor. Participation requirements may vary with the job setting. 1302.00
**Journalism (Jour)**

10 Newswriting (3)
Class hours: 48-54 lecture.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
(CAN JOUR 2)
Principles of writing news stories with emphasis on selecting and organizing information in a clear, accurate, coherent, and concise manner. Fundamentals of correctness in grammar and spelling are stressed, as well as news copy preparation and format. Five hours of supplemental instruction in the newspaper production laboratory is required. 0506.00

11 Advanced Newswriting and Editing (3)
Class hours: 48-54 lecture.
Prerequisite: English 1A.
Advisory: Completion of Journalism 10.
Transfer Credit: CSU.
Principles and practice in writing specialized types of magazine and newspaper articles, including features, editorials, and in-depth news and sports events stories. Mastery of fundamental reporting techniques and advanced editing skills are emphasized. Ten hours of supplemental instruction in the newspaper production laboratory is required. 0602.00

61A.B.C Newspaper Production (1, 2, or 3)
(Available also as English 61A.B.C)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Advisory: Typing and/or computer skills, and the ability to take black-and-white photos.
Transfer Credit: CSU.
Experience in planning, editing, and producing a weekly or bi-weekly newspaper. Students cover campus and community events; write news and feature stories, editorials, reviews, and headlines; edit copy using the departments’ computer for typesetting; typeset copy; take, print, and edit photos; paste up page flats or printing; and distribute finished paper on campus. May be taken four times regardless of the unit combination. 0506.00

**Management (MGMT)**

(Also see Business)

11 Retail Merchandising and Management (3)
(Available also as Fashion Merchandising 17)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
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 negotiations, pricing, displaying, advertising, selling, and controlling of merchandise. 0506.58

40 Introduction to Management (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
A survey of management concepts, basic functions, and skills as they apply at all levels within the contemporary work environment. Designed to link management theory with actual management practice in order for the organization to become more effective, efficient, and internationally competitive. 0506.00

42 Human Resource Management (3) (Cnx)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Formulation 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. 0506.30

44 Introduction to Human Relations (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Assists the individual in the business organization in understanding the causation of behavior, group and individual dynamics, perception, conflict, motivation, leadership, influence, and authority relationships. 0506.30

430 Warehouse Management and Material Handling (3)
Class hours: 48-54 lecture.
Essential skills for warehouse managers, with emphasis on the planning, protection, productivity, and quality control functions in warehouse and distribution operations. Topics include: warehouse design and layout, effective communications, industry terminology, technology, distribution systems, inventory management and protection, accountability, auditing, and safety rules and regulations. 0510.00

432 Supply Chain Management (3)
Class hours: 48-54 lecture.
Tools and techniques for design and improvement of any supply chain, through the optimal use of information, materials, and technology to improve efficiency and reduce costs. Integration of outside suppliers and customers into an organization’s supply chain. Overview of career opportunities within the field. 0510.00

434 Transportation Management (3)
Class hours: 48-54 lecture.
Traffic management principles and techniques that facilitate distribution of the world’s commerce. Analysis of the major forms of transportation – motor, rail, air, water, pipeline, inter-modal, and international – and their integration into a distribution system. Carrier management and selection, including rate structures, scheduling, outsourcing, private fleet operations, and transportation customers. Governmental regulations on tariffs and transportation of hazardous materials. 0510.00

440 Principles of Leadership (2)
Class hours: 32-36 lecture.
Explores the meaning of leadership, similarities and differences between leadership and management, impact of leadership on organizational performance, and theories and models for understanding leadership. Assessment of leadership behaviors. Leadership and influence in organizational settings. Teamwork, group problem solving, and conflict resolution. 0506.30

460 Total Quality Management Concepts (3)
Class hours: 48-54 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. 0506.00

480 Principles of Supervision (3)
Class hours: 48-54 lecture.
Duties and responsibilities of management from the line-supervisor’s level. Principles of employee/management relations. The use of systematic approach to problem-solving. Functions of the supervisor concerning interpretation of company policy, introducing new employees to their jobs, transfers, promotions and discharges, safety, training, and interpretation of union agreements. Case studies in the functional areas of supervision. 0506.30

492A-H Special Topics: Management (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit. Pursues certain specializations in management. See class schedule for current topics. May be taken only four times regardless of the unit combination. However, no single-subject, special-interest class can be repeated. May require corequisites and/or prerequisites based on the content of the course. 0506.00

**Mathematics (Math)**

4 Mathematical Concepts for Elementary School Teachers (4)
Class hours: 64-72 lecture.
Prerequisite: Eligibility for Mathematics 4 as determined by the Chaffey assessment process, or completion of Mathematics 420.
Transfer Credit: CSU; UC.
Study of mathematical concepts, targeted primarily to students preparing to teach elementary school mathematics. Topics include: real number systems and subsystems, patterns and sequences, basic set theory, logic, and mathematical induction. Emphasis is on comprehension of concepts and application of logical reasoning and critical analysis in problem-solving. 1701.00

25 College Algebra (4)
Class hours: 64-72 lecture.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 420.
Transfer Credit: CSU; UC credit limitations. See counselor.
(CAN MATH 10)
Coordinate geometry and graphing techniques; conic sections; solutions to higher degree polynomial equations. Functions: notation, algebraic operations, composition, and variation. Polynomial, rational, inverse, exponential, and logarithmic functions. Systems of equations; solving systems by matrices and determinants. Sequences and series; binomial expansion; mathematical induction. 1701.00
31 Plane Trigonometry (4)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 25.  
Advisory: Completion of Mathematics 430 or 1 year of high school geometry.  
Transfer Credit: CSU.  
(CAN MATH 8)  
Trigonometric functions including definitions of the circular functions. Radian measure, graphs, inverse trigonometric functions, trigonometric equations and identities, solution of right and oblique triangles, applications, vectors, complex numbers, polar coordinates and graphs, equation of conics, and rotation of axes. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
60 Calculus with Applications (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 31.  
Transfer Credit: CSU UC.  
Techniques of calculus as applied to problem solving in business and the social, behavioral, and natural sciences. Topics include: limits, continuity, differentiation and integration in one and several dimensions, optimization, and transcendental functions.  
1701.00  
61 Pre-Calculus (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 25 and 31.  
Advisory: Prior experience with a graphing calculator is needed.  
Transfer Credit: CSU UC credit limitations. See counselor.  
(CAN MATH 16)  
Further studies in algebra and trigonometry for students intending to take calculus. Factoring techniques, nonlinear inequalities including absolute values, partial fractions, introduction to limits, graphing rational functions, conic sections, and trigonometric functions and inverses. Trigonometric concepts emphasized as needed for calculus, including identities, equations, and applications. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
65A Calculus I (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 61.  
Advisory: Prior experience with a graphing calculator is needed.  
Transfer Credit: CSU UC.  
(CAN MATH 18)  
Functions, limits, and continuity; differentiation of algebraic, trigonometric, logarithmic, and exponential functions with applications; integration of algebraic, trigonometric, logarithmic, and exponential functions; and the definite integral and some applications, including rectilinear motion and average value. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
65B Calculus II (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 65A.  
Advisory: Prior experience with a graphing calculator is needed.  
Transfer Credit: CSU UC.  
(CAN MATH 20)  
Applications of the definite integral including area, volume, arc length, surfaces of revolution, work, and centroids of planar regions; differentiation and integration involving hyperbolic, inverse trigonometric and inverse hyperbolic functions; techniques of integration; indeterminate forms and improper integrals; infinite series; conic sections; polar coordinates and parametric equations. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
75 Calculus III (5) (Cx)  
Class hours: 80-90 lecture.  
Prerequisite: Mathematics 65B.  
Advisory: Prior experience with a graphing calculator is needed.  
Transfer Credit: CSU UC.  
(CAN MATH 22)  
(CAN MATH SEQ C = MATH 65A + 65B + 75)  
Topics include: vectors; lines planes and surfaces in space; cylindrical and spherical coordinates; vector-valued functions; functions of several variables; differential calculus, including partial derivatives, chain rule, directional derivatives, gradients, implicit differential and extreme values; multiple integration; line integrals; surface integrals; Jacobians; vector theory; and theorems of Gauss, Green, and Stokes. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
81 Linear Algebra (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 75.  
Transfer Credit: CSU UC.  
Systems of linear equations, vectors, matrices and determinants, 2- and 3-dimensional vectors, vector spaces, linear transformations, eigenvalues and eigenvectors, and canonical forms.  
1701.00  
85 Differential Equations (4) (Cx)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 75.  
Advisory: Prior experience with a graphing calculator is needed.  
Transfer Credit: CSU UC.  
(CAN MATH 24)  
Methods of solving ordinary differential equations with applications primarily in the physical sciences. A graphing calculator is required; see instructor for specifics, since CAS-based calculators may be prohibited.  
1701.00  
90A Mathematics Honors Seminar (1)  
Class hours: 16-18 lecture.  
Transfer Credit: CSU UC credit limitations. See counselor.  
Honors component for Mathematics. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.  
1701.00  
92A-H Special Topics: Mathematics (.5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Transfer Credit: CSU UC credit limitations. See counselor.  
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.  
1701.00  
401 Mathematics for Health Science (1)  
Class hours: 16-18 lecture.  
Prerequisite: Eligibility for Mathematics 410 as determined by the Chaffey assessment process, or completion of Mathematics 520 or 521. 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.  
1701.00  
410 Elementary Algebra (4)  
Class hours: 64-72 lecture.  
Prerequisite: Eligibility for Mathematics 410 as determined by the Chaffey assessment process, or completion of Mathematics 520 or 521. 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.  
1701.00  
410G Group Enrichment Workshop for Elementary Algebra (1)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 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.  
1701.00  
411 Re-Entry Review of Elementary Algebra (2)  
Class hours: 96-108 laboratory.  
Prerequisite: Completion of the Chaffey assessment process, or completion of Math 410.  
Course is targeted to students needing a review of elementary algebra before continuing with intermediate algebra. Topics include: integer and polynomial operations, variable and rational expressions, solving linear equations, graphing linear equations and inequalities in two variables, and introduction to the Cartesian coordinate system, radicals, and quadratic equations.  
1701.00  
420 Intermediate Algebra (4)  
Class hours: 64-72 lecture.  
Prerequisite: Eligibility for Mathematics 420 as determined by the Chaffey assessment process, or completion of Mathematics 410 or 411. First degree equations and inequalities; factoring; algebraic fractions; equations and inequalities with rational expressions; exponents and radicals; quadratic equations and inequalities; equations with radicals; applications; graphing; and determining linear equations in two variables.  
1701.00  
420G Group Enrichment Workshop for Intermediate Algebra (1)  
Class hours: 48-54 self-paced laboratory.  
Corequisite: Mathematics 420 or 421.  
Advisory: Completion of 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.  
1701.00  
421 Re-Entry Review of Intermediate Algebra (2)  
Class hours: 32-36 lecture or 64-72 directed-learning laboratory.  
Prerequisite: Mathematics 420.  
Review of intermediate algebra. Topics include: solving linear equations and inequalities, absolute value equations, factoring, operations with rational expressions, simplifying exponential and radical expressions, solving quadratic equations and inequalities, graphing
linear equations and inequalities, and an introduction to functions. This is a review course for students returning to mathematics after some absence, preparing them for MATH-52.

1701.00

430 Geometry (4)
Class hours: 64-72 lecture.
Prerequisite: Mathematics 420.
Deductive reasoning, polygons, triangles, quadrilaterals, circles, parallels, constructions, similarity, volumes and surface areas, elements of analytic geometry, and introduction to trigonometry.

1701.00

502 Mathematics Study Skills (1)
Class hours: 48-54 self-paced laboratory.
Prerequisite: Completion of the College Mathematics assessment process.
Corequisite: Concurrent enrollment in a mathematics course.
Not Degree Applicable.
Application and practice of study skills including previewing concepts, text reading, note taking, preparing for and completing assignments, daily review, test preparation, test-taking, and final review from content of and in synchrony with the math class being taken concurrently. May be taken four times. 4930.41

504 Basic Operations of Arithmetic (4)
Class hours: 48-54 lecture and 48-54 laboratory.
Prerequisite: Completion of the Chaffey assessment process.
Not Degree Applicable.
Course is targeted to students needing competency in basic arithmetic operations. Topics include place value, rounding off, adding, subtracting, multiplying, and dividing whole numbers; perimeters, areas, and volumes; and introductory concepts of fractions.

4930.41

510 Arithmetic (4)
Class hours: 56-63 lecture and 24-27 laboratory.
Prerequisite: Eligibility for Mathematics 510 as determined by the Chaffey assessment process.
Not Degree Applicable.
Complete study of arithmetic, including operations and applications involving whole numbers, fractions, decimals, ratios, proportions, measurement, and percents. Seven hours of supplemental instruction in a Success Center that supports this course is required. The supplemental instruction provides students opportunity to develop measurement skills by calculating distances, weights, surface areas, and volumes.

4930.41

520 Pre-Algebra (4)
Class hours: 56-63 lecture and 24-27 laboratory.
Prerequisite: Eligibility for Mathematics 520 as determined by the Chaffey assessment process, or completion of Mathematics 510.
Not Degree Applicable.
For students preparing for elementary algebra, who are competent in the basic operations of arithmetic, but need review of fractions, decimals, percents, and a preview of the elementary concepts of algebra. Topics include: review of arithmetic, order of operations, Pythagorean theorem, signed numbers, variable expressions, solving linear equations, application problems, graphing linear equations, polynomial operations, and factoring.

4930.41

521 Re-Entry Review of Arithmetic and Pre-Algebra (2)
Class hours: 96-108 laboratory.
Prerequisite: Completion of the Chaffey assessment process, or completion of Mathematics 520.
Not Degree Applicable.
Course is targeted to students needing a review of arithmetic and the introductory concepts of algebra before continuing with elementary algebra. Topics include: fractions, decimals, ratios, proportions, percents, signed numbers, numerical and variable expressions, and linear equations.

4930.41

592LA-H Special Topics: Basic Mathematics (.5-6)
Course is offered on a credit/no-credit basis only. Class hours: 48-54 hours/term self-paced laboratory for each unit of credit.
Not Degree Applicable.
Special-interest laboratory course offering specializations in basic mathematics. Topics are determined by the individual instructor and cover a range of basic mathematics subjects/skills. Refer to the instructor syllabus and class schedule for current term emphasis and requirements. May be taken four times regardless of the unit combination, however, no single-subject, special-interest class may be repeated. May have a recommended preparation, or require prerequisites and/or corequisites, based on the content of the course.

4930.41

MULTIMEDIA
(SEE ART)

MUSIC (MUSIC)

1 Fundamentals of Music (3) [Cx]
Class hours: 48-54 lecture.
Advisory: Concurrent enrollment in Music 51A.
Transfer Credit: CSU; UC credit limitations. See counselor.
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 an introduction to musicianship. Recommended for the student starting in music with no scholastic music background. Concurrent enrollment in Beginning Piano helpful. Music 1 is not open to students who have credit for Music 3A and 3B.

1004.00

2A Music History and Literature (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
 chronological survey of music in Western culture, encompassing the Medieval through Baroque periods. Origins of Western music up through the era of Johann Sebastian Bach and George Frideric Handel.

1004.00

2B Music History and Literature (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
 Chronological survey of music in Western culture, from 1750 to the present. Explores the music of the great composers of the Classical, Romantic, and 20th century eras.

1004.00

3A Musicianship (4) [Cx]
Class hours: 64-72 lecture.
Corequisite for music majors and minors: Concurrent enrollment in Music 51A or 51B or satisfactory completion of a piano proficiency examination. Advisory: Completion of Music 3A and an elementary knowledge of notation.
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.

1004.00

3B Musicianship (4) [Cx]
Class hours: 64-72 lecture.
Corequisite for music majors and minors: Concurrent enrollment in Music 51A or 51B or satisfactory completion of a piano proficiency examination. Advisory: Completion of Music 3A and an elementary knowledge of notation.
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.

1004.00

4 Music Appreciation (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Survey of music literature for the non-music major. Designed to enhance listening skills through insights into the structure and style of recorded musical examples. Relates music to the visual arts and philosophies of its time period.

1004.00

10 Songwriting and Commercial Harmony (3)
Class hours: 48-54 lecture.
Advisory: Completion of Music 1 or Music 3A.
Transfer Credit: CSU.
Introduction to the application of commercial music theory and technology to the songwriter. Diatonic and non-diatonic harmony including the circle of fifths, extended and altered chords, basic chord substitution, slash chords, chord symbols, substitution and common chord progressions with direct application to commercial song forms. Introduction to operation and use of the drum machine, synthesizer and computer as related to class projects.

1004.00

11 Record Production (1.5)
Class hours: 48-54 studio.
Transfer Credit: CSU.
Theory and application of contemporary recording concepts and techniques utilizing modern technology in the recording studio. May be taken twice.

1005.00

12 Electronic Music (3)
Class hours: 48-54 lecture.
Advisory: Some keyboard skill and/or experience with electronic components.
Transfer Credit: CSU.
Electronic sound production. Topics include: sound types, sound manipulation, sequencing, Musical Instrument Digital Interface (MIDI), and editing. May be taken twice.

1004.00

14 Introduction to the Music Business (2) [Cx]
Class hours: 32-36 lecture.
Transfer Credit: CSU.
Survey of the music industry, with emphasis on individual career options, roles, and responsibilities. Contracts, relationships, and interaction of song writing, publishing, copyright law, recording, broadcasting, managing, booking, licensing, and merchandising.

1005.00

21 History of Jazz (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Survey of the development of jazz from its origins in the Afro-American society, through the developmental periods of the various metropolitan areas, to the present-day eclectic style. Includes correlation with sociological influence.

1004.00
Course Descriptions

22 History and Survey of Rock Music (3)
Class hours: 48-54 lecture.
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

28 World Music (3)
Class hours: 48-54 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

30 Elementary Class Voice (1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Understanding the vocal process and attaining the confidence needed to produce an adequate vocal sound. Study of art songs suited to the beginner and adapted to individual needs, and activities designed to improve ability to sing music at sight. May be taken twice. 1004.00

32 Concert Choir (2)
Class hours: 64-72 studio.
Limitation on Enrollment: Audition is required at first class meeting to determine ability to match pitches, sing in tune, perform simple rhythms, and carry an assigned part independently. Advisory: Previous choral experience is desirable.

33 Concert Ensemble Singers (1.5)
Class hours: 48-54 studio.
Limitation on Enrollment: Audition is required first week of class to determine basic music reading ability, tonal memory, independence in carrying an assigned part, ability to sing a chromatic scale accurately for one octave, and ability to blend with other voices. Advisory: Concurrent enrollment in Music 32 and previous choral experience.

40 Beginning Guitar (1) [Cx]
Class hours: 32-36 studio.
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 twice. 1004.00

41 Intermediate Guitar (1)
Class hours: 32-36 studio.
Advisory: Completion of Music 40 or the ability to sight-read in the first position.
Transfer Credit: CSU; UC.
Further exploration of guitar literature and the capabilities of the solo guitarist. Student must provide own guitar for use in class. May be taken twice. 1004.00

51A, B Beginning Class Piano (1-1)
Class hours: 32-36 studio.
Transfer Credit: CSU; UC.
Development of the ability to read simple piano scores in the classical literature. Development of a keyboard sense from the standpoint of touch and sound. Major and minor scales, the use of primary chords and their inversions in harmonizing melodies. Some key transposition. 1004.00

52 Intermediate Piano (1)
Class hours: 32-36 studio.
Advisory: Completion of Music 51B.
Transfer Credit: CSU; UC.
Piano literature of second and third levels focusing on differences in historical styles. Extensive sight reading, performance of all major and minor scales, chords, and arpeggios. Some analysis and melodic harmonization. May be taken twice. 1004.00

53 Studio Piano (1)
Class hours: 32-36 studio.
Advisory: Completion of Music 51B.
Transfer Credit: CSU; UC.
Basic contemporary harmony and chording techniques. Performance of popular music in a variety of styles. Reading from lead sheets and construction of song arrangements. Approach to improvisation. May be taken twice. 1004.00

60 Jazz Band (1.5)
Class hours: 48-54 studio.
Limitation on Enrollment: Intermediate to advanced proficiency on one’s musical instrument, together with the ability to read music is required. Audition on the first day of class on the following instruments: trumpet, trombone, saxophone, bass and bass guitar, keyboards, drums, guitar, and auxiliary percussion.
Transfer Credit: CSU; UC.
Instrumental studio/performance 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. 1004.00

62 College-Community Band (1.5)
Class hours: 48-54 studio.
Limitation on Enrollment: Audition on the first day of class on any one of the standard band instruments, with nominal proficiency required.
Transfer Credit: CSU; UC.
Instrumental music group specializing in training and experience in a wide sampling of band repertoire, through rehearsals and performance. Attendance at public performance is required. May be taken four times. 1004.00

67 Latin Jazz Band (1.5)
Class hours: 48-54 studio.
Limitation on Enrollment: Nominal proficiency on one’s musical instrument and the ability to read some music is required. Audition at the first class meeting.
Transfer Credit: CSU; UC.
Latin, Afro-Cuban, and Latin-Jazz ensemble music with an emphasis on performance. Open to instrumentalists, percussionists, and vocalists. Public performance may be required. May be taken four times. 1004.00

70A Harmony and Intermediate Musicianship (3) [Cx]
Class hours: 48-54 lecture.
Corequisite: Music 52 or satisfactory completion of keyboard skill proficiency examination.
Advisory: Completion of Music 3B and 51B.
Transfer Credit: CSU; UC.
Principles of voice leading in diatonic harmony of the common practice period of classical music of the eighteenth and nineteenth centuries. Emphasis on diatonic harmony for voicing root position triads and all inversions. Includes study of cadences, non-chord tones, and diatonic seventh chords. 1004.00

70B Harmony and Intermediate Musicianship (3)
Class hours: 48-54 lecture.
Corequisite: Music 52.
Advisory: Completion of Music 70A.
Transfer Credit: CSU; UC.
Further study of the principles of voice leading in diatonic and chromatic harmony, in classical music of the eighteenth and nineteenth centuries. Begins with part-writing of diatonic seventh chords, and progresses to chromatic harmony for voicing secondary function chords. Emphasis on changing keys using diatonic common chords, sequence, common tone, monophonic, and direct modulation. Includes study of binary and ternary forms, and 12-bar blues. 1004.00

92A-H Special Topics: Music (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special-interest class of varying length, for students who wish to further develop specific areas of music performance and background. Topics determined by the instructor and cover a wide range of interests from listening to performance. May be taken four times regardless of the unit combination, however, no single-subject, special-interest class may be repeated. 1004.00

98A, B, C Independent Study: Music (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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 in music. 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 taken only three times, regardless of the unit combination. 1004.00

501 Music Reading and Music Making (2)
Course is offered only on a credit/no credit basis.
Class hours: 32-36 lecture.
Not Degree Applicable.
Introduction to reading music, music dictation, and sight-singing. Practical experience in performing melodies and rhythms. For beginning instrumental and vocal students, and anyone who wants to learn more about music. Recommended as preparation for music theory. May be taken four times. 1004.00

NURSING: ACUTE CARE TECHNICIAN (nurACT)

Students must apply for admission into the Nursing Acute Care Technician program. See Programs of Study area for requirements.

Students enrolled in two corequisite-linked courses (i.e. Acute Care Technician 420 and 420L), will have the lower of the two grades earned assigned to both courses when either course grade is less than “C” or “CR”.  
Course Descriptions

420 Acute Care Technician (4) [Cx]
Class hours: 64-72 lecture. Limitation on Enrollment: Admission into the Nursing: Acute Care Technician program, and possession of an active California Certified Nursing Assistant (CNA) certificate or coordinator approval of advanced placement status.
Corequisite: Nursing: Acute Care Technician 420L.
Knowledge and skills that prepare the CNA to function effectively in acute care settings, including hospitals and sub-acute facilities. Students gain an overview of an acute care nursing assistant’s responsibilities in these facilities, with emphasis on the successful communication techniques and appropriate patient care skills necessary for safe practice. Use of the body systems approach, with focus on the seven major body systems. Course is designed for CNAs wishing to qualify for work in hospital settings, and is required for students applying to the Chaffey Vocational Nursing program.
1230.30

420L Acute Care Technician Laboratory (2)
Course is offered only on a credit/no credit basis. Class hours: 96-108 laboratory.
Corequisite: Nursing: Acute Care Technician 420.
Clinical application of the knowledge and skills required for the Certified Nursing Assistant (CNA) to function effectively in acute care settings. Under direct supervision student practice their communication techniques, and patient care skills as they relate to the seven bodily systems. Course is designed for CNAs wishing to qualify for work in hospital settings, and is required for students applying to the Chaffey Vocational Nursing program.
1230.30

450 Professional Development for the Acute Care Technician (1)
Class hours: 16-18 lecture. Limitation on Enrollment: Admission into the Nursing: Acute Care Technician program, and possession of an active California Certified Nursing Assistant (CNA) certificate or coordinator approval of advanced placement status.
Advisory: Basic computer skills are recommended. Further development of the interpersonal and professional skills needed by entry-level healthcare providers in hospital settings. Topics include: review of the healthcare workplace, career ladder, and employment opportunities; role of the Acute Care Technician in the nursing process; time management and organizational strategies; test anxiety and successful test-taking tactics; critical thinking skills applied to case studies, math exercises and role-play; and career professionalism issues.
1230.30

NURSING: ASSISTANT (NURAST)

Students must apply for admission into the Nursing Assistant program. See Programs of Study area for requirements. Students enrolled in two corequisite-linked courses (i.e. Nursing Assistant 400 and 400L) will have the lower of the two grades earned assigned to both courses when either course grade is less than a “C” or “CR”.

400 Nursing Assistant (3.5) [Cx]
Class hours: 56-68 lecture. Limitation on Enrollment: Admission into the Nursing Assistant program.
Corequisite: Nursing Assistant 400L and 405.
Fundamental principles of basic nursing care necessary to meet the hygiene, comfort, and safety needs of clients, including the prevention, identification and reporting of suspected patient abuse. Focus on developing communicative skills and effective interpersonal relations with clients, families, and fellow healthcare team members. Course follows the guidelines established by the California Department of Health Services.
1230.30

400L Nursing Assistant Laboratory (2) [Cx]
Course is offered only on a credit/no credit basis. Class hours: 96-108 laboratory.
Corequisite: Nursing Assistant 400 and 405.
Clinical application of the basic nursing care required to provide for the hygiene, comfort, and safety needs of clients in long-term health care settings. Focus on roles and responsibilities, knowledge of and adherence to federal and state regulations, demonstration of nursing skills, and practice in effective communications.
1230.30

405 Nursing Assistant Skills Laboratory (.5) [Cx]
Course is offered only on a credit/no-credit basis. Class hours: 24-27 laboratory.
Corequisite: Nursing Assistant 400L and 400L
- Limitation on Enrollment: Admission into the Nursing Assistant program.
- Demonstration and student practice of the forty core skills required to function as a Certified Nurse Assistant (CNA) in a healthcare setting. Includes teamwork in providing bedside care for adult and geriatric clients, and practice in effective communications.
1230.30

NURSING: ASSOCIATE DEGREE (NURADN)

Students must apply for admission into the Nursing (A.D.N.) program. See the Programs of Study for information on entrance requirements. Students enrolled in two corequisite-linked courses (i.e. Nursing A.D.N. 3 and 3L) will have the lower of the two grades earned assigned to both courses, when either course grade is less than a “C” or “CR”.

3 Transition in Nursing (1.5) [Cx]
Class hours: 24-27 lecture. Limitation on Enrollment: Must be a graduate of a Vocational Nursing School with an active LVN license, or have completed one year of nursing courses. Corequisite: Nursing A.D.N. 3L.
Transfer Credit: CSU.
Core curriculum of the Associate Degree in Nursing Program, including theories of Maslow and Erickson. Development of critical thinking skills. Utilization of the nursing process and therapeutic communications skills in client care.
1230.10

3L Transition in Nursing Laboratory (.5) [Cx]
Course is offered only on a credit/no credit basis. Class hours: 72-81 laboratory. Limitation on Enrollment: Must be a graduate of a Vocational Nursing School with an active LVN license, or have completed one year of nursing courses. Corequisite: Nursing A.D.N. 3.
Transfer Credit: CSU.
Application of basic nursing skills in an on-campus setting.
1230.10

6 Clinical Nursing Skills (1.5) [Cx]
Class hours: 72-81 laboratory. Limitation on Enrollment: Admission to the Nursing A.D.N program.
Transfer Credit: CSU.
Development of the essential components of client care, enabling the practice of safe and effective nursing.
1230.10

11 Nursing Process I (5) [Cx]
Class hours: 80-90 lecture. Limitation on Enrollment: Admission to the Nursing A.D.N Program
Corequisite: Nursing A.D.N 11L.
Transfer Credit: CSU.
Utilization of the nursing process in providing basic care for adult and geriatric clients and their families. Development of beginning client-centered communication, interpersonal relationships, and critical thinking skills.
1230.10
<table>
<thead>
<tr>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11L Nursing Process I Laboratory (4.5) [Cx]</td>
</tr>
<tr>
<td>Course is offered only on a credit/no credit basis.</td>
</tr>
<tr>
<td>Class hours: 216-243 laboratory.</td>
</tr>
<tr>
<td>Corequisite: Nursing A.D.N 11L.</td>
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<tr>
<td>Transfer Credit: CSU.</td>
</tr>
<tr>
<td>Clinical application of the nursing process in providing basic care for adult and geriatric clients and their families. Application of beginning client-centered communication, interpersonal relationships, and critical thinking skills. Clinical application at long-term care and medical-surgical facilities.</td>
</tr>
<tr>
<td>22L Maternal-Newborn Nursing Laboratory (1.5) [Cx]</td>
</tr>
<tr>
<td>Course is offered only on a credit/no credit basis.</td>
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<tr>
<td>Class hours: 72-81 laboratory.</td>
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<tr>
<td>Corequisite: Nursing A.D.N 22L.</td>
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<tr>
<td>Transfer Credit: CSU.</td>
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<tr>
<td>Clinical application of maternal-newborn concepts in ambulatory, hospital, and home care settings.</td>
</tr>
<tr>
<td>23L Family-Child Nursing Laboratory (1.5) [Cx]</td>
</tr>
<tr>
<td>Course is offered only on a credit/no credit basis.</td>
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<tr>
<td>Class hours: 72-81 laboratory.</td>
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<tr>
<td>Corequisite: Nursing A.D.N 23L.</td>
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<tr>
<td>Transfer Credit: CSU.</td>
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<tr>
<td>Clinical application in the nursing care of infants, children, and adolescents. Use of the nursing process and critical thinking skills in pediatric units and selected community agencies.</td>
</tr>
<tr>
<td>43L Nursing Process IV Laboratory (4.5) [Cx]</td>
</tr>
<tr>
<td>Course is offered only on a credit/no credit basis.</td>
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<tr>
<td>Class hours: 72-81 laboratory.</td>
</tr>
<tr>
<td>Corequisite: Nursing A.D.N 43L.</td>
</tr>
<tr>
<td>Transfer Credit: CSU.</td>
</tr>
<tr>
<td>Clinical application of psychiatric nursing. Performance of client-centered communication and critical thinking skills at psychiatric and community health facilities.</td>
</tr>
<tr>
<td>92A-H Special Topics Laboratory: Nursing (.5-6)</td>
</tr>
<tr>
<td>Class hours: 48-54 hours/term laboratory for each unit of credit.</td>
</tr>
<tr>
<td>Limitation of Enrollment: Admission into the Nursing A.D.N Program.</td>
</tr>
<tr>
<td>Transfer Credit: CSU.</td>
</tr>
<tr>
<td>Individualized courses designed to assist the student to demonstrate proficiency in clinical nursing skills. May be taken four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated.</td>
</tr>
</tbody>
</table>
NURSING: VOCATIONAL (NURVN)

Students must apply for admission into the Nursing (V.N) program. See the Programs of Study for information on entrance requirements.

Students enrolled in two corequisite-linked courses (i.e. Nursing: V.N. 402 and 402L) will have the lower of the two grades earned assigned to both courses when either course grade is less than a “C” or “CR”.

400 Critical Thinking in Health Care (1) [Cx]
Class hours: 16-18 lecture.
Advisory: Concurrent enrollment in a clinical laboratory course
Increase effectiveness of everyday health care decision-making. Application of critical thinking skills in the health care setting. 1230.20

402 Fundamentals of Nursing (3) [Cx]
Class hours: 48-54 lecture.
Corequisite: Nursing: Vocational 402L.
Fundamental principles and techniques necessary for the beginning vocational nursing student to provide basic nursing care to patients. Leadership focus on the VN role, responsibilities, and skills in extended-care clinical and home settings. Students select and use appropriate components of the nursing process and Maslow’s Hierarchy of Needs to promote health, hygiene, nutrition, rest/sleep, safety, relief of pain, and meet the mobility, bowel/bladder, respiratory, sexual, spiritual, psychosocial, and self-esteem needs of acutely ill and geriatric patients. Study of loss/grief concepts, health and disease, stress adaptation, and therapeutic communication styles is included. 1230.20

402L Fundamentals of Nursing Laboratory (2)
Course is offered only on a credit/no credit basis. Class hours: 96-108 laboratory.
Corequisite: Nursing: Vocational 402.
Discussion, demonstration, and application of nursing theory, principles, and effective communication techniques. Through application of the nursing process, assessment of needs, and developmental theories, students provide care for adult and geriatric patients in home and extended-care clinical settings. Focus on medication administration and patient status reporting. 1230.20

404 Introduction to Medical-Surgical Nursing (4) [Cx]
Class hours: 64-72 lecture.
Corequisite: Nursing: Vocational 404L.
Discussion, demonstration, and application of developmental theory and the nursing process to meet the needs of patients in simulated and live acute care clinical situations. Students identify and care for the needs of patients experiencing emergency and/or threats to endocrine and respiratory systems. 1230.20

404L Introduction to Medical-Surgical Nursing Laboratory (4.5)
Course is offered only on a credit/no credit basis. Class hours: 216-243 laboratory.
Corequisite: Nursing: Vocational 404.
Clinical instruction at an acute care facility, under the direction and supervision of an instructor. Students apply the nursing process, needs, and developmental theories to patient care of perioperative, respiratory, and integumentary system disorders. 1230.20

406A Intermediate Medical Surgical Nursing 2 (4) [Cx]
Class hours: 64-72 lecture.
Corequisite: Nursing: Vocational 406AL.
Discussion, demonstration, and application of developmental theory and the nursing process to meet the needs of patients in simulated and live acute care clinical situations. Students identify and care for the needs of patients experiencing emergency and/or threats to endocrine and respiratory systems. 1230.20

406AL Intermediate Medical Surgical Nursing 2 Laboratory (2.5)
Course is offered only on a credit/no credit basis. Class hours: 120-135 laboratory.
Corequisite: Nursing: Vocational 406A.
Discussion, demonstration, and application of developmental theory and the nursing process to meet the needs of patients in simulated and live acute care clinical situations. Students identify and care for the needs of patients experiencing emergency and/or threats to endocrine and respiratory systems. 1230.20

406B Intermediate Medical Surgical Nursing 3 (4) [Cx]
Class hours: 64-72 lecture.
Corequisite: Nursing: Vocational 406BL.
Discussion, demonstration, and application of developmental theory and the nursing process to meet the needs of patients in simulated and live acute care clinical situations. Students identify and care for the needs of patients with acute and chronic problems. Leadership focus on the skills required in assuming the role and responsibilities of charge nurse for a group of patients. 1230.20

408B Advanced Medical-Surgical Nursing 4 Laboratory (3)
Course is offered only on a credit/no credit basis. Class hours: 144-162 laboratory.
Corequisite: Nursing: Vocational 408.
Discussion, demonstration, and application of developmental theory and the nursing process to meet the needs of patients in the acute medical-surgical setting. Students identify threats and care for the needs of patients with musculo-skeletal, neurological, urinary, reproductive, bloodstream, and visual or auditory problems, with minimal observation and supervision by an instructor and facility staff. Primary focus is the integration and prioritization of all components of the nursing process in the care of medical-surgical patients, in the role of charge nurse. 1230.20

428 Basic Pharmacology (3) [Cx]
(Also available as Health Science 428)
Class hours: 48-54 lecture.
Advisory: Completion of Mathematics 401 and Biology 424.
Basic concepts of pharmacology with emphasis on the role of the nurse in drug administration. Drugs affecting body systems; drugs used in neoplastic and infectious diseases, and infectious skin disorders; immunologic agents; diagnostic agents; toxicology; fluids and electrolytes; and vitamins. Principles and factors for managing medication regimen in a home setting. Course is recommended for students enrolled in a nursing program and as Continuing Education credit for RN’s and LVN’s. BRN #00426. 1230.20

429A Growth/Development: Psychology Adult-Geriatric (1) [Cx]
Class hours: 15-18 lecture.
Corequisite: Nursing: Acceptance into the Vocational Nursing (VN) program.
Study of cognition, behavior, and characteristics of the adult and elderly. Influences of age and gender on the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Theories and perspectives of mental health nursing. 1230.20

429B Growth/Development: Psychology Infancy - Young Adult (1.5) [Cx]
Class hours: 24-27 lecture.
Corequisite: Nursing: Acceptance into the Vocational Nursing (VN) program.
Stages of growth and development, behavior, and characteristics of the adult and elderly. Influences of age and gender on the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Studies of cognitive and psychiatric disorders. 1230.20

434 Pediatric Nursing (1.5) [Cx]
Class hours: 24-27 lecture.
Corequisite: Nursing: Acceptance into the Vocational Nursing (VN) program.
Study of the theories of human needs and nursing process components guides the plan of care for children. Focus is on the identification of needs and problems of...
Course Descriptions

500 NCLEX Review for VN Licensure Examination (2)
Course is offered only on a credit/no credit basis.
Class hours: 32-36 lecture.
Limitation on Enrollment: Proof of completion of an accredited vocational nursing program within the past 5 years, or completion of licensure application packets and 54 hours of pharmacology, or eligibility for licensure through work experience or education is required.
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. Taking this course does not guarantee passing of the NCLEX examination. 1230.20

NUTRITION AND FOOD (NF)
(SEE ALSO CONSUMER STUDIES)

Students enrolled in two corequisite-linked courses that consist of one lecture and one lab course (i.e. Nutrition and Food 470 and 470L), will receive the lower of the two grades earned in these courses, for both courses, when either course grade is less than satisfactory. A minimum grade of “C” in both the lecture and laboratory courses is required for successful completion.

5 Nutrition for Life (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
(CAN FCS 2)
Essentials of nutrition as they relate to diet, health and disease, risk-reduction, stress, and nutritional deficiencies. Topics include: developments and discoveries in the field of nutrition, nutrients essential for human health, disease consequence and prevention, eating disorders, obesity, dieting, nutritional fads and fallacies, vitamins and supplements, and changing nutritional needs across the lifespan. Use of sound consumer nutritional information in the development of an individual health plan. 1301.00

11 Food Service Management Supervision (3) [Cx]
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Advisory: Completion of Nutrition and Food 470.
Aspects of food service management supervision. Role of the supervisor/manager in developing personnel programs and establishing workable labor-management relationships. Additional topics include: job descriptions, hiring practices, training procedures, advancement programs, and delegation of responsibility. 1307.10

15 Nutrition I: The Science of Nutrition (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Introduction to the science of nutrition and its implications for human health. Topics include: essential macro- and micro-nutrients, basic dietary guidelines, evaluation of published nutritional information, and changing nutritional needs throughout the lifecycle. 1306.00

19 Nutrition II: Modified Diets (3)
Class hours: 48-54 lecture.
Prerequisite: Nutrition and Food 5 or 15.
Advisory: Concurrent enrollment in Nutrition and Food 470.
Transfer Credit: CSU.
The study of therapeutic diets and the principles of nutrition as related to special physical conditions. Screening and assessment techniques used by health care professionals. 1306.00

21 Diet and Fitness (3)
(Also available as Physical Education Lecture 15)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
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. 1301.00

25 Culture and Nutrition (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Exploration of cultural, religious, and lifestyle characteristics that impact nutrition choices. Topics include: human nutritional needs, food myths, cultural taboos, religious beliefs, social and environmental influences on unique cuisines and eating customs, controversies surrounding use of biotechnology in food production, politics and food availability, and the history and health effects of under-nutrition in world populations. 1306.00

27 Healthy Cooking (2)
Class hours: 32-36 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. 1301.00

421 Nutrition III: Nutrition Care (2)
Class hours: 32-36 lecture.
Prerequisite: Nutrition and Food 5 and 15.
Advisory: Completion of Nutrition and Food 470.
Introduction to the work of the Dietetic Technician and the attendant responsibilities as a member of the nutrition care component of the health care team. Topics include: techniques of communication, evaluation of nutrition histories, progress reports, and counseling.

423 Nutrition IV: Advanced Nutrition Care (2)
Class hours: 32-36 lecture.
Advisory: Completion of Nutrition and Food 15, 19, and 421.

470 Dietetic Service Supervisor (1)
Class hours: 16-18 lecture.
Limitation on Enrollment: Proof of a negative tuberculin test within the past 12 months is required.
Corequisite: Nutrition and Food 470L, and a minimum of four additional units of Nutrition and Food curriculum.
Supervisory and management roles in the professional health care setting. Topics include: nutrition screening, nutritional status assessment of patients/patients with varying medical conditions, menu planning, purchasing, food production management, modified diets, health care management, supervision, and training. Sociocultural factors and individual differences of clients/patients/resident population are considered. May be taken three times. 1306.20

470L Dietetic Service Supervisor: Supervised Clinical Laboratory (1)
Class hours: 48-54 laboratory.
Limitation on Enrollment: Proof of a negative tuberculin test within the past 12 months is required.
Corequisite: Nutrition and Food 470, and a minimum of four additional units of Nutrition and Food curriculum.
Practical experience in practice and live clinical situations. Application of dietetic principles and practices, communication skills, record keeping, patient/client...
screening and assessment, adherence to Federal and State regulations, and essential management functions. May be taken four times. 1306.20

480 Dietetic Technician Seminar (2)  
Class hours: 32-36 lecture.  
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.  
Corequisite: Nutrition and Food 470 (may be taken previously), and Nutrition and Food 480L plus a minimum of four additional units in Nutrition and Food curriculum (must be taken concurrently).  
Roles and responsibilities of the dietetic technician in the professional health care setting. Topics include: nutritional screening and assessment, charting and vocabulary, safety and sanitation standards, menu planning, purchasing, food production management, modified diets, health care management, supervision, and training. Sociocultural factors and individual differences of clients/patients/resident population are considered. Course meets the Commission and Accreditation of Dietetic Education (CADE) requirements, and (with the corequisite course) helps prepare students to take the externally administered national registration exam of the American Dietetic Association. May be taken three times. 1306.60

480L Dietetic Technician: Supervised Clinical Laboratory (2)  
Class hours: 96-108 laboratory.  
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.  
Corequisite: Nutrition and Food 470 (may be taken previously), and Nutrition and Food 480 plus a minimum of four additional units in Nutrition and Food curriculum (must be taken concurrently).  
Practical experience in clinical situations. Topics include: menu planning, purchasing, and food production controls; management functions; training techniques; nutritional screening and assessment; utilization of dietetic technology; application of federal and state regulations; patient/client referrals; communication strategies; and professional development. Course meets the Commission and Accreditation of Dietetic Education (CADE) requirements, and (with the corequisite courses) helps prepare students to take the externally administered national registration exam of the American Dietetic Association. May be taken four times. 1306.60

492LA-H Special Topics Laboratory: Nutrition and Food (5-6)  
Class hours: 48-54 hours/term laboratory for each unit of credit.  
Open laboratory for the Nutrition and Food program student who wishes to increase skills through the use of the food service facilities. May be taken four times, regardless of the unit combination. 1306.20

PHARMACY TECHNICIAN (PHARM)

Students enrolled in two corequisite-linked courses consisting of one lecture and one lab course (i.e., Pharmacy Technician 420 and 420L), will receive the lower of the two grades earned in these courses, for both courses, where either course grade is less than satisfactory. Minimum grades of “C” in both the lecture the lab components are required to advance in the Pharmacy Technician program.

400 Introduction to Pharmacy Technology (2)  
Class hours: 32-36 lecture.  
Limitation on Enrollment: Student must attend a mandatory program orientation. Duties and responsibilities of a pharmacy technician. Topics include: basic medical and pharmaceutical terminology, professional ethics, legal requirements, employer expectations, effective communication skills, an orientation to pharmacology, and the requirements for state licensure. 1221.00

401 Pharmacology of the Body Systems I (3)  
Class hours: 48-54 lecture.  
Limitation on Enrollment: Student must attend a mandatory program orientation. Fundamentals of pharmacology, and the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g. herbal products, dietary supplements, homeopathy, and lifestyle modification) commonly used to treat diseases affecting human integumentary, endocrine, gastrointestinal, and nervous systems. Pharmacology of antibiotics, antivirals, and antifungals. Introduces the related medical terms and standard abbreviations used in pharmacy practice. 1221.00

402 Pharmacology of the Body Systems II (3)  
Class hours: 48-54 lecture.  
Limitation on Enrollment: Student must attend a mandatory program orientation. Fundamentals of pharmacology and the use and side effects of prescription medications, nonprescription medications, and alternative therapies (e.g. herbal products, dietary supplements, homeopathy, and lifestyle modification) commonly used to treat diseases affecting human musculoskeletal, respiratory, gastrointestinal, and cardiovascular, and the special senses. Introduces the related medical terms and standard abbreviations used in pharmacy practice. 1221.00

405 Sterile Products (2)  
Class hours: 32-36 lecture.  
Limitation on Enrollment: Student must attend a mandatory program orientation. Basic concepts of aseptic techniques as they apply to the pharmacy technician. Focus on the use of laminar flow hoods and the proper handling and disposal of needles, syringes, and other supplies used in the preparation/compounding of sterile pharmacy products. Properties of antiseptics and antimicrobials used in maintaining sterile pharmacy equipment. Quality assurance processes and applicable governing laws, regulations, and standards, including <USP797>. 1221.00

415 Pharmaceutical Calculations (2)  
Class hours: 32-36 lecture.  
Limitation on Enrollment: Admission to the Pharmacy Technician program. Prerequisite: Eligibility for Math 410 as determined by the Chaffey assessment process, or completion of Math 250 or 251. Basic and advanced calculations used in pharmacies. Practical application of metric, apothecary, avoirdupois, and household systems of measurements, including percent solution, allegations, reduction and enlargement of formulas, and ratio strength. Conversions between systems of pharmacy measurements; calculation of oral dosages for adult and pediatric patients, and calculations unique to intravenous medications. Preparation of outpatient and inpatient prescription orders using appropriate pharmacy calculations. 1221.00

420 Community Pharmacy Operations (3)  
Class hours: 48-54 lecture.  
Limitation on Enrollment: Admission to the Pharmacy Technician program. Corequisite: Pharmacy Technician 420L. Duties and responsibilities of the pharmacy technician working in an ambulatory setting. Emphasized topics include: inventory receipt and control; prescription and medication orders screening; computerized prescription processing; medical insurance payment procedures; professional, patient information confidentiality and relevant regulatory, legal, and ethical issues; extemporaneous compounding principles; over-the-counter drug indications and contraindications, and effective customer relations. 1221.00

420L Community Pharmacy Operations Laboratory (0.5)  
Class hours: 24-27 laboratory.  
Corequisite: Pharmacy Technician 420. Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an ambulatory setting. 1221.00

430 Institutional Pharmacy Operations (3)  
Class hours: 48-54 lecture.  
Limitation on Enrollment: Admission to the Pharmacy Technician program. Corequisite: Pharmacy Technician 430L. Duties and responsibilities of the pharmacy technician working in an institutional setting. Emphasized topics include: aseptic technique; use and maintenance of laminar flow hoods; IV admixture and Total Parenteral Nutrition preparation; materials management; inpatient oral medication distribution systems; institutional organization and function; and relevant legal and ethical issues. Students develop the knowledge and skills required to work with pharmacists, other clinical staff, and patients. 1221.00

430L Institutional Pharmacy Operations Laboratory (0.5)  
Class hours: 24-27 laboratory.  
Corequisite: Pharmacy Technician 430. Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an institutional setting. 1221.00

482 Clinical Externship (4)  
Class hours: 240 hours unpaid on-site work experience.  
Limitation on Enrollment: Concurrent enrollment requirement. In the Fall and Spring terms, students taking this work experience course must be enrolled in a total of seven units or more, including this course. In the Summer term, students must be enrolled in at least one other course in addition to this one. Coursework at any accredited high school or college may be used to meet this requirement. Prerequisite: Pharmacy Technician 420, 420L, 430, and 430L. Work experience in cooperation with local institutional (hospital, long-term care facility, etc.) and community (retail, chain drugstores, etc.) pharmacies. Students apply knowledge and skills through unpaid employment, solidifying knowledge and expanding capabilities acquired in classroom and clinical experiences. Placement is by the instructor. 1221.00

492A-H Special Topics: Pharmacy Technician (5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Limitation on Enrollment: Admission to the Pharmacy Technician program. Selected special topics in the Pharmacy Technician field, designed to augment the program curriculum or provide additional assistance to enrolled students. May be taken up to four times, for a maximum of 12 units, in any unit combination. No single-subject special interest class may be repeated. 1221.00
Course Descriptions

PHILOSOPHY (PHIL)

70 Introduction to Philosophy (3)
Course hours: 48-54 lecture. Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC. (CAN PHIL 2)
An introductory study of some fundamental philosophic problems emphasizing the nature and problems of knowledge (epistemology) and some of humanity’s world views (metaphysics).

72 Seminar in Ethics (3)
Course hours: 48-54 lecture. Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC. (CAN PHIL 4)
Seminar for the study of ethics with emphasis on personal, social, and political values. May be offered as an Honors course.

73 Seminar in Contemporary American Philosophy (3)
Course hours: 48-54 lecture. Advisory: Completion of Philosophy 70 and eligibility for English 1A as determined by the Chaffey assessment process or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC. (CAN PHIL 3)
The role of philosophies in the creation of and solution to the problems we face in contemporary American society. Emphasis on leading American thinkers in the areas of aesthetics, political and social theory, scientific thought, religious philosophy, and ethics.

76 Critical Thinking (3)
Course hours: 48-54 lecture. Advisory: Completion of English 1A.
Transfer Credit: CSU; UC.
Explores the underlying structure of argument and the role of sound reasoning in the investigation of claims. An analysis of language, inductive and deductive reasoning, the difference between fact and judgment and belief from knowledge, and the identification of formal and informal fallacies.

78 History of Philosophy: Modern (3)
Course hours: 48-54 lecture. Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC credit pending.
A survey of the major philosophers and ideas from Descartes to the 19th century, including Kant, Locke, Hume, Nietzsche, Kierkegaard, and others.

80 Introduction to Religion (3)
Course hours: 48-54 lecture. Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
Exploration into the philosophies of religion and their intellectual, cultural, and personal expressions.

81 Introduction to Eastern Philosophy (3)
Course hours: 48-54 lecture. Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Transfer Credit: CSU; UC.
An examination of the philosophies of the East, including Hinduism, Buddhism, Confucianism, and Taoism, and their influence on contemporary society.

82 Introduction to Monotheistic Religions: Judaism/Christianity/Islam (3)
Course hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special-interest course of varying length for students who wish further exploration in specific areas of philosophy. Topics may be determined by the individual instructor. This course may be taken only four times regardless of the unit combination. No single-subject, special-interest class may be repeated. May require corequisites and/or prerequisites based on the content of the course.

92A-H Special Topics: Philosophy (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
An Honors course. May be attempted a maximum of 12 units, in any unit combination. No single-subject special interest class may be repeated.

PHOTOGRAPHY (PHOTO)

1 History of Photography (3) [Cx]
Class hours: 48-54 lecture. Transfer Credit: CSU; UC.
History and appreciation of photography as a medium of artistic and social communication. May be offered as an Honors course.

7 Introduction to Digital Photography (4)
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC credit pending.
Introduction to the principles of digital photography. Emphasis on issues in photography in the context of art, mass media, and media history, using digital cameras, software such as Photoshop, and digital printing. Students must furnish an affordable digital camera.

9 Digital Imaging (4)
(Replaces Photography 456)
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC credit pending.
Introductory course using computer imaging applications in photography and digital arts that explores the creative potential of imaging software used by visual artists. Students establish familiarity with output devices, hardware, and software such as Adobe Photoshop. The creation of digital art is examined within the framework of current issues in art and culture. May be taken three times.

10 Beginning Photography (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory. Transfer Credit: CSU; UC. (CAN ART 18)
Instruction in the basic principles of black-and-white and color slide photography with darkroom experience in conjunction with discussions of issues related to the use of photography in both fine art and mass media. Students must furnish an affordable camera.

11 Intermediate Photography (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory. Prerequisite: Photography 10. Transfer Credit: CSU.
Continuation of the principles learned in Photography 10 with more advanced problems. Student must furnish an affordable camera. May be taken three times.

12 Studio Lighting (4) [Cx]
Class hours: 48-54 lecture; 48-54 laboratory. Prerequisite: Photography 10. Transfer Credit: CSU.
Introduction to the use of studio equipment and lighting techniques. Topics include portrait, still life, advertising, and art photography. Student must furnish a camera. May be taken three times.

13 Fine Art Photography (4)
Class hours: 48-54 lecture; 48-54 laboratory. Prerequisite: Photography 10. Transfer Credit: CSU.
Explores photography as an art form. Concerned with contemporary issues in art photography. Emphasis on students making photographic artwork. May be taken three times.

20 Photography for Publications (4)
Class hours: 48-54 lecture; 48-54 laboratory. Prerequisite: Photography 10. Transfer Credit: CSU.
Introduction to various types of publication including photojournalism, sports, advertising, and editorial. Emphasis on the technical ability to make such pic-
tutuors and the aesthetic judgment and visual communication involved. Student must supply a camera. May be taken three times. 1012.00

21 Public Relations and Communications Photography (2)
Class hours: 24-27 lecture; 24-27 laboratory.
Prerequisite: Photography 10.
Transfer Credit: CSU.
Theory and practice of photography of people and locations for commercial and promotional use. Equipment, set-ups, directing, lighting, presentations, and simple business practices. Student will finish a portfolio of simple projects. 1012.00

50 Introduction to Color Photography (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Photography 10.
Transfer Credit: CSU.
Basic background in the aesthetics, history, theory, techniques, and materials of color photography. Both color negative and color positive techniques are used. May be taken three times. 1012.00

70 Museum and Gallery Field Study (1)
(Also available as Art 70 and Humanities 70)
Class hours: 16-18 lecture.
Advisory: Completion of any art or photography course.
Transfer Credit: CSU.
Issues in contemporary art, photography, art history, and photo history are investigated through direct observation of museum and gallery exhibitions. Readings, research, and class discussion provide the foundation for student understanding and analysis of art (including drawing, painting, photography, mixed media, sculpture, installation, and new media) in a museum setting. Field trips are a required part of this course. May be taken four times. 1011.00

410 Digital Photography (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Photography 10.
Corequisite: Art 688, 68C, 468B, or 468C.
Advisory: Completion of Photography 12 and 456.
Introduction to digital cameras, including point-and-shoot, 35mm professional, and studio cameras. Concepts, techniques, and controls in the use of image editing software, including Photoshop. Advanced digital printing and analysis. Critical examination of contemporary issues and portfolio development. Students are encouraged, but not required, to furnish their own digital cameras. May be taken three times. 1012.00

422 Wedding Photography (2)
Class hours: 24-27 lecture; 24-27 laboratory.
Prerequisite: Photography 10.
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. May be taken three times. 1012.00

456 Computers and Photography (4)
(Being replaced by Photography 9)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Photography 10 or Art 67.
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. 1012.00

90A, B Photography Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
Honors component for Photography. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 1011.00

92A-H Special Topics Laboratory Photography (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU.
Special-interest lecture course 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 vary and are determined by the instructor; see the class schedule for current term emphases. May be taken 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. 1012.00

92LA-H Special Topics Laboratory: Photography (.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU.
Special-interest laboratory course 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 vary and are determined by the instructor; see the class schedule for current term emphases. May be taken 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. 1012.00

1  Beginning Tennis (1)
Class hours: 48-54 laboratory.
Rules, court etiquette, history, and fundamental skills for tennis. 0835.10

1A Beginning Tennis (.5)
Class hours: 24-27 laboratory.
Rules, court etiquette, history, and fundamental skills for tennis. 0835.10

2 Advanced Tennis (1)
Class hours: 48-54 laboratory.
Rules, court etiquette, history, and advanced skills of tennis. 0835.10

2A Advanced Tennis (.5)
Class hours: 24-27 laboratory.
Rules, court etiquette, history, and advanced skills of tennis. 0835.10

3 Badminton (1)
Class hours: 48-54 laboratory.
Rules, etiquette, history, and fundamental skills for badminton. 0835.10

3A Badminton (.5)
Class hours: 24-27 laboratory.
Rules, etiquette, history, and fundamental skills for badminton. 0835.10

5 Swimming (1)
Class hours: 48-54 laboratory.
Basic skills and safety precautions for swimming. Several different strokes are taught according to skill levels. 0835.10

5A Swimming (.5)
Class hours: 24-27 laboratory.
Basic skills and course etiquette of golf. 0835.10

9A Swimming (.5)
Class hours: 24-27 laboratory.
Basic skills and safety precautions for swimming. Several different strokes are taught according to skill levels. 0835.10

12 Bowling (1)
Class hours: 48-54 laboratory.
Basic skills, rules, and etiquette of bowling. 0835.10

12A Bowling (.5)
Class hours: 24-27 laboratory.
Basic skills, rules, and etiquette of bowling. 0835.10

14 Archery (1)
Class hours: 48-54 laboratory.
Basic skills, rules, and etiquette of archery. 0835.10

14A Archery (.5)
Class hours: 24-27 laboratory.
Basic skills, rules, and etiquette of archery. 0835.10
Course Descriptions

16 Volleyball (.5)
Class hours: 48-54 laboratory.
Rules, court etiquette, history, and basic skills of volleyball. 0835.10

16A Volleyball (.5)
Class hours: 24-27 laboratory.
Rules, court etiquette, history, and basic skills of volleyball. 0835.10

17 Advanced Volleyball (1)
Class hours: 48-54 laboratory.
Advisory: Previous volleyball experience.
Advanced skills, techniques, and information to use in offense and defense patterns in volleyball. 0835.10

17A Advanced Volleyball (.5)
Class hours: 24-27 laboratory.
Advisory: Previous volleyball experience.
Advanced skills, techniques, and information to use in offense and defense patterns in volleyball. 0835.10

19 Advanced Slow Pitch Softball (1)
Class hours: 48-54 laboratory.
Advisory: Previous softball experience.
Skills, rules, and strategies of advanced slow pitch softball. 0835.10

19A Advanced Slow Pitch Softball (.5)
Class hours: 24-27 laboratory.
Advisory: Previous softball experience.
Skills, rules, and strategies of advanced slow pitch softball. 0835.10

20 Basketball (1)
Class hours: 48-54 laboratory.
Rules, court etiquette, basic offensive and defensive positions, and basic passing and dribbling techniques of basketball. 0835.10

20A Basketball (.5)
Class hours: 24-27 laboratory.
Rules, court etiquette, basic offensive and defensive positions, and basic passing and dribbling techniques of basketball. 0835.10

22 Soccer (1)
Class hours: 48-54 laboratory.
Kicks, dribbles, passes, ball control, patterns of play, and basic rules of soccer. 0835.10

22A Soccer (.5)
Class hours: 24-27 laboratory.
Kicks, dribbles, passes, ball control, patterns of play, and basic rules of soccer. 0835.10

23 Intermediate Soccer (1)
Class hours: 48-54 laboratory.
Advisory: Completion of Physical Education: Activity 22 or 22A.
Designed for players with basic soccer playing skills and understanding of the game, who wish to improve their playing abilities. 0835.10

23A Intermediate Soccer (.5)
Class hours: 24-27 laboratory.
Advisory: Completion of Physical Education: Activity 22 or 22A.
Designed for players with basic soccer playing skills and understanding of the game, who wish to improve their playing abilities. 0835.10

24 Low Impact Aerobics (1)
Class hours: 48-54 laboratory.
High energy, low impact, aerobic exercises, good posture, proper warm-ups and cool-down, strength, flexibility, and endurance exercise. Designed for beginning students of body conditioning. 0835.10

24A Low Impact Aerobics (.5)
Class hours: 24-27 laboratory.
High energy, low impact, aerobic exercises, good posture, proper warm-ups and cool-down, strength, flexibility, and endurance exercise. Designed for beginning students of body conditioning. 0835.10

26 Body Conditioning: Cardio/Weight Training (1)
Class hours: 48-54 laboratory.
Evaluation of total body fitness and study of body mechanics in everyday activities. Establishing fitness goals and developing appropriate exercise fitness routines to build strength, endurance, and flexibility. 0835.10

26A Body Conditioning: Cardio/Weight Training (.5)
Class hours: 24-27 laboratory.
Evaluation of total body fitness and study of body mechanics in everyday activities. Establishing fitness goals and developing appropriate exercise fitness routines to build strength, endurance, and flexibility. 0835.10

28 Yoga (1)
Class hours: 48-54 laboratory.
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. 0835.10

28A Yoga (.5)
Class hours: 24-27 laboratory.
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. 0835.10

30 Cardio/Strength Fitness Lab (1)
Class hours: 48-54 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. 0835.10

30A Cardio/Strength Fitness Lab (.5)
Class hours: 24-27 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. 0835.10

31 Introduction to Self-Defense and Personal Safety (1)
Class hours: 48-54 laboratory.
Beginning and foundation course in personal safety. Basic martial arts techniques for self-defense. Material covers safety and defense in a technical and practical framework. Focus on normal life and violence in society. 0835.10

31A Introduction to Self-Defense and Personal Safety (.5)
Class hours: 24-27 laboratory.
Beginning and foundation course in personal safety. Basic martial arts techniques for self-defense. Material covers safety and defense in a technical and practical framework. Focus on normal life and violence in society. 0835.10

32 Karate and Athletic Conditioning I (1)
Class hours: 48-54 laboratory.
Advisory: Previous martial arts experience, 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. 0835.10

32A Karate and Athletic Conditioning I (.5)
Class hours: 24-27 laboratory.
Advisory: Previous martial arts experience, 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. 0835.10

33 Karate and Athletic Conditioning II (1)
Class hours: 48-54 laboratory.
Advisory: Completion of Physical Education: Activity 32 or 32A.
Intermediate to advanced karate skill training and athletic conditioning. Basic karate athletic workout and prescribed personal training plan. Emphasis on pyrometrics, flexibility, mechanics, training, and methodology. 0835.10

33A Karate and Athletic Conditioning II (.5)
Class hours: 24-27 laboratory.
Advisory: Completion of Physical Education: Activity 32 or 32A.
Intermediate to advanced karate skill training and athletic conditioning. Basic karate athletic workout and prescribed personal training plan. Emphasis on pyrometrics, flexibility, mechanics, training, and methodology. 0835.10

34 Tai Chi (1)
Class hours: 48-54 laboratory.
Stretching, balance, breathing, moving meditation, and the application of martial science techniques using Tai Chi. 0835.10

34A Tai Chi (.5)
Class hours: 24-27 laboratory.
Stretching, balance, breathing, moving meditation, and the application of martial science techniques using Tai Chi. 0835.10

35 Walking for Fitness (1)
Class hours: 48-54 laboratory.
Walking for physical health, fitness, weight control, and general well-being. Designed for men and women of all ages, course emphasizes perfecting fitness walking form and technique, building cardiovascular efficiency, increasing muscular strength, and attaining/maintaining a healthy weight. 0835.10

35A Walking for Fitness (.5)
Class hours: 24-27 laboratory.
Walking for physical health, fitness, weight control, and general well-being. Designed for men and women of all ages, course emphasizes perfecting fitness walking form and technique, building cardiovascular efficiency, increasing muscular strength, and attaining/maintaining a healthy weight. 0835.10

36 In-Line Skating and Roller Hockey (1)
Class hours: 48-54 laboratory.
Fundamentals of skating, fitness, and safety. Rules, strategies, and fundamental skills of hockey. 0835.10

46A In-Line Skating and Roller Hockey (.5)
Class hours: 24-27 laboratory.
Fundamentals of skating, fitness, and safety. Rules, strategies, and fundamental skills of hockey. 0835.10

50 Baseball Fundamentals (1)
Class hours: 48-54 laboratory.
Advisory: Previous baseball experience.
Designed for players with basic baseball playing skills and understanding of the game, who wish to improve their skill levels. Topics include: proper swing motion technique, performance enhancement drills, game strategies, and safety issues. 0835.10
PHYSICAL EDUCATION:
ADAPTIVE (PEAD)

All courses: Transfer Credit: CSU; UC credit limitations. See counselor.

For all Physical Education: Adaptive courses: Students with specific disabilities and educational limitations should have a physician’s recommendation for class activities. This provides the instructor with the information necessary to tailor a program to the needs and capabilities of the individual student. Students meeting criteria identified in Title 5, section 56029, may repeat courses more than the stated number of times.

1 Self Defense for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Personal safety including awareness, assessment and action in self defense. Physical skills required to improve physical fitness level. 0835.80

2 Wheelchair Basketball for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prepares students with disabilities to compete in the sport of wheelchair basketball using national and international wheelchair basketball rules. 0835.80

3 Adapted Wellness and Fitness (2.5)
Class hours: 32-36 lecture; 24-27 laboratory.
Introduces students with disabilities to all the major topics of wellness. Development of individualized assessment and wellness plans. 0835.80

4 Racquetball for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prepares students with disabilities to learn the basic skills in the sport of racquetball using adapted rules and specialized equipment. 0835.80

5 Tennis for Students with Physical Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Prepares students with disabilities to compete in the sport of tennis using specialized equipment and rules adapted for physical limitations. 0835.80

8 Body Building for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Weight training to improve muscle to fat ratio. Body composition assessments will evaluate progress. 0835.80

9A Beginning Body Conditioning for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Physical fitness cardio-respiratory conditioning, muscular strength and endurance, and flexibility. Individualized exercise prescriptions, safety, and appropriate use of adapted fitness equipment. 0835.80

9B Intermediate Body Conditioning for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Advisory: Completion of Physical Education: Adaptive 9A. Intermediate aerobic, flexibility, and weight training protocols. Assessment of strength, cardio-respiratory capacity, body composition, and flexibility, with resultant individually tailored exercise prescriptions. Safety in performing exercise and the appropriate use of adapted fitness equipment are stressed. 0835.80

9C Advanced Body Conditioning for Students with Disabilities (2)
Class hours: 16-18 lecture; 48-54 laboratory.
Advisory: Completion of Physical Education: Adaptive 9A or 9B. Advanced aerobic and weight training protocols. Use of interval training and pyramid training systems to significantly increase fitness. All programs are individually tailored to meet the specific needs of each student. May be taken twice. 0835.80

10A Beginning Aquatics for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Advisory: Completion of Physical Education: Adaptive 10A. Preparatory course in swimming designed to help students become comfortable in the water and gain the vital basic water survival skills. May be taken twice. 0835.80

10B Intermediate Aquatics for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Advisory: Completion of Physical Education: Adaptive 10A. Class is designed to enhance the individual’s ability to achieve independence in the recuperative and leisure aquatic setting. May be taken twice. 0835.80

11A Beginning Bowling for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Prepares students with disabilities to participate and compete in the sport of bowling. Specialized equipment to compensate for physical limitations is necessary. 0835.80

11B Intermediate Bowling for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Advisory: Completion of Physical Education: Adaptive 11A. Prepares students to compete in regulation bowling leagues and increases bowling skills. Specialized equipment to compensate for physical limitations is necessary. 0835.80

11C Advanced Bowling for Students with Disabilities (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Advisory: Completion of Physical Education: Adaptive 11B.
Prepares students for success in the more competitive atmosphere of independent bowling leagues. Specialized equipment to compensate for physical limitations is necessary. May be taken twice. 0835.80

12A Beginning Adapted Fitness Walking (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Focus on improvement in the cardio-respiratory endurance of students with physical limitations. Adapted equipment such as walkers, canes, and sports wheelchairs is utilized to maximize each student’s participation in the class. May be taken twice. 0835.80

12B Intermediate Adapted Fitness Walking (1)
Class hours: 8-9 lecture; 24-27 laboratory.
Advisory: Completion of Physical Education: Adaptive 12A. Use of specialized equipment to increase the workload of each session, resulting in faster improvement and longer-lasting benefits to the cardiovascular system. Designed primarily for special-interest groups responsible for teaching life saving, water safety, and all lev-
els 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. 0835.70

11 Football Video Analysis (2)  
Class hours: 48-54 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. 0835.60

12 Principles and Practices of Officiating Team Sports (3) [Cx]  
Class hours: 48-54 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. 0835.60

14 Lifeguard Training (3) [Cx]  
Class hours: 48-54 lecture.  
Advisory: Ability to swim 500 yards continuously using each of the following strokes for at least 100 yards: crawl, breaststroke, sidestroke, treading water for two minutes using legs only, and submerge to a depth of seven feet and return a ten pound object to the surface.  
Transfer Credit: CSU; UC.  
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. Upon successful completion of this course, students receive the following certificates:  
• American Red Cross Lifeguard Training  
• American Red Cross Standard First Aid  
• American Red Cross CPR for the Professional Rescuer  
0835.70

15 Diet and Fitness (3)  
(Available also as Nutrition and Food 21)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
A lifestyle approach to fitness, including the study of nutrition, disease prevention, increased cardiovascular endurance, weight control, increased flexibility, stress management, and considerations of aging on the body. 0835.00

16 First Aid (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC  
Immediate and temporary care for victims of injury, acute illness, or other medical emergency prior to treatment by licensed medical personnel, in accordance with the procedures and protocols established by the American Red Cross. Includes legal and ethical concerns, emergency scene control, identification of life-threatening conditions and appropriate emergency treatment, removal of airway obstruction, and oneperson CPR administration. Upon successful completion of this course, students receive the following certificates:  
• American Red Cross First Aid—Responding to Emergency  
• American Red Cross Adult CPR  
0835.00

17 Advanced First Aid and Emergency Response (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Designed primarily for the person responsible for the emergency care of the sick and injured. Prepares the participant to make appropriate decisions in an emergency situation to help sustain life, reduce pain, and minimize the consequence of injury or sudden illness, until more advanced medical help can arrive. Upon successful completion of this course, students receive the following American Red Cross certificates:  
• Emergency Response  
• Cardio-Pulmonary Resuscitation—Automated External Defibrillation for Professional Rescuer  
• Preventing Disease Transmissions  
• Oxygen Administration for the Professional Rescuer  
Students are required to provide breathing masks and first aid kits. Fees are charged for each certificate earned. May be taken twice. 0835.00

18 Introduction to Kinesiology (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Survey of the discipline of Kinesiology, including physical activity, pedagogy, motor behavior, sport and exercise psychology, biomechanics, and the physiology of physical activity. Introduces students to various physical activity professions typically pursued by kinesiologists, and assists them in making early career decisions. 0835.00

31 Fitness and Wellness for Older Adults (3)  
(Available also as Gerontology 31)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
Training for people who teach older people the exercises and wellness practices 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. Provides experience in body conditioning exercises, as well as safety precautions and accident prevention for the elderly during physical exercise. Chair and bed exercises for people with limited mobility. 0835.00

32 Outdoor Adventures (2)  
Class hours: 16-18 lecture; 48-54 laboratory.  
Transfer Credit: CSU.  
Introduces the techniques of backpacking, selection of equipment, group planning, conditioning, safety, and survival information. Guide to many forms of backpacking. Field trips are required to fulfill the laboratory requirement. May be taken twice. 0835.10

33 Introduction to Eastern Movement and Meditation (2)  
Class hours: 24-27 lecture; 24-27 laboratory.  
Transfer Credit: CSU.  
Brief history of yoga, qigong, tai chi and meditation. Physical movements of these four disciplines is explored. Course includes readings and class discussions on the benefits of these ancient forms as resources toward one’s continuing physical education, growth, and well-being. 0835.10

92A-H Special Topics: Physical Education Lecture (.5-.6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
Pursues certain specializations in physical education. See class schedule for current topic emphasis. May be taken four times regardless of the unit combination, however, no single-subject, special-interest topics may be repeated. May require prerequisites and/or corequisites based on the content of the course. 0835.00

413 Sports Management (3)  
Class hours: 48-54 lecture  
Advisory: Completion of Physical Education Lecture 13.  
Basic theory of sports management. Topics include: management and organizational skills, marketing and fundraising, communication, finance, safety issues, economics, and law and governance. 0835.00

422 Therapeutic Touch (3)  
Class hours: 48-54 lecture  
Introduction to the wellness concepts and techniques of healing with an emphasis on stress reduction, acceleration of healing, and pain management. Integration of body/mind concepts to reflect holistic approach. 0835.00

PHYSICAL EDUCATION: TEAM (PETEAM)

For all Physical Education Team courses:  
• Transfer Credit: CSU; UC credit limitations. See counselor.  
• Open-entry/open-exit activity (except PETEAM-83 and 84).  
• May be taken 4 times (except PETEAM 83 and 84 which may be taken twice, and Intercollegiate Physical Education Team courses PETEAM-41 through 59 which may be taken four times, however athletes may only compete twice.)

Hours for Physical Education Team 1 through 15: 48-54 laboratory per term.

1A Football Team Activity, Defense (1)  
Advisory: Competitive football background.  
Information and practice in the development of football basic offensive skills and techniques. Primarily intended for students who wish to compete in the sport of football, but is open to all. 0835.10

1B Football Team Activity, Defense (1)  
Advisory: Competitive football background.  
Information and practice in the development of football basic offensive skills and techniques. Primarily intended for students who wish to compete in the sport of football, but is open to all. 0835.10

2 Volleyball Team Activity, Women (1)  
Advisory: Competitive volleyball background.  
Information and practice in the development of competitive volleyball and joining the women’s intercollegiate team. 0835.10

3 Basketball Team Activity, Women (1)  
Focus on history, conditioning, rules, and fundamental skills needed for competitive women’s basketball. 0835.10
4 Softball Team Activity, Women (1)
Limitation on Enrollment: Competitive softball experience is required.
Overall development of basic skills and knowledge needed for competitive women's softball play. 0835.10

5 Water Polo Team Activity, Men (1)
Limitation on Enrollment: Water polo experience or possession of an advanced swimming certificate is required.
Rules, etiquette, history, and advanced skills of water polo, designed for the prospective men's water polo team participant. 0835.10

6 Basketball Team Activity, Men (1)
Advisory: Competitive basketball background.
Designed for men interested in playing competitive men's basketball. 0835.10

7 Baseball Team Activity, Men (1)
Limitation on Enrollment: Competitive baseball experience is required.
Specific experience in track and field. Emphasis on fundamental theory and basic skills. Designed for men interested in competitive baseball at the college level. 0835.10

9 Water Polo Team Activity, Women (1)
Limitation on Enrollment: Water polo experience or possession of an advanced swimming certificate is required.
Rules, etiquette, history, and advanced skills of water polo. Course is designed for prospective women's water polo team participants. 0835.10

11 Swimming Team Activity, Men and Women (1)
Limitation on Enrollment: Above average swimming ability is required.
Rules and fundamental skills involved in competitive swimming strokes. Designed for students interested in competitive swimming. 0835.10

12 Track and Field Team Activity, Men (1)
Advisory: Competitive track and/or field background.
Specific experience in track and field. Emphasis on fundamental theory and basic skills. Designed for students interested in competitive track and field events at the college level. 0835.10

13 Track and Field Team Activity, Women (1)
Advisory: Competitive track and/or field background.
Specific experience in track and field. Emphasis on fundamental theory and basic skills. Designed for women interested in competitive track and field events at the college level. 0835.10

14 Soccer Team Activity, Men (1)
Advisory: Competitive soccer background.
Information and practice to develop basic soccer skills, techniques, and strategies. Designed for men interested in playing competitive soccer at the college level. 0835.10

15 Soccer Team Activity, Women (1)
Advisory: Competitive soccer background.
Information and practice to develop basic soccer skills, techniques, and strategies. Designed for women interested in playing competitive soccer at the college level. 0835.10

153 Hours for Physical Education Team 21 through 35: 96-108 laboratory per term

21A Football Team Class, Offense (2)
Advisory: Competitive football background.
Information and practice to develop advanced offensive skills and techniques. Primarily intended for students who wish to compete in the intercollegiate sport of football, but is open to all. 0835.10

21B Football Team Class, Defense (2)
Advisory: Competitive football background.
Information and practice to develop advanced defensive skills and techniques. Primarily intended for students who wish to compete in the intercollegiate sport of football, but is open to all. 0835.10

22 Volleyball Team Class, Women (2)
Advisory: Competitive volleyball background.
Rules, etiquette, history, and skills. Designed for women interested in playing competitive volleyball at the college level. 0835.10

23 Basketball Team Class, Women (2)
Limitation on Enrollment: Basketball experience is required.
Advanced skills for intercollegiate competition. Primarily for students who wish to compete in the intercollegiate sport of basketball, but is open to all. 0835.10

24 Softball Team Class, Women (2)
Limitation on Enrollment: Competitive softball experience is required.
Advanced skills and knowledge needed for competitive softball play. Primarily for women who wish to compete in the intercollegiate sport of softball, but is open to all. 0835.10

25 Water Polo Team Class, Men (2)
Limitation on Enrollment: Water polo experience or advanced swimming ability is required.
Rules, etiquette, history, and skills. Primarily for men who wish to compete in the intercollegiate sport of water polo, but is open to all. 0835.10

26 Basketball Team Class, Men (2)
Advisory: Competitive basketball background.
Advanced skills and techniques for competitive men's basketball. Primarily for men who wish to compete in the intercollegiate sport of basketball, but is open to all. 0835.10

27 Baseball Team Class, Men (2)
Limitation on Enrollment: Competitive baseball background is required.
Specific experience in playing competitive baseball at the college level. Primarily for men who wish to compete in the intercollegiate sport of baseball, but is open to all. 0835.10

29 Water Polo Team Class, Women (2)
Limitation on Enrollment: Water polo experience or possession of an advanced swimming certificate is required.
Rules, etiquette, history, and skills of water polo. Course is primarily for women who wish to compete in the intercollegiate sport of water polo, but is open to all. 0835.10

31 Swimming Team Class, Men and Women (2)
Limitation on Enrollment: Above average swimming ability is required.
Rules and advanced skills involved in competitive swimming strokes. Primarily for students who wish to compete in the intercollegiate sport of swimming, but is open to all. 0835.10

32 Track and Field Team Class, Men (2)
Advisory: Competitive track and/or field background.
Theories, principles, philosophies, and practical applications for competition in track and field events. Primarily for men who wish to compete in the intercollegiate sports of track and field, but is open to all. 0835.10

33 Track and Field Team Class, Women (2)
Advisory: Competitive track and/or field background.
Theories, principles, philosophies, and practical applications for competition in track and field events. Primarily for women who wish to compete in the intercollegiate sports of track and field, but is open to all. 0835.10

34 Soccer Team Class, Men (2)
Advisory: Competitive soccer background.
Continuation of practice and development of advanced soccer skills, techniques, and strategies. Primarily for men who wish to compete in the intercollegiate sport of soccer, but is open to all. 0835.10

35 Soccer Team Class, Women (2)
Advisory: Competitive soccer background.
Continuation of practice and development of advanced soccer skills, techniques, and strategies. Primarily for women who wish to compete in the intercollegiate sport of soccer, but is open to all. 0835.10

Hours for Physical Education (Intercollegiate) Team 41 through 59: 175 laboratory hours arranged per term

41 Intercollegiate Football (2)
Advisory: 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. 0835.50

42 Intercollegiate Volleyball Team, Women (2)
Opportunity for women to compete at the intercollegiate level in volleyball. 0835.50

43 Intercollegiate Basketball Team, Women (2)
Opportunity for women to compete at the intercollegiate level in basketball. 0835.50

44 Intercollegiate Softball Team, Women (2)
Opportunity for women to compete at the intercollegiate level in softball. 0835.50

45 Intercollegiate Water Polo Team, Men (2)
Opportunity for men to compete at the intercollegiate level in water polo. 0835.50

46 Intercollegiate Basketball Team, Men (2)
Opportunity for men to compete at the intercollegiate level in basketball. 0835.50

47 Intercollegiate Football Team, Men (2)
Opportunity for men to compete at the intercollegiate level in football. 0835.50

51 Intercollegiate Swimming Team, Men and Women (2)
Advisory: Above average swimming ability.
Opportunity for men and women to compete at the intercollegiate level in swimming. 0835.50

52 Intercollegiate Track and Field Team, Men (2)
Opportunity for men to compete at the intercollegiate level in track and field events. 0835.50

53 Intercollegiate Track and Field Team, Women (2)
Opportunity for women to compete at the intercollegiate level in track and field events. 0835.50

54 Intercollegiate Soccer Team, Men (2)
Opportunity for men to compete at the intercollegiate level in soccer. 0835.50

55 Intercollegiate Soccer Team, Women (2)
Opportunity for women to compete at the intercollegiate level in soccer. 0835.50
Course Descriptions

59 Intercollegiate Water Polo Team, Women (2)  
Limitation on Enrollment: Water polo experience or average swimming ability is required. 
Competitive intercollegiate women's water polo team, involving skills and knowledge of all aspects of competitive play. 0835.50

Hours for Physical Education Team 80, 81, and 82: 48-54 self-paced laboratory 
Hours for Physical Education Team 83 and 84: 96-108 laboratory

80 Weights and Conditioning for Athletes (In-Season) (1)  
Advisory: Concurrent or previous enrollment in any Physical Education: Team course. 
Safety and proper use of weight training equipment. Performing sport-specific drills and exercises necessary for proper conditioning for competitive athletes. Designed for in-season athletes competing at the intercollegiate level. 0835.50

81 Weights and Conditioning for Athletes (Off-Season) (1)  
Advisory: Concurrent or previous enrollment in any Physical Education: Team course. 
Safety and proper use of weight training equipment. Performing sport-specific drills and exercises necessary for proper conditioning for competitive athletes. Designed for off-season athletes competing at the intercollegiate level. 0835.50

82 Weights and Conditioning for Athletes (Out-of-Season) (1)  
Advisory: Concurrent or previous enrollment in any Physical Education: Team course. 
Advanced sport-specific drills and exercises designed for in-season athletes. Exercise routines increase strength, speed, flexibility, and conditioning to enhance athletic performance. Pre- and rehabilitative prescriptions are individually tailored and provided by the instructor. May be taken twice. 0835.50

83 Strength and Conditioning for Athletes (In-Season) (2)  
Advisory: Concurrent or previous enrollment in any Physical Education: Team course. 
Introduction to mechanics for students majoring in a life or medical science, or engineering technology, whose university major requires calculus-based physics. Position, velocity, and acceleration of objects are described using vectors. Concepts of mass, force, Newton's Laws of Motion, momentum, impulse, work, energy, and power are used to describe straight-line motion, projectile motion, circular motion, collisions, and explosions. Rotation motion includes torque, moment of inertia, angular momentum, and static equilibrium. Differential calculus is used to describe velocity and acceleration, and in presenting the laws of conservation of momentum and conservation of angular momentum. 1902.00

84 Strength and Conditioning for Athletes (Off-Season) (2)  
Advisory: Concurrent or previous enrollment in any Physical Education: Team course. 
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major requires calculus-based physics. Position, velocity, and acceleration of objects are described using vectors. Concepts of mass, force, Newton's Laws of Motion, momentum, impulse, work, energy, and power are used to describe straight-line motion, projectile motion, circular motion, collisions, and explosions. Rotation motion includes torque, moment of inertia, angular momentum, and static equilibrium. Differential calculus is used to describe velocity and acceleration, and in presenting the laws of conservation of momentum and conservation of angular momentum. 1902.00

PHYSICS (PHYS)  
5 The Ideas of Physics (3)  
Class hours: 48-54 lecture. 
Prerequisite: Eligibility for Mathematics 420 as determined by the Chaffey assessment process, or completion of Mathematics 410. 
Transfer Credit: CSU; UC credit limitations. 
See counselor.

6 The Ideas of Physics Laboratory (1)  
Class hours: 48-54 laboratory. 
Corequisite: Physics 5 (may be taken previously). 
Transfer Credit: CSU; UC credit limitations. 
See counselor.

20A College Physics I (4) (Cx)  
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Mathematics 31 and Physics 5 or 44 or one year of high school physics. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
(CAN PHYS 2) (CAN PHYS SEQ A = PHYS 20A + 20B)  
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major does not require calculus-based physics. Concepts of mass, force, Newton's Laws of Motion, momentum, impulse, work, energy, and power are used to describe straight-line motion, projectile motion, circular motion, collisions, explosions, and vibrations. Rotation motion includes torque, moment of inertia, angular momentum, and static equilibrium. 

20B College Physics II (4) (Cx)  
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Physics 20A. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
(CAN PHYS 3) (CAN PHYS SEQ B = PHYS 20A + 20B)  
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major requires calculus-based physics. Topics include: simple harmonic motion, static fluids and fluid flow, zeroth, first and second laws of thermodynamics, sound waves, electric force and field, electric potential energy, electrical potential, capacitance, resistance, electromotive force, magnetic force and field, Faraday's Law, inductors, light waves, and optics. 

30A Physics for the Medical and Life Sciences I (4) [Cx]  
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Physics 5 or 44 or one year of high school physics. 
Corequisite: Mathematics 65A. 
Transfer Credit: CSU; UC credit limitations. 
See counselor.

30B Physics for the Medical and Life Sciences II (4) [Cx]  
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Physics 30A. 
Transfer Credit: CSU; UC credit limitations. 
See counselor.

44 Introduction to Motion (4)  
Class hours: 48-54 lecture; 48-54 laboratory. 
Prerequisite: Mathematics 61. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
Introduction to mechanics for students majoring in a physical science or engineering. Position, velocity, and acceleration of objects are described using vectors. Concepts of mass, force, Newton's Laws of Motion, momentum, and impulse are used to describe straight-line motion, projectile motion, circular motion, collisions, and explosions. In the laboratory, microcomputers with motion detectors and force probes are used to study the concepts of velocity and acceleration, and Newton's Laws of Motion. Graphical representation of motion – velocity-time graphs, acceleration-time graphs, and force-time graphs – is emphasized. 

45 Physics for Scientists and Engineers I (5)  
Class hours: 64-72 lecture; 48-54 laboratory. 
Prerequisite: Physics 44 and Mathematics 65A. 
Transfer Credit: CSU; UC credit limitations. 
See counselor. 
(CAN PHYS 8) (CAN PHYS SEQ C = PHYS 45 + 46 + 47)  
For students majoring in a physical science or engineering. Position, velocity, and acceleration of objects described using vectors. Concepts of mass, force, Newton's Laws of Motion momentum, and impulse used to describe straight-line motion, projectile motion, circular motion, collisions, explosions, and vibrations. Work, kinetic energy, potential energies,
thermal energy, and power. Conservation of energy. Forces and pressures in static and moving fluids. Rotational motion includes torque, moment of inertia, angular momentum, angular kinetic energy, and static equilibrium. 1902.00

46 Physics for Scientists and Engineers II (5)
Class hours: 64-72 lecture; 48-54 laboratory.
Prerequisite: Physics 43 and Mathematics 65B.
Transfer Credit: CSU; UC credit limitations.
See counselor.
(CAN PHYS 12) (CAN PHYS SEQ B = PHYS 45 + 46 + 47)
For students majoring in a physical science or engineering. Electromagnetic concepts: electric force – Coulomb’s Law, electric field, Gauss’ Law, electric potential energy, electric potential, capacitance, resistance, electrostatic force, power, meters, RC circuits, magnetic field, magnetic force - cyclotrons, Ampere’s Law, Faraday’s Law, inductors, LC circuits, and LCR circuits – impedance and power factor. 1902.00

47 Physics for Scientists and Engineers III (5)
Class hours: 64-72 lecture; 48-54 laboratory.
Prerequisite: Physics 46.
Transfer Credit: CSU; UC credit limitations. See counselor.
(CAN PHYS 14) (CAN PHYS SEQ B = PHYS 45 + 46 + 47)
For students majoring in a physical science or engineering. Topics include: first and second laws of thermodynamics, heat engines, sound wave intensity, Doppler effect, light waves – interference and diffraction, optics – refraction, lenses, images, special relativity, energy levels in the hydrogen atom, and spectrum of the hydrogen atom. 1902.00

92LA-H Special Topics Laboratory: Physics (.5-6)
Class hours: 48-54 hours/term laboratory for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Special-interest course of varying length for students who wish further exploration in specific areas of physics. Topics will be determined by the instructor. May be taken 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. 1902.00

POLITICAL SCIENCE (PS)

1 American Politics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC. (CAN GOVT 2)
Study of the American political process and institutions. Topics include: social and political institutions, major American linkage institutions, the politics of public policy, the struggle of under-represented groups for equality, and other current problems. Analysis of the organization and function of California’s state and local governments. May be offered as an Honors Course. 2207.00

2 Introduction to Political Science (3)
Class hours: 48-54 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: 48-54 lecture.
Transfer Credit: CSU.
State, county, and municipal government with an emphasis on California’s unique heritage, culture, people, and politics. Issues such as economic and class conflict, immigration and ethnic-cultural influences, and problems in urban government in the 21st century are examined. 2207.00

7 International Relations (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Survey of historical and contemporary international relations. Examination of key IR theories and research methodologies, international security, the global economy, international law and organizations (e.g. UN, WTO), and non-traditional issues of human security – global poverty, pandemics, environment and resource management, and NGOs. Emphases on the foreign policies of major states, areas of conflict and tension, and various aspects of globalization. 2207.00

10 Comparative Politics (3)
Class hours: 48-54 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

21 Urban Politics (3)
Class hours: 48-54 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 the impact of economic change will be examined. 2207.00

25 Latino Politics (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC.
Examination of Latino politics. Topics include: political influence, civil rights, discrimination, immigration, affirmative action, assimilation, acculturation, citizenship, political efficacy, voting affiliations and tendencies, diversity within the Latino community, and contemporary political issues affecting Latinos. Special emphasis on the growing political and economic impact of Latinos on the local, state, national, and international levels. 2203.00

32 Law and Society (3)
Class hours: 48-54 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 made. 2207.00

90A Political Science Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations. See counselor.
Honors component for Political Science. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 2207.00

92A-H Special Topics: Political Science (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations. See counselor.
Special-interest course of varying length for students who wish further exploration in specific areas of political 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. 2207.00

PROFESSIONAL NURSING
(SEE NURSING: ASSOCIATE DEGREE)

PSYCHOLOGY (PSYCH)

1 Introduction to Psychology (3) [Cx]
Class hours: 48-54 lecture.
Advisory: Completion of Guidance 2.
Transfer Credit: CSU; UC. (CAN PSY 2)
Survey of psychology, including research methods, history and systems, lifespan, perception, learning and memory, cognition, psychological disorders and treatment, social behavior, and brain mechanisms in behavior and consciousness. May be offered as an Honors course. 2001.00

5 Personal and Social Awareness (3)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
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: 48-54 lecture.
Prerequisite: Psychology 1.
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)
( Available also as Gerontology 21)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
Transfer Credit: CSU; UC credit limitations. See counselor.
Study of the psychology of human development in adulthood with particular emphasis on biological and social influences. Environmental, cognitive, and physical changes are examined in light of contemporary research and theory. Designed to help persons of all ages understand the aging process from a psychological perspective. 2001.00

25 Developmental Psychology: Lifespan Development (3)
Class hours: 48-54 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
41 Biological Psychology (3)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
Transfer Credit: CSU; UC.
Study of the biological basis of behavior. Topics include: basic neuroanatomy and neurophysiology; neurophysiological mechanisms in movement, sensation, perception, learning, memory, emotion, psychological disorders, language, and consciousness; scientific methods as applied in the brain sciences; brain evolution; and the effects of discoveries in the neurosciences on modern views of human nature and theories of mind.
2001.00

98A,B,C Independent Study: Psychology (1, 2, 3)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor
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 in Psychology. 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 taken only four times, regardless of the unit combination.
2001.00

45 Psychoactive Drugs: The Chemistry of Consciousness (3)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
Transfer Credit: CSU; UC.
The major classes of psychoactive drugs, their subjective effects, and the mechanisms of their actions on the brain. Basic concepts in nerve cell physiology and brain structure and function, requisite for an understanding of drug actions.
2001.00

55 Abnormal Psychology (3)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
Transfer Credit: CSU; UC.
Introduction to psychopathology. Disorders of sensation, perception, emotions, and thinking, and their nature, causes, and effects on life. Analysis of attempts at alleviation, helping therapies, and problem intervention.
2001.00

65 Social Psychology (3)
Class hours: 48-54 lecture.
Prerequisite: Psychology 1.
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 Research Methods in Psychology (4)
Class hours: 48-54 lecture; 48-54 laboratory.
Prerequisite: Psychology 1 and Social Science 10.
Transfer Credit: CSU; UC.
(CAN PSY 8)
Survey of research methods currently used in psychology: archival, naturalistic observation, case study, survey, and field 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

90A Psychology Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Psychology. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis.
2001.00

92A-H Special Topics: Psychology (.5-6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.
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. May be taken twice, however, the emphasis must be different each time.
2001.00

160 Laboratory for Research Investigation (2, 3, 4, 5, 6)
Limitation on Enrollment: Instructor signature is required for registration.
Transfer Credit: CSU; UC credit limitations.
See counselor
Experiments designed to illustrate the theories presented in lecture. Through the process of discussion, demonstration, role-played and timed simulated evaluation, students acquire competency. Prerequisites and/or corequisites are required. May be taken twice, however, the emphasis must be different each time.
2001.00

430 Health Psychology (3)
Class hours: 48-54 lecture.
Health psychology, including historical and contemporary research and practice. Understanding of behaviors affecting health, including risks for cardiovascular disease, cancer, and other diseases. Psychological management of pain and chronic illness. Strategies for increasing adherence to healthy lifestyle behaviors.
2001.00

Radiologic Technology (RADTEC)

Students must apply for admission to the Radiologic Technology program and must pay for a physical examination.

Limitation on Enrollment: All Radiologic Technology courses numbered 1-99: Admission to the Radiologic Technology program.

10 Anatomy and Radiographic Positioning I (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Comprehensive study of radiographic positioning of the chest, upper and lower extremities, shoulder and pelvic girdle, abdomen, and urinary system, with emphasis on associated anatomy and radiographic image evaluation. Provides the knowledge base necessary to perform standard radiographic procedures. Consideration is given to radiation protection and the production of images of optimal diagnostic quality. Laboratory experience complements the didactic portion.
1225.00

10L Laboratory for Medical Procedures for Radiologic Technologists (1)
Class hours: 48-54 laboratory.
Transfer Credit: CSU.
Discussion, application, and timed simulated performance of medical procedures and techniques commonly used in diagnostic imaging. Proper body mechanics for patient transfer by wheelchair or stretcher. Use of blood pressure equipment, enema administration, and Foley catheterization kits. Isolation techniques, including portable equipment. Medical and surgical aseptic technique is studied in depth.
1225.00

20 Radiologic Science and Protection (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Course establishes a basic knowledge of atomic structure and terminology, including the nature and properties of matter, energy, and radiation; x-ray production; and the fundamentals of photon interactions with matter. Factors that govern and influence the production and recording of radiologic images are presented, including the prime technical factors required to produce a radiographic image. Radiation interaction on living systems, its effects on molecules, cells, tissues and the body as a whole, and factors affecting radiological responses. Emphasis on attenuation and absorption of radiation within the human body, basic radiation measurement, health effects, and protection for the patient and technologist. Review of state and federal radiation control laws. Foundation discussion on the use of accessories in radiography, such as collimators and automatic exposure controls.
1225.00

25 Anatomy and Radiographic Positioning II (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Experiments are performed in on-campus laboratories to illustrate the theories presented in lecture. Through the process of discussion, demonstration, return demonstration, group sharing and demonstration evaluation, students correlate concepts with the actual making of an x-ray. Laboratory experiments demonstrate the actual production of radiation, facilitating student acquisition of competency and skill in the handling of radiographic equipment. Focus on equipment manipulation (to include mobile units), image receptors, ionization and exposure, beam intensity, image quality, and radiation protection.
1225.00

Topics include: communication techniques, professional ethics, legal considerations, the history of radiology, and safety of the radiographer through proper body mechanics. Care of patients with nasogastric tubes, geriatric and pediatric patients, and the acutely disturbed patient. Medical and surgical aseptic technique is studied in depth. Recognition of adverse reactions to contrast agents, and the treatment of these reactions. Theory of skills, including the taking of vital signs, enema administration, and urinary catheterization.
1225.00

20 Medical Procedures for Radiologic Technologists (3)
Class hours: 48-54 lecture.
Limitation on Enrollment: A current health care provider cardiopulmonary resuscitation card is required.
Transfer Credit: CSU.
Comprehensive study of radiographic positioning of the vertebral column, bony thorax, gastrointestinal tract, and biliary system. Accommodations for trauma, mobile/bedside, surgical radiography and age specific attention; with emphasis on associated anatomy and radiographic image evaluation. Development of the...
knowledge base necessary to perform standard radiographic procedures. Consideration is given to radiation protection and the production of images of optimal diagnostic quality. Laboratory experience complements the didactic portion.

2SL Laboratory for Anatomy and Radiographic Positioning II (1)
Class hours: 48-54 laboratory.
Transfer Credit: CSU.
Discussion, application, demonstration, and role-played and timed simulated positioning of the vertebral column, bony thorax, special view of the skeletal system, gastrointestinal system, and biliary system, with considerations for trauma, mobile/bedside, surgical radiography, and age specific attention for pediatric and geriatric imaging.

31 Radiographic Clinical Education I (2)
Class hours: 96-108 laboratory
Transfer Credit: CSU.
First semester of clinical practice experiences designed for sequential development, application, critical analysis, and integration of the concepts and theories presented in the on-campus courses. Through competency-based assignments, the student will first observe and then perform, under direct supervision, patient care and radiographic procedures identified in the course syllabus. Emphasis is placed on familiarizing the student to the clinical educational setting, patient-centered clinical practice, professional development, and corresponding working relationships with other health care professionals.

34 Radiographic Imaging (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Study of film, screens, film-screen combinations, processing, grids, quality control, quality management, and quality assurance. A significant portion of the course is devoted to circuitry of the radiographic tube. Image archiving, digital and film-less radiography are also discussed, as well as different radiographic equipment such as conventional tomography. Radiation protection methods are studied in depth.

34L Laboratory for Radiographic Imaging (1)
Class hours: 48-54 laboratory.
Transfer Credit: CSU.
On-campus radiographic laboratory is used for a series of experiments complementing the didactic instruction. Experiments illustrate radiation theory in regards to radiographic image quality, film/screen combinations, the use and misuse of grids, automatic processing, and radiographic quality assurance, management and control.

40 Radiographic Clinical Education II (8)
Class hours: 384-432 laboratory.
Transfer Credit: CSU.
Clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, evaluated, and reinforced. Emphasis is on patient care assessment, competent performance of radiologic images, and total quality management. Students achieve and demonstrate increasing levels of competency and measurable outcomes that ensure the well being of the patient preparatory to, during, and following the procedure.

50 Radiographic Clinical Education III (6)
Class hours: 288-324 laboratory.
Transfer Credit: CSU.
Continued clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, evaluated, and reinforced. Emphasis is on patient care and assessment, competent performance of radiologic images, and total quality management. Students achieve and demonstrate increasing levels of competency and measurable outcomes that ensure the well being of the patient preparatory to, during, and following the procedure.

55 Radiographic Equipment and Clinical Application (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU.
Course establishes a knowledge base in fluoroscop equipment requirements, design, and operation, and isoeXposure curves and related radiation protection. Study of the radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations. Class demonstrations/labs provide opportunity for application and reinforcement of theory.

61 Radiographic Clinical Education IV (8)
Class hours: 384-432 laboratory.
Transfer Credit: CSU.
Continued clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, evaluated, and reinforced. Emphasis is on patient care and assessment, competent performance of radiologic images, and total quality management. Students achieve and demonstrate increasingly advanced levels of competency and measurable outcomes that ensure the well being of the patient preparatory to, during, and following the procedure.

66 Anatomy and Radiographic Positioning III (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU.
Comprehensive study of radiographic positioning of the calvarium, facial area, sinuses, and temporal bone, including special examinations for each of these areas. Provides the knowledge base necessary to perform radiographic procedures. Consideration is given to radiation protection and the production of images of optimal diagnostic quality. Laboratory experience complements the didactic portion.

66L Laboratory for Anatomy and Radiographic Positioning III (1)
Class hours: 48-54 laboratory.
Transfer Credit: CSU.
Comprehensive study of radiographic positioning of the calvarium, facial area, sinuses, and temporal bone. Emphasis on associated anatomy, radiation protection, patient communication, effective patient interaction, and radiographic image evaluation.

70 Radiographic Clinical Education V (11)
Class hours: 528-594 laboratory.
Transfer Credit: CSU.
Guided practice in the application of radiology technology to patients in a hospital environment, with the student performing more independently. Evening shifts and performance of radiography specialties are included. Students rotate between clinical education settings with digital imaging systems and those that are film based, so experience is obtained in both. Clinical experiences complement and reinforce the didactic portion of instruction, facilitating continued advancement in the level of competency and measurable outcomes, and ensuring the well being of the patient preparatory to, during, and following the procedure.

76 Radiographic Pathology (4)
(Replaces Radiologic Technology 75; first offered in Spring 2007)
Class hours: 64-72 lecture.
Transfer Credit: CSU.
Introduction to theories of disease causation and the pathologic disorders that compromise healthy systems. Analysis of alterations in body systems' anatomy and physiology occurring in response to disease, emphasizing the impact on related radiographic procedures. Definitions and classifications, etiology, pathophysiologic responses, complications, clinical manifestations, radiographic appearance, and procedural and technique considerations are studied in depth.

81 Radiographic Clinical Education VI (5)
Class hours: 240-270 laboratory.
Transfer Credit: CSU.
Final course in the series of guided practicums applying radiologic technology to patients in a hospital environment. Advanced clinical practice experiences designed to provide patient assessment and care, competent performance of radiologic imaging, and assure total quality management. Sequential development, critical analysis, integration, synthesis, application, and evaluation of concepts and theories in the performance of radiologic procedures. Students perform independently with appropriate supervision and assess their skills for employability.

85 Development of Advanced Radiographic Skills (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU.
Application of radiographic theory to develop proficiency in the skills necessary to become employed. Review of the entire radiologic technology curriculum, following the ARRT examination outline, to prepare the student for the written certifying examinations at the state and national levels.

400 Radiographic Skills in Mammography (3)
Class hours: 48-54 laboratory.
Limitation on Enrollment: Proof of graduation from an accredited radiologic technology program, proof of an ARRT or CRT license, or proof of current enrollment in a radiologic technology program is required. Study of mammography. Patient education, anatomy, physiology, positioning and pathology of the breast, technical breast examinations, instrumentation, and mammography techniques. Special emphasis on communication techniques and professional ethical/legal considerations.
460 Venipuncture for Imaging Professionals (1.5)  
Class hours: 24-27 lecture.  
Corequisite: Radiologic Technology 460L.  
Advisory: Student should be a 2nd year radiography student or a graduate of JRCERT-approved radiography program, and possess a current health care provider CPR card.  
Basic concepts of pharmacology. Theory and practice of basic techniques of venipuncture, anatomy and physiology of venipuncture sites, instrumentation and related equipment, and the administration of diagnostic contrast agents and/or intravenous medications. Training standards and limitations of a radiologic technologist in the performance of venipuncture in an upper extremity. Appropriate delivery of patient care before, during, and after procedures is emphasized, along with the hazards and complications of venipuncture, and anaphylactic shock. Fulfills the requirements of Section 106985 of the California Health and Safety Code relating to radiologic technology. 1225.00

460L Venipuncture Laboratory for Imaging Professionals (1.5)  
Class hours: 24-27 laboratory.  
Corequisite: Radiologic Technology 460.  
Advisory: Student should be a 2nd year radiography student or a graduate of JRCERT-approved radiography program, and possess a current health care provider CPR card.  
Application of skills and reinforcement of theory in the basic concepts of pharmacology. Provides the practice necessary to perform a minimum of 10 successful “live” skills on individuals (classmates and guests). Demonstration of the anatomy and physiology of venipuncture sites, venipuncture instrumentation, I.V. solutions, and related equipment, with students executing a simulated demonstration prior to actual performance. Patient care aspects of venipuncture are emphasized. 1225.00

516L Radiographic Procedures Laboratory (1)  
Course is offered on a credit/no-credit basis only.  
Class hours: 48-54 laboratory.  
Not Degree Applicable.  
Reinforcement of medical procedures necessary in the radiology department. Use of specific equipment found in the clinical education settings is emphasized. May be taken three times. 1225.00

510 Introduction to Reading (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 510 as determined by the Chaffey assessment process, or completion of Reading 500.  
Not Degree Applicable.  
Beginning reading class, for students with a variety of backgrounds and learning skills. Emphasis on locating the main idea, making inferences, vocabulary improvement, and understanding paragraphs. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.70

520 Intermediate Reading (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 520 as determined by the Chaffey assessment process, or completion of Reading 510.  
Not Degree Applicable.  
Introductory reading and study skills class for students with a variety of backgrounds and learning skills. Focus is on improvement of reading and study skills abilities, with emphasis on reading comprehension, vocabulary development, and study techniques. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.70

530 Interactive Reading and Literature (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 530 as determined by the Chaffey assessment process, or completion of Reading 520.  
Not Degree Applicable.  
Focus on reading comprehension, literary terminology, and vocabulary development, using literature as a basis. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.70

550 Reading Improvement (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 550 as determined by the Chaffey assessment process, or completion of Reading 530.  
Not Degree Applicable.  
Program of systematic training to develop literal and critical comprehension, vocabulary, and speed skills, targeted to students with average reading skills. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.70

589 Reading (READ)  
450 Advanced Reading (3)  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 450 as determined by the Chaffey assessment process, or completion of Reading 550.  
Program of systematic training to develop literal and critical comprehension, vocabulary, and speed skills for advanced students. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. 4930.71

500 Beginning Reading (3)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 lecture.  
Prerequisite: Eligibility for Reading 500 as determined by the Chaffey assessment process.  
Not Degree Applicable.  
Beginning reading class for students from a variety of backgrounds and learning skill levels, who are having extreme difficulty with reading. Emphasis on phonics, basic sight vocabulary, comprehension, and following directions. Fifteen hours of supplemental instruction in a Success Center that supports this course is required. May be taken twice. 4930.70

REAL ESTATE (RE)  
10 Real Estate Principles (3) [Cx]  
Class hours: 48-54 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. 0511.00

15 Real Estate Practice (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Real Estate 10.  
Transfer Credit: CSU.  
Office procedures and practices of the broker and sales person in the real estate business, including listing, prospecting, advertising, financing, exchanges, and sales techniques. Course is applicable toward the educational requirements for broker’s license and real estate salesperson’s license. 0511.00

50 Legal Aspects of Real Estate I (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Real Estate 10.  
Transfer Credit: CSU.  
Introductory course to acquaint students with current California real estate law, with emphasis on its application in real estate brokerage and related fields. Course is applicable toward the educational requirements for broker’s license and real estate salesperson’s license. 0511.00

60 Real Estate Finance (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Real Estate 10.  
Transfer Credit: CSU.  
Analysis of real property financing. Topics include: primary and secondary sources of real estate loans, mathematics and legal aspects of finance, role of government agencies, mortgage insurance and interest rates, credit reporting, real estate appraisal, and taxation. Course is applicable toward the educational requirements for broker’s license and real estate salesperson’s license. 0511.00

70 Real Estate Appraisal (3)  
Class hours: 48-54 lecture.  
Prerequisite: Real Estate 10.  
Transfer Credit: CSU.  
Advisory: Current real estate license may substitute for Real Estate 10.  
Transfer Credit: CSU.  
Introductory course covering the purposes of appraisals, the appraisal process and approaches, and the methods and techniques used to determine the value of various types of property, with emphasis on the single-family residence. Course is applicable toward the educational requirements for broker’s license and real estate sales-person’s license. 0511.00

86 Real Estate Property Management (3)  
Class hours: 48-54 lecture.  
Prerequisite: Real Estate 10.  
Transfer Credit: CSU.  
Introduction to management of real estate. Identification and analysis of functions, responsibilities, legal rights, liabilities, and leasing instruments. Study of relationships between owners and tenants, or managers and tenants. Course is elective for the California sales or broker’s license. 0511.00

92A-H Special Topics: Real Estate (.5 , 1, 1.5, 2, 3, 4, 5, or 6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Transfer Credit: CSU.  
Special-interest lecture course for students who wish further exploration in specific areas of real estate. Topics vary and are determined by the individual instructor; see schedule of classes for current term emphases. May be taken 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. 0511.00

472 Advanced Real Estate Appraisal (3)  
Class hours: 48-54 lecture.  
Prerequisite: Real Estate 70.  
Transfer Credit: CSU.  
Appraisal of residential apartment buildings, small office buildings, shopping centers, and industrial buildings. Course meets California real estate broker license requirements, and is accepted as 54 hours toward Office of Real Estate Appraisers (OREA) certifi cate/residential/certificate-general appraisal requirements. 0511.00
475 Real Estate Escrow I (3)  
Class hours: 48-54 lecture.  
Prerequisite: Real Estate 10  
Case method study of escrow procedures, including  
the actual processing of sale escrow. Topics include:  
encumbrances, interest adjustments, reconveyance,  
mortgages, insurance, taxes, fees, unique vocabulary,  
title policy types, drawing of documents, and other  
processing details pertinent to the handling of an  
escrow from inception to closing. Course applies  
towards the education requirements for broker's and  
real estate salesperson's licenses.  0511.10

SCIENCE (SCI)

580 Introduction to Science (1)  
Course is offered only on a credit/no credit basis.  
Class hours: 48-54 laboratory.  
Not Degree Applicable  
Introduction to some fundamental scientific concepts.  
Designed to improve performance in science courses.  
Eight hour field trip required in addition to normal  
class meetings.  1901.00

SOCIAL SCIENCE (SCSCI)

(SEE ALSO COURSES UNDER ANTHROPOLOGY,  
GERONTOLOGY, HISTORY, PHILOSOPHY, POLITICAL  
SCIENCE, PSYCHOLOGY AND SOCIOLOGY)

10 Statistics for Social Science (4)  
Class hours: 48-64 lecture; 48-54 laboratory.  
Prerequisite: Mathematics 4 or 25.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
(CAN PSY 6)  
Survey of methods used to analyze and interpret data  
generated by scientific investigation. Purpose and  
application of statistics, frequency distributions and  
graphing, central tendency, variability, percentiles,  
standard scores, the normal distribution, regression,  
correlation, probability, hypothesis testing, simple  
and two-factor analysis of variance, and non-parametric  
techniques. Use of computerized statistical packages  
(e.g. SPSS).  2201.00

11 Computer Applications for the Social Sciences (3)  
Class hours: 48-54 lecture.  
Advisory: Basic word processing knowledge is desirable.  
Transfer Credit: CSU:  
A basic understanding of microcomputer functions  
used in the Social and Behavioral Sciences. Students  
will prepare academic and research papers according  
to Social Science standards, and learn to access spe- 
cialized resources on the Internet. Introduction to  
Social Science applications for data analysis; social  
survey software.  2201.00

13 Introduction to Social Work (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC:  
Comprehensive exploration of the scope of social  
work. Historical overview of social welfare as an insti- 
tutional response to social needs. Analysis of current  
trends and future possibilities.  2104.00

15 Introduction to Peer Counseling (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU:  
Advisory: Completion of one or more behavioral sci- 
ence 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 infor- 
mation, as well as an evaluation of sex research. Lec- 
tures are supplemented by class discussion, video  
presentations, demonstrations.  2201.00

17 Human Sexuality (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of one or more behavioral sci- 
ence courses.  
Transfer Credit: CSU; UC:  
Perspectives on death: cross-cultural and historical.  
Death in American society. Health care systems,  
including the hospital and the dying patient and hos- 
pice. Death and the process of dying. Bioethics. Dying  
in a technological age. Euthanasia, suicide, funerals,  
grief, and bereavement. The law and death. Living  
wills, organ donation and autopsies. Life after death:  
old and new meanings. An interdisciplinary course  
with emphasis in the disciplines of sociology, psychol- 
ogy, and philosophy.  2201.00

22 Dying and Death (3)  
(Also also Gerontology 22)  
Class hours: 48-54 lecture.  
Advisory: Completion of any introductory courses in  
psychology, sociology, anthropology, religion, or phi- 
losophy.  
Transfer Credit: CSU; UC:  
Perspectives on death: cross-cultural and historical.  
Death in American society. Health care systems,  
including the hospital and the dying patient and hos- 
pice. Death and the process of dying. Bioethics. Dying  
in a technological age. Euthanasia, suicide, funerals,  
grief, and bereavement. The law and death. Living  
wills, organ donation and autopsies. Life after death:  
old and new meanings. An interdisciplinary course  
with emphasis in the disciplines of sociology, psychol- 
ogy, and philosophy.  2201.00

25 Introduction to Chicana/Latino Studies (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC:  
Multidisciplinary study of Chicano/Latino communi- 
ties examining race, ethnicity, gender and sexuali- 
ety, history, politics, culture, migration, literature, and  
the arts.  2203.00

40 Retrospective on the 20th Century:  
World War II (3)  
(Also also History 40)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC:  
World War II from the perspective of various view- 
points relative to the war's impact on both not limited to  
the following: history, sociology, philosophy, litera- 
ture, the arts, business/technology, psychology, sci- 
ce, political science, religion, economics, and  
sports. Faculty from different disciplines will present  
materials relative to their expertise.  2201.00

90 Seminar: Social Science (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
Advisory: 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  
twice.  2201.00

92A-H Special Topics: Social Science (.5-6)  
Class hours: 16-18 hours/term lecture for each unit of  
credit.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.

SOCIOLGY (SOC)

(SEE ALSO SOCIAL SCIENCE)

10 Introduction to Sociology (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN SOC 2)  
Characteristics of social life, processes of interaction,  
consequences of group membership, structures of the  
institutions of modern society, factors that perpetuate  
social inequality, and conditions affecting social  
change and globalization. May be offered as an Honors  
course.  2208.00

11 Popular Culture (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Sociology 10.  
Transfer Credit: CSU.  
Analyzes the role of popular culture as a site of con- 
temporary social practices and cultural politics. Con- 
siders the institutional organization and production of  
popular culture, its meanings and symbols, and its role  
in shaping and reflecting social attitudes, interac- 
tions, and behaviors.  2208.00

14 Sociology of Gender (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Sociology 10.  
Transfer Credit: CSU.  
Role and status of women and men in society, examin- 
ing issues of gender equity and recent changes that  
affect the family, education, the economy, the law, and  
other institutions. Historical and cross-cultural infor- 
mation. Myths about gender differences and gender  
inequality.  2208.00
15 Ethnic and Race Relations: U.S. and Global Perspectives (3)
Class hours: 48-54 lecture.
Advisory: Completion of Sociology 10.
Transfer Credit: CSU; UC.
Application of major sociological theories and concepts to the examination of ethnic and race relations in the United States and the world, with detailed focus on the four major U.S. ethnic groups: African-American, Latino-American, Asian-American, and Native American. Scrutiny of historical, socioeconomic, and gender influence on inter-group relations. Analysis of the symbiotic nature between social institutions and dominant-subordinate ethnic/race relations. Significance of contemporary multiculturalism, and its relation to racism, ethnocentrism, and sexism. 2208.00

16 Marriage, Family and Relationships (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU, UC.
(CAN FCS 12)
Cross-cultural, social class, and ethnic variation in marriages, families, and relationships. Topics include: romantic love, mate selection, gender roles, communication, sexuality, parenting, divorce, single-parent families, remarriage, cohabitation, and abusive relationships. Emphasis on the application of theories, research, and social factors. 2208.00

18 Sociology of Aging (3)
Also available as Gerontology (3)
Class hours: 48-54 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Social, cultural, and policy issues for an aging society. Diversity in the experience of aging: cultural, economic, gender, and ethnic differences. Age and aging as social constructs. Life-long age status and role expectations. Society’s response to an increasingly aged population. May be offered as an Honors course. 2208.00

19 Sociology of Deviance (3)
Class hours: 48-54 lecture.
Advisory: Completion of Sociology 10.
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. 2208.00

70 Social Problems (3)
Class hours: 48-54 lecture.
Prerequisite: Sociology 10.
Transfer Credit: CSU; UC.
(CAN SOC 4)
Social problems in modern industrial societies. Discussion of the techniques of social problems research. Sexual deviance, alcohol and drug abuse, crime, poverty, and sexism. 2208.00

90A Sociology Honors Seminar (1)
Class hours: 16-18 lecture.
Transfer Credit: CSU; UC credit limitations.
See counselor.
Honors component for Sociology. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 2208.00

92A-H Special Topics: Sociology (.5-.6)
Class hours: 16-18 hours/term lecture for each unit of credit.
Transfer Credit: CSU; UC credit limitations.
See counselor.

SPANISH (SPAN)
1 Elementary Spanish (4)
Class hours: 64-72 lecture.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 2) (CAN SPAN SEQ A = SPAN 1 + 2)
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. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. This course corresponds to the first year of high school Spanish. Spanish 1 is not recommended for heritage (native) speakers of Spanish. 1105.00

1A Elementary Spanish (2)
Class hours: 32-36 lecture.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 2) (CAN SPAN SEQ A = SPAN 1A + SPAN 1B)
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. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Spanish 1A is equivalent to the first half of Spanish 1; students must successfully complete both Spanish 1A and Spanish 1B in order to receive CSU General Education credit for Spanish 1. Spanish 1A is not recommended for heritage (native) speakers of Spanish. 1105.00

1B Elementary Spanish (2)
Class hours: 32-36 lecture.
Prerequisite: Spanish 1A.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 2A + SPAN 1B)
Continuous 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. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Spanish 2A is equivalent to the first half of Spanish 2; students must successfully complete both Spanish 2A and Spanish 2B in order to receive CSU General Education credit for Spanish 2. Spanish 2A is not recommended for heritage (native) speakers of Spanish. 1105.00

1SS Elementary Spanish for Spanish Speakers (4)
Class hours: 64-72 lecture.
Advisory: Ability to communicate in Spanish.
Transfer Credit: CSU; UC limitations.
Designed to address the needs and strengths of Spanish-speaking students who have little or no formal language training in Spanish. Focuses on the development of correct grammar, correction of speech habits, and the expansion of vocabulary skills through reading and writing. Emphasis on Hispanic Culture through reading of various texts. Course is conducted in Spanish. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 1105.00

2 Elementary Spanish (4)
Class hours: 64-72 lecture.
Prerequisite: Spanish 1, or Spanish 1A and 1B, or one year of high school Spanish.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 4) (CAN SPAN SEQ A = SPAN 1 + 2)
Continued 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. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Spanish 2 is not recommended for heritage (native) speakers of Spanish. 1105.00

2A Elementary Spanish (2)
Class hours: 32-36 lecture.
Prerequisite: Spanish 1, or Spanish 1A and 1B, or one year of high school Spanish.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 4) (CAN SPAN SEQ A = SPAN 1 + 2)
Continued 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. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Spanish 2A is equivalent to the first half of Spanish 2; students must successfully complete both Spanish 2A and Spanish 2B in order to receive CSU General Education credit for Spanish 2. Spanish 2A is not recommended for heritage (native) speakers of Spanish. 1105.00

2B Elementary Spanish (2)
Class hours: 32-36 lecture.
Prerequisite: Spanish 2A.
Transfer Credit: CSU; UC credit limitations.
(CAN SPAN 4) (CAN SPAN SEQ A = SPAN 1 + 2)
Continued 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 additional aspects of the life and culture of the Spanish-speaking peoples. Materials demonstrating cultural and historic aspects further supplement the textbook and are the basis for additional oral practice. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. Spanish 2B is equivalent to the second half of Spanish 2; students must successfully complete both Spanish 2A and Spanish 2B in order to receive CSU General Education credit for Spanish 2. Spanish 2B is not recommended for heritage (native) speakers of Spanish. 1105.00

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Spanish 2. Spanish 2B is not recommended for heritage (native) speakers of Spanish. 1105.00

2SS Elementary Spanish for Spanish Speakers (4)  
Class hours: 64-72 lecture.  
Prerequisite: Spanish 1SS.  
Transfer Credit: CSU; UC credit limitations.  
Designed to further address the needs and strengths of Spanish-speaking students who have little formal language training in Spanish. Continues the development of formal grammar and writing skills, the distinction between standard and vernacular usages, and the development of an advanced vocabulary through reading and writing. Reading and discussion will have an emphasis in Hispanic culture. Course is conducted in Spanish. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 1105.00

3 Intermediate Spanish (4)  
Class hours: 64-72 lecture.  
Prerequisite: Spanish 2, or Spanish 2A and 2B, or two years of high school Spanish.  
Transfer Credit: CSU; UC.  
(CAN SPAN 8)  
Reviews basic grammar and introduces more elaborate structures of syntax and grammar, with emphasis on composition, reading, and discussion in Spanish. Studying texts of moderate difficulty in the culture, history, and literature of the Hispanic world. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 1105.00

4 Intermediate Spanish (4)  
Class hours: 64-72 lecture.  
Prerequisite: Spanish 3.  
Transfer Credit: CSU; UC.  
Continued review of basic grammar and introduction to more elaborate structures of syntax and grammar, with emphasis on composition, reading, and discussion in Spanish. Studying texts of moderate difficulty in the culture, history, and literature of the Hispanic world. Fourteen hours of supplemental instruction in a Success Center that supports this course is required. 1105.00

7 Survey of Hispanic Literature: 1100-1700 (3)  
Class hours: 48-54 lecture.  
Prerequisite: Spanish 2 or 2SS.  
Transfer Credit: CSU; UC.  
Chronological survey, conducted in Spanish, of the history and development of Spanish and Spanish-American literature, from 1100-1700. Continuation of a comprehensive study of the Spanish language that prepares students for upper-division language courses. Reading selections introduce aspects of the life and culture of the Spanish-speaking peoples. 1105.00

8 Survey of Hispanic Literature: 1700-Present (3)  
Class hours: 48-54 lecture.  
Prerequisite: Spanish 2 or 2SS.  
Transfer Credit: CSU; UC.  
Chronological survey, conducted in Spanish, of the history and development of Spanish and Spanish-American literature, from 1700 to the present. Continuation of a comprehensive study of the Spanish language that prepares students for upper-division language courses. Reading selections introduce aspects of the life and culture of the Spanish-speaking peoples. 1105.00

15 Elementary Spanish Conversation (2)  
Class hours: 32-36 lecture.  
Prerequisite: Spanish 1 or 1B.  
Transfer Credit: CSU.  
Practice in oral and aural Spanish through monologs and dialogs, stressing correct speech patterns and idiomatic expressions. Subjects for extemporaneous conversations based on everyday situations and cultural events. Spanish 15 is not recommended for heritage (native) speakers of Spanish. May be taken twice. 1105.00

3 9A Spanish Honors Seminar (1)  
Class hours: 16-18 lecture.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
Honors component for Spanish. Topics of interest are chosen by the instructor and students, and are presented in a seminar format. Prerequisites and/or corequisites are required. May be taken four times with change in topic emphasis. 1105.00

9A-H Special Topics: Spanish (.5-6)  
Class hours: 16-18 hours/term lecture for each unit of credit.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
Special interest lecture class for students who seek further development in specific areas of Spanish literature and extended knowledge of the language and culture. Variety of topics offered with particular emphasis determined by the instructor; see schedule of classes for current term emphases. May be taken four times, however no single-subject, special-interest, course may be repeated. May require corequisites and/or prerequisites based on the content of the course. 1105.00

STASTISTICS (STAT)  
10 Elementary Statistics (4)  
Class hours: 64-72 lecture.  
Prerequisite: Mathematics 25.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
(CAN STAT 2)  
Introduction to descriptive and inferential statistics with problem sets selected from the natural and behavioral sciences, business, and economics. Topics include: frequency distribution; measures of variation and central tendency; elementary probability theory; discrete and continuous random variables; binomial, normal, and t-distribution; interval estimations of population parameters; hypothesis testing; analysis of variance; chi square analysis; and linear regression and correlation. A TI-83 or 84 graphing calculator is required. May be offered as an Honors course. 1701.00

THEATRE ARTS (THEATRE)  
1 Introduction to Theatre (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN DRAM 18)  
Introduction to the world of theatre with emphasis on the dramatic experience, the types of drama, contemporary theatre, the physical theatre, the roles of the director and the actor, the technical theatre, and criticism and evaluation of theatre. 1007.00

2 Stage Movement (3)  
(available also as Dance 2)  
Class hours: 48-54 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

4 Development of the Theatre I (3) (Cx)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Study of the Western theatre from its beginning in Greece through Elizabethan drama. Emphasis on historical, philosophical, and sociological influences on development of the theatre. Plays representative of each period studied are read and discussed. 1007.00

5 Development of the Theatre II (3) (Cx)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
Study of the Western theatre from the seventeenth through the twentieth centuries. Emphasis on historical, philosophical, and sociological influences on development of the theatre. Plays representative of each period are read and discussed. 1007.00

10 Beginning Acting (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN DRAM 8)  
Theory of acting and acting techniques with emphasis on the ability to express emotion and character through the effective use of voice, movement and script analysis. May be taken twice. 1007.00

12 Intermediate Acting (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 10 and concurrent enrollment in Theatre Arts 30 or 40.  
Transfer Credit: CSU; UC.  
(CAN DRAM 22)  
In depth application of the techniques explored in beginning acting, with emphasis on characterization and scene study. May be taken twice. 1007.00

14 Stylized Acting (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 10.  
Transfer Credit: CSU; UC.  
Advanced acting techniques necessary for drama of various types: stylized, classic and modern. Some work on dialects as needed for specific scenes. 1007.00
16 Principles of Costume Design and Production (3)  
(Also available as Fashion Design 16)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
Study of performance techniques in musical theatre.  
Emphasis on the integration of acting, singing, and  
movement techniques through a combination of group  
scenes and solo works. May be taken four times.  
1006.00

18 Seminar in Television Production:  
Acting Techniques (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 10 and/or  
considerable theatre or film background.  
Transfer Credit: CSU; UC.  
Theory and application of costume design and con-  
struction for theatre. Research, principles of design,  
and construction techniques. Members of the class  
construkt all costumes necessary for the semester's  
theatrical production. May be taken three times.  
1006.00

20 Directing for the Stage I (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 12 and Theatre  
Arts 30, 40, 50, 51 or 56.  
Transfer Credit: CSU; UC.  
For advanced students who wish to study acting from  
a directing standpoint. Prepares the student to begin  
directing.  
1007.00

21 Directing for the Stage II (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 20 and Theatre  
Arts 30, 40, 50, 51 or 56.  
Transfer Credit: CSU; UC.  
For advanced students who wish to study acting from  
a directing standpoint. Student directs a production  
for public presentation.  
1007.00

30 Technical Theatre (3)  
Class hours: 32-36 lecture and 48-54 laboratory.  
Transfer Credit: CSU; UC.  
(CAN DRAM 12)  
The theory and practice of stagecraft including con-  
struction techniques, painting properties, rigging and  
lighting, sound, knowledge of tools and equipment,  
shop safety, and computer assisted set-lighting and  
sound design. May be taken four times.  
1006.00

32 Theatre Design - Lighting (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 30.  
Transfer Credit: CSU.  
The study of lighting design, including script anal-  
ysis, research, sketches, and critical analysis of  
theatrical design. Development of basic lighting  
design skills through practical projects that stress col-  
aboration, light and color manipulation, craft skills,  
and computer lighting CADD competency. Artistic  
quality and creativity are emphasized. May be taken  
twice.  
1006.00

34 Theatre Design - Scenography (3)  
Class hours: 48-54 lecture.  
Advisory: Completion of Theatre Arts 30.  
Transfer Credit: CSU.  
The study of costuming design, including script anal-  
ysis, research, sketches, and critical analysis of  
costume design. Development of basic costume design  
skills through practical projects that stress collab-  oration, research, color manipulation, and computer-assist-  
ed design techniques. May be taken twice.  
1006.00

35 Musical Theatre Performance (3)  
Class hours: 96-108 studio.  
Advisory: Completion of Theatre Arts 10.  
Transfer Credit: CSU; UC credit pending.  
The study of performance techniques in musical theatre.  
Emphasis on the integration of acting, singing, and  
movement techniques through a combination of group  
scenes and solo works. May be taken four times.  
1006.00

40 Stage Costuming (3)  
Class hours: 32-36 lecture and 48-54 laboratory.  
Transfer Credit: CSU; UC.  
The study of costuming design and construction for  
theatre. Research, principles of design, and con- 
struction techniques. Members of the class construct  
costumes necessary for the semester's theatrical  
production. May be taken three times.  
1006.00

42 Theatrical Makeup (3)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU; UC.  
(CAN DRAM 14)  
The study of the theory, design, and application of  
makeup for the theatre, including corrective, character,  
and non-realistic. Practical use of theatrical makeup  
materials for the various theatrical forms.  
1006.00

50 Main Stage Production Workshop I (3)  
Class hours: 144-162 laboratory.  
Transfer Credit: CSU; UC.  
Supervised practical experience in the preparation and  
performance of a theatrical production. Requires par-  
ticipation in one of the faculty-directed productions  
in either an acting or production role. May be taken  
four times.  
1006.00

51 Main Stage Production Workshop II (3)  
Class hours: 144-162 laboratory.  
Advisory: Completion of Theatre Arts 50.  
Transfer Credit: CSU; UC.  
A continuation of supervised practical experience in  
the preparation and performance of a theatrical pro- 
duction. Requires participation in one of the faculty-  
directed productions, in either an acting or a pro- 
duction role. May be taken four times.  
1006.00

54 Summer Repertory (3)  
Class hours: 144-162 laboratory.  
Transfer Credit: CSU; UC.  
All aspects of theatre production, including fundamen- 
tals 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 program for the public. Gives  
interested community adults, as well as regular col- 
lege students, an opportunity to participate in the  
drama program. May be taken four times.  
1006.00

56 Children’s Theatre (4) (Cx)  
Class hours: 48-54 lecture; 48-54 laboratory.  
Transfer Credit: CSU.  
Selection and presentation of a play for children at the  
early or junior level. May be taken four times.  
1006.00

60 Seminar: Acting (3)  
Class hours: 48-54 lecture.  
Limitation on Enrollment: Consent of instructor is  
required prior to registration.  
Transfer Credit: CSU; UC.  
Seminar for actors who have completed several acting  
courses 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.  
1007.00

64 History of Costume (3) (Cx)  
(Also available as Art 64)  
Class hours: 48-54 lecture.  
Transfer Credit: CSU.  
The study of evolution of costume from primitive society  
to the twenty-first century. Evaluation of aesthetic,  
technical, sociological, and psychological factors in  
costume and their relation to modern dress. Students  
may receive credit only for both Theatre 64 and Art 64.  
1007.00

92A-H Special Topics: Theatre Arts (.5-6)  
Class hours: 16-18 hours/term for each unit of credit.  
Transfer Credit: CSU; UC credit limitations.  
Special interest lecture course for students who wish  
their further exploration in specific areas of theatre,  
radio, television, film, or dance. Topics vary and are  
determined by the instructor; see the schedule of  
classes for current term emphases. May be taken four  
times regardless of the unit combination; however, no  
single-subject, special interest class may be repeated.  
May require prerequisites and/or corequisites based  
upon the content of the course.  
1007.00

92LA-H Special Topics Laboratory: Theatre Arts (.5-6)  
Class hours: 48-54 hours/term laboratory for each unit of  
credit.  
Transfer Credit: CSU; UC credit limitations.  
Special interest laboratory course for students who  
wish further exploration in specific areas of theatre.  
Topics vary and are determined by the instructor; see  
the schedule of classes for current term emphases.  
Topics vary and are determined by the instructor; see  
the schedule of classes for current term emphases.  
May be taken four times regardless of the unit combi- 
nation, however, no single-subject, special interest  
class may be repeated. May require prerequisites  
and/or corequisites based upon the content of the  
course.  
1007.00

98A, B, C Independent Study: Theatre Arts (1, 2, or 3)  
Limitation on Enrollment: Instructor signature is  
required for registration.  
Transfer Credit: CSU; UC credit limitations.  
See counselor.  
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. Students who participates in this  
project must have completed introductory courses  
or have shown a skill greater than that necessary for  
completion of the class offerings. The nature and  
extent of the project must be determined by the stu- 
dent and a member of the Theatre Arts staff before  
the student registers for the class, since the extent of  
the project determines the number of units allowed.  
May be taken twice, regardless of the unit combination.  
1007.00

427 Computer Aided Design for Set and Interior  
Design (3)  
(Also available as Interior Design 427)  
Class hours: 48-54 lecture.  
Advisory: Basic familiarity with Macintosh or Windows  
computers.  
Computer aided design using professional software,  
such as AutoCAD, Revit, Architectural Desktop, and  
ArchCAD. Floor plans, furniture layouts, elevations,  
lighting plans, 3-D perspectives, and renderings. Use  
of various printers and plotters. May be taken  
three times.  
1007.00

X-RAY  (SEE RADIOLOGIC TECHNOLOGY)  

ZOOLOGY  (SEE BIOLOGY)
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B.A., Ph.D., University of California, Riverside

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B.A., California State University, San Bernardino
M.A., Sonoma State University
Ed.D., University of La Verne

Karen Sanders
Assistant Dean, Student Services
B.A., California Baptist University, Riverside
M.A., University of Redlands

Lori Waite
Dean, Counseling and Matriculation
B.S., California Polytechnic State University, San Luis Obispo
M.S., San Diego State University
Ed.D., University of San Diego

Chris Willis
Dean, School of Business and Applied Technology
B.S., Youngstown State University, Ohio
M.A., San Jose State University

MANAGEMENT

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Executive Director, Human Resources
B.A., Loyola-Marymount University
M.A., California State University, Los Angeles

Cecilia Carrera
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Director, Marketing and Public Relations
A.A., Riverside Community College
B.A., California State Polytechnic University, Pomona
M.A., University of California, Fullerton

Eunice Clark
Director, Auxiliary Services
B.S., University of Arizona

Elizabeth Coria
Supervisor, Financial Aid
B.A., Whittier College
M.A., University of Redlands

Jenny Dannelley
Director, Transfer Center and International Student Programs
A.A., Chaffey College
B.S., California State Polytechnic University, Pomona
M.B.A., University of La Verne

Kathleen Dutton
Director, Economic Development/Community Education
B.A., M.S., California State University, San Bernardino

Kimberly Erickson
Director, Accounting Services
A.A., Mt. San Antonio College, Walnut
B.S., University of Redlands

James Fillpot
Director, Institutional Research
B.A., M.A., California State University, San Bernardino

Michael Fink
Director, Technical Services
B.A., M.B.A., California Baptist University

Monica Hernandez
Administrator, Safety and Risk Management
B.A., Pitzer College

Frank Juarez
Supervisor, Operations
A.A., Riverside Community College

Kim Masaicenas
Administrator, Payroll
B.S., California State Polytechnic University, Pomona

Birgit Monks
Director, Child Development Center
B.A., M.A., Pacific Oaks College

Susan Panattoni
Administrator, Personnel Services

Ciriaco Pinedo
Executive Director, Governmental Relations/Foundation
B.A., St. John’s Seminary College

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Supervisor, Lithography Services

David Ramirez
Director, Public Safety
B.S., University of La Verne
J.D., University of La Verne College of Law

Jeffrey Saito
Director, Purchasing
B.A., University of California, Los Angeles
J.D., University of San Diego, School of Law

Melanie Siddiqui
Director, Administrative Systems
B.A., Chaffey College
B.A., University of La Verne

Susan Stewart
Director, Student Activities
B.A., M.A., San Diego State University

Anita Undercoffer
Director, Budgeting Services
A.S., Chaffey College
B.A., M.B.A., California State University, San Bernardino

Katherine Willson
Director, Student Health Services
B.S.N., Anna Pacific University
M.S., Ph.D., California Coast University

FACULTY

Alexander, Monica F.
Associate Professor, Child Development
B.A., University of California, Los Angeles
M.A., Claremont Graduate School

Alger, Ardon H.
Professor, Interior Design
B.A., University of California, Los Angeles
M.A., University of California, Riverside

Algozer, Sharon A.
Professor, Interior Design
B.A., M.A., California State University, Fullerton

Alvarez, Jo Anna
Assistant Professor, Communication Studies
A.A., Mt. San Antonio Community College
B.A., M.A., California State University, Fullerton

Alves, Elmano
Professor, Industrial Electricity
A.S., Chaffey College
B.S., University of Phoenix
M.B.A., University of Phoenix

Aranda, Patrick
Associate Professor, Music
B.A., California State University, Los Angeles
M.M., California State University, Fullerton

Arciniega, Rachel
Associate Professor, Nursing
B.A., Chaffey College
B.S.N., M.S.N., California State University, Dominguez Hills

Arner, Timothy D.
Professor, Math Success Center
B.A., University of California, Santa Barbara
M.A., California State University, San Bernardino

Arouze, Gary W.
Professor, Philosophy
B.A., University of California, Riverside
M.A., California State University, Los Angeles

Ausubel, Jonathan
Professor, English
B.A., M.A., University of Toronto, Canada
Ph.D., University of Delaware
Avila-Teeguarden, Emily
Assistant Professor, Biological Science
B.A., New Mexico State University
Ph.D., Michigan State University

Bacus, Catherine
Assistant Professor, Gerontology
B.S., M.S., University of La Verne

Baiz, Robert
Professor, Physical Education
B.A., California State University, Fullerton
M.A., Azusa Pacific University

Bartell, Susan
Associate Professor, Dental Assisting
A.A., San Jose City College
B.V.E., California State University, San Bernardino

Bartlett, Angela
Assistant Professor, English
B.A., San Francisco State University
M.F.A., Columbia University, New York

Baty, Russell
Associate Professor, Aeronautics
A.A., Chaffey College
B.S., Embry-Riddle Aeronautical University, Florida

Best, Cecilia T.
Associate Professor, Multidisciplinary Center
B.A., Wright State University, Ohio
M.A., California State University, San Bernardino

Boboye, Jackie
Assistant Professor, Counseling
B.A., M.A., California State University, San Bernardino

Boyd, Marie
Associate Professor, Reference Librarian
B.A., Merrimack College
M.S., University of Southern California

Braxton, David
Associate Professor, Computer Information Systems
A.A., Victor Valley College
B.A., San Diego State University
M.A., California State University, San Bernardino

Brewer-Calvillo, Judy
Professor, Child Development
B.A., California State University, Los Angeles
M.S., University of La Verne

Brindell, Kathleen
Professor, History
B.A., Scripps College
M.A., California State University, Fullerton

Brouwer, Jeffrey
Associate Professor, Mathematics
B.A., California State University, San Marcos
M.A., University of California, Santa Barbara

Brown, Baron
Associate Professor, Administration of Justice
B.S., California State University, Dominguez Hills
M.P.A., University of La Verne

Brusselle, Thierry
Associate Professor, Business and Business Management
B.S., M.B.A., California State Polytechnic University, Pomona

Burk-Herrick, Angela
Assistant Professor, Biological Science
B.A., University of California, Santa Cruz
Ph.D., University of California, Riverside

Burks, Sidney
Associate Professor, Automotive Technology
B.A., San Diego State College
M.A., San Diego State University

Burruel, Misty
Assistant Professor, Art
M.F.A., Claremont Graduate University
B.A., California State University, San Bernardino
A.A., Victor Valley College

Calebotta, Stephen
Assistant Professor, English
B.A., University of California, Los Angeles
M.A., California State University, Los Angeles

Cameron, Kevin
Associate Professor, Political Science
B.A., California State University, San Jose
M.A., San Francisco State University
Ph.D., New York University, Albany

Carlson, Robert A.
Professor, Autobody Repair
Community College Instructor Credential

Carlton, Robert G.
Professor, History
B.A., University of Santa Clara
M.A., Claremont Graduate School

Carrick, William E.
Professor, Resource Specialist, Disability Programs and Services
B.A., M.A., San Jose State University
M.A., California State University, Dominguez Hills

Carter, Monica L.
Associate Professor, Political Science
B.A., California State University, Dominguez Hills
M.A., Claremont Graduate School

Cheattle, Medina
Professor, Physics
B.A., University of California, Los Angeles
M.S., San Jose State University

Chen, Abel
Assistant Professor, Business Administration/Business Law
B.A., California State University, Northridge
J.D., Whittier College School of Law

Child, Beth
Assistant Professor, Biological Science
B.S., M.S., University of California, Riverside

Clarke, Jr., Orville
Professor, Art History
B.A., University of California, Los Angeles
M.A., California State University, Fullerton

Clay, Sandra
Associate Professor, Nursing
B.S., M.S.N., University of Phoenix

Cobos, Rose A.
Professor, Biological Sciences
A.B., University of California, Santa Barbara
M.S., California State University, Fullerton

Collins, Sandra
Associate Professor, Biological Science
B.S., M.S., California State Polytechnic University, Pomona

Colondres, Donna
Professor, Counseling
A.A., El Camino College
B.A., M.A., California State University, Dominguez Hills
Ph.D., Pepperdine University

Connelly, Sean
Associate Professor, English
B.A., University of California, Santa Barbara
M.A., University of California, Riverside

Cosand, Diana
Associate Professor, Biological Science
B.S., M.S., California State University, Fullerton

Cox, Beverly
Associate Professor, Health Science Computer Laboratory
B.S., M.A., California State Polytechnic University, Pomona

Creasy Valdez, Dorothea E.
Professor, Counseling
A.B., M.S., San Diego State University

Creele, Gregory J.
Associate Professor, Multidisciplinary Center
B.A., M.A., California State Polytechnic University, Pomona

Crow, Leonard
Associate Professor, Mathematics
B.S., California State Polytechnic University, San Luis Obispo
M.S., California State Polytechnic University, Pomona
Ph.D., Argon University

Cruz, Asiris
Associate Professor, Chicano History
B.A., M.A., Ph.D., University of California, Riverside

Decker, Catherine
Professor, English
B.A., LaSalle University
M.A., Ph.D., University of Rochester, New York

deDobay, Thomas R.
Professor, Music
B.A., University of Wisconsin
M.S., Indiana University
Ph.D., University of Southern California

Delgado, Ruth
Assistant Professor, Counseling
B.A., Citrus College, Claremont
M.A., University of La Verne

DeRose, Nicole
Associate Professor, Biological Science
B.S., M.S., California State University, San Bernardino

Deschamps, Michael
Associate Professor, Accounting
B.S., University of San Diego
M.S., San Diego State University

Des Lauriers, Dale A.
Professor, Biological Sciences
B.A., California State University, Fullerton
M.A., University of California, Riverside

De Villers, Linda
Professor, Psychology
B.A., University of Colorado
M.A., California State University, Sacramento
Ph.D., University of Windsor, Canada

Diaz, Ricardo
Professor, Counseling
B.A., California State University, Northridge
M.S., California State University, Los Angeles

Dinielli, Michael
Professor, English
B.A., University of Connecticut
M.A., California State University, Long Beach

Dowd, Michelle
Associate Professor, English
B.A., Pitzer College
M.A., University of Colorado

Duno, Douglas
Professor, Spanish
B.A., California State University, Fullerton
M.A., Ph.D., University of California, Riverside

Dunwoody, Verajean
Professor, Psychology
B.A., M.A., California State College, San Bernardino

Dutton, Andrea
Professor, Radiologic Technology
Community College Instructor Credential
B.V.E., M.Ed., California State University, San Bernardino
Registered Radiologic Technologist,
American Registry
Certified Radiologic Technologist,
State of California

Eckvahl, Shelley
Associate Professor, Nursing
A.S., Rio Hondo College
B.S.N., University of Phoenix
M.S.N., University of Phoenix

Eisberg, Joann
Associate Professor, Astronomy
A.B., Harvard University
M.Phil., Cambridge University
Ph.D., Harvard University

Eldson, Rodney
Professor, Mathematics
A.A., Napa Valley College
B.A., University of California, Berkeley
M.S., University of California, Davis

Encinas, Karen
Professor, Fashion and Costume Design
M.A., California State University, Long Beach

Erkebaev, E. “Alec”
Associate Professor, Mathematics
B.S., Leningrad Polytechnic Institute
Ph.D., Moscow University of People’s Friendship

Estes, Benjamin E.
Professor, English
B.A., M.A., University of Texas, El Paso

Chaffey College
Hagin, Dianne M.  
Assistant Professor, Nursing  
B.S., M.S., California State University, Dominguez Hills

Hanna, Rachel  
Assistant Professor, Spanish  
B.A., Indiana University  
M.A., University of California, Los Angeles

Hardie, Sandra  
Professor, Child Development  
B.A., University of California, Irvine  
M.A., California State University, Los Angeles

Harlow, Jeff  
Associate Professor, Physical Education  
B.S., M.Ed., Azusa Pacific University

Havenhill, Christa  
Associate Professor, Theatre Arts  
A.A., Fresno City College  
B.A., California State University, Fresno  
M.F.A., San Diego State University

Hegeman, Tracy C.  
Associate Professor, Computer Information Systems  
B.S., M.B.A., California State Polytechnic University, Pomona

Helfand, Terri E.  
Professor, Computer Information Systems  
B.S., M.A., California State University, Los Angeles

Henry, Annette  
Associate Professor, Physical Education  
B.A., M.A., California State University, Chico

Herman, Susan  
Professor, Nursing  
B.S.N., Lewis University  
M.S., Azusa Pacific University

Hernández, Joe D.  
Professor, Counseling  
B.A., M.A., LaVerne College

Hindman, Barbara  
Professor, Nursing  
B.S.N., University of Nebraska  
M.N., University of Washington

Hines-Tinsley, Candice  
Associate Professor, Nutrition and Food  
B.S., M.A., California State University, Long Beach

Hodge, Cheryl R.  
Associate Professor, Nursing  
A.S., Riverside Community College  
B.S., University of Phoenix

Hodge, Deckard  
Associate Professor, English  
B.A., University of California, Los Angeles  
M.A., Ph.D., University of California, Riverside

Hollenbeck, Charles L.  
Professor, Physics  
B.A., University of California, Los Angeles  
M.A., University of Southern California

Hope, Laura  
Professor, English  
B.A., M.A., California State University, San Bernardino

Hultgren, Larry G.  
Associate Professor, Aeronautics  
A.S., Chaffey College  
B.S., M.S., Embry-Riddle Aeronautical University, Florida

Hunter, Stanton  
Associate Professor, Art/Ceramics  
B.A., Eckerd College, Ft. Lauderdale  
M.F.A., University of Southern California

Hutte, Carol  
Assistant Professor, Reference Librarian  
B.A., University of California, Santa Barbara  
M.S., California State University, San Jose

Ikeda, Robin  
Professor, Biological Sciences  
B.A., M.A., University of California, Riverside

Jacobo, Daniel  
Associate Professor, Broadcasting  
B.A., University of California, Riverside  
M.F.A., University of California, Los Angeles

Jacobson, Erik  
Associate Professor, Theatre Arts  
B.A., University of California, Santa Cruz  
M.A., California State University, Los Angeles

Jenkins, Michele  
Associate Professor, Dance  
B.S., Utah State University  
M.A., California State University, San Bernardino

Jenkins, Tamari L.  
Associate Professor, Spanish  
B.A., Pacific Union College, Angwin  
M.A., University of California, Riverside

Jenkins, Theodore A.  
Associate Professor, Mathematics  
B.A., University of Oregon  
M.A., Claremont Graduate School

Karet, Julia  
Professor, English as a Second Language  
B.A., University of Pennsylvania  
M.S.Ed., California State University, Fullerton  
Ph.D., Harvard School of Public Health  
M.S.W., University of California Berkeley

Karp, David  
Associate Professor, Business Administration/Business Law  
B.S., University of Illinois  
M.S., University of Wisconsin, Madison  
J.D., Loyola Law School

Kearney, Catherine  
Professor, Chemistry  
B.S., Rosary Hill College, Snyder, New York  
Ph.D., Boston College, Massachusetts

Kern, Daniel  
Assistant Professor, Philosophy  
B.A., University of Montana  
M.Div., Regent College  
M.A., Indiana University  
Ph.D., Marquette University

Kerr, James J.  
Associate Professor, Computer Information Systems, CISCO  
A.A., San Bernardino Valley College  
B.A., California State University, San Bernardino  
B.S., Chapman College

Ketchum, Renee  
Professor, Nursing  
ADN, R.N., Golden West College  
M.P.H., CNS, BSN, MSN, California State University, Long Beach

Khaw-Posthuma, Bonnie  
Associate Professor, English  
B.A., University of Hawaii  
M.A., Ph.D., Claremont Graduate School

Khou, Meng  
Associate Professor, Mathematics  
A.S., Mt. San Antonio College  
B.S., M.S., California State Polytechnic University

Koenigsher, Kenneth A.  
Professor, Psychology  
B.A., M.A., Ph.D., University of California, Riverside

Konovnitzine, Peter  
Associate Professor, Geography  
B.A., M.A., California State University, Los Angeles

LaMay, Julie  
Professor, English  
B.A., M.A., California State University, San Bernardino  
Ph.D., The Union Institute, Cincinnati

Lewis, Mark  
Professor, Multimedia/Digital Media  
B.A., San Francisco State University  
M.F.A., California Institute of the Arts

Lightner, Catherine  
Professor, Nursing  
A.A., Chaffey College  
B.S., M.S., Azusa Pacific University

Limón, Mercedes  
Associate Professor, Spanish  
B.A., M.A., California State University, Los Angeles  
Ph.D., University of California, Los Angeles

Linn-Watson, TerriAnn  
Professor, Radiologic Technology  
B.S., University of Redlands  
M.Ed., University of LaVerne  
Registered Radiologic Technologist, American Registry  
Certified Radiologic Technologist, States of California and Montana  
Registered Diagnostic Medical Sonographer, American Registry

Little, Jack  
Associate Professor, Aeronautics  
A.S., Chaffey College  
B.S., Embry-Riddle Aeronautical University

Lively, Christine  
Assistant Professor, American Sign Language  
B.A., M.A., Gallaudet University

Loonis, Daniel  
Professor, History  
B.A., California State University, San Bernardino  
M.A., California State University, Fullerton
Lowman, Judy Ann
Professor, Geology
B.S., Southern Illinois University
M.A., California State Polytechnic University, Pomona
M.S., California State University, Los Angeles

Lyman, Karen
Professor, Sociology
B.A., Humboldt State University, Arcata
M.A., California University, Riverside
Ph.D., University of Southern California, Los Angeles

MacDonald, Heather A.
Associate Professor, Nursing
B.S., California State University, Fullerton
B.S.N., Loma Linda University
M.S.N., California State University, Long Beach

Madden, Peggy A.
Professor, English
A.B., M.A., University of California, Santa Barbara

Magnelli, Irma
Associate Professor, Radiologic Technology
A.S., Chaffey College

Maleki, Wendy
Associate Professor, Nursing
A.S., Edison State Community College
B.S., Franklin University
M.S., Wright State University

Marcelle, Linda
Associate Professor, Child Development
B.S., M.S., University of La Verne

Marcus, Shelley
Assistant Professor, Librarian
B.A., University of Rochester
M.A., Rutgers University
M.A., Boston University
M.L.S., San Jose State University

Marino, Penny B.
Professor, Fashion Merchandising and Design
B.S., California State Polytechnic University, San Luis Obispo
M.A., California State University, Los Angeles

Martin, Woodford
Professor, Computer Information Systems
B.A., California Baptist College, Riverside
M.A., Pepperdine University

McCall, Arlene L.
Professor, Physical Education
B.S., California State University, Los Angeles
M.S., Washington State University, Pullman

McCabe, Carol
Associate Professor, Biological Science
B.S., California State University, Long Beach
Ph.D., University of California, Riverside

McMurry, Bret
Professor, Economics
B.A., University of California, Los Angeles
M.A., Ph.D., University of California, Riverside

Meyer, Marc
Assistant Professor, Anthropology
B.A., The City University of New York, Queens College
Ph.D., University of Pennsylvania

Miller, Cynde
Professor, Studio Art
B.F.A., California Institute of Arts
M.F.A., University of California, Irvine

Molina, Monica
Associate Professor, Counseling
B.A., California State Polytechnic University, Pomona
M.S., California State University, San Bernardino

Montgomery, Mary Ellen
Professor, Business and Office Technologies
B.S., Bloomsburg State College, Pennsylvania
M.S., California State Polytechnic University, Pomona

Mora, Maria
Assistant Professor, Counseling, EOPS
B.A., California State Polytechnic University, Pomona
M.S., California State University, San Bernardino

Mundy, Linda
Associate Professor, Dental Assisting
A.S., Citrus College
B.V.E., California State University, Long Beach

Navarette, D. Lynn
Associate Professor, Sociology
B.A., California State Polytechnic University, Pomona
M.A., California State University, Fullerton

Navarro, Carmen
Assistant Professor, Communication Studies
B.A., M.A., California State University, Los Angeles

Nazar, Robert
Associate Professor, English
B.A., M.A., California State University, Fullerton

Neece, Cheryl
Professor, Reading
B.A., Biola University
M.A., California State University, San Bernardino

Navarez, Hermelinda (Ami)
Assistant Professor, Counseling, EOPS
B.A., California State University, Long Beach
M.S., California State University, San Bernardino

Ngo, Boysie
Professor, Computer Information Systems
B.A., Lake Forest College, Illinois
M.A., Loyola University of Chicago
M.A., Claremont Graduate School

Nobile, Vincent
Professor, History
B.A., California State University, San Bernardino
Ph.D., University of California, Irvine

Oakdale, Joyce
Associate Professor, Chemistry
B.S., New York State University
B.S., Northeastern Illinois University
Ph.D., Loyola University, Illinois

Oduwole, Toks
Associate Professor, Counseling, EOPS
B.A., M.S., University of La Verne

Okura, Irene
Professor, Resource Specialist, Disability Programs and Services
B.A., University of California, Los Angeles
M.A., California State University, Los Angeles

Oliva, Victor R., Jr.
Professor, Counseling
B.A., M.S., California State University, Hayward

Olivera, Cathy D.
Professor, Resource Specialist, Disability Programs and Services
B.A., University of La Verne
M.A., California State University, San Bernardino

Olivera-LaVallee, Melanie
Associate Professor, Reading
B.A., M.A., University of La Verne

Osburn, J. “Bruce”
Associate Professor, Automotive Technology

Oswood, Joanne
Associate Professor, Business and Office Technologies
B.S., University of Florida
B.S., University of California, Los Angeles

Osgood, Joanne
Associate Professor, Business and Office Technologies
B.S., University of California, Riverside

Padgett, Lisa
Associate Professor, Mathematics
B.A., University of California, San Diego
M.A., California State University, Fullerton

Paplanus, Susan
Associate Professor, Nursing
B.S.N., University of Texas
M.S.N., California State University, Long Beach

Parker, Cynthia M.
Associate Professor, Economics
B.A., M.B.A., California State University, Long Beach

Pender, Karen L.
Professor, Mathematics
B.A., California State University, Long Beach
M.S., California State Polytechnic University, Pomona

Pennett, Kyle
Professor, English as a Second Language
B.A., M.S., California State University, Fullerton

Phipps-Smith, Charmaine
Assistant Professor, English as a Second Language
B.A., California State University, Stanislaus
M.A., California State Polytechnic University, Pomona

Piper, Candice
Assistant Professor, Vocational Nursing
A.S.N., Chaffey College

Pratt, Laurie
Associate Professor, Vocational Nursing
B.A., Azusa Pacific University
M.A., California State University, Fullerton

Preble, Kipp
Professor, Communication Studies
B.A., M.A., California State University, Northridge

Rainel, Janice C.
Professor, Art
B.A., University of Missouri
M.F.A., Claremont Graduate School

Reid, Patricia
Assistant Professor, African-American History
B.A., California State University, San Bernardino
M.A., University of Iowa

Requa, Marylee
Professor, Sociology
B.A., California State University, San Bernardino
M.A., University of California, San Diego

Rivas, Henry
Associate Professor, Correctional Science
B.A., M.A., California State University, Los Angeles

Roberts, Philip
Assistant Professor, Physical Education
B.S., Kansas State University
M.S., North West Missouri State University

Rodriguez, Juan A.
Professor, English as a Second Language
B.A., University of St. Thomas, Houston
M.A., Sam Houston State University
Ph.D., The Union for Experimenting College and Universities, Cincinnati, Ohio

Roebuck, Alan
Associate Professor, Mathematics
B.S., M.A., University of California, Los Angeles

Rose, Eva K.
Professor, Communication Studies
B.A., M.A., California State University, Fullerton

Ross, Mary Jane
Associate Professor, Multidisciplinary Center
B.A., M.A., Pepperdine University, Malibu

Rundquist, Robert
Assistant Professor, Interdisciplinary Writing Center
B.A., University of California, Berkeley
M.A., University of Southern California
Sadowski, Angela  
Associate Professor, Psychology  
B.A., M.A., California State University, Los Angeles

Scott, Wanda S.  
Associate Professor, Computer Information Systems  
B.S., University of Redlands  
M.S., University of Phoenix

Seol, Sara  
Associate Professor, Nursing Skills Lab  
B.S.N., M.S.N., California State University, Dominguez Hills

Serrano, Maria  
Associate Professor, Counseling  
A.S., Pasadena City College  
B.A., M.S., California State University, Los Angeles

Siedschlag, Steven B.  
Associate Professor, Computer Information Systems, Networking  
B.A., M.A., California State University, Northridge  
B.A., M.A., California State University, Fullerton

Silliman, Rachel  
Professor, English as a Second Language  
A.B., Silliman University, Philippines  
M.A., Ph.D., Claremont Graduate School

Smith, Sharlene  
Professor, Resource Specialist, Disability Programs and Services  
B.A., Andrews University  
M.S., Butler University

Snyder, Paula  
Associate Professor, Sociology  
B.A., University of California, Riverside  
M.A., California State University, San Bernardino  
Ph.D., Howard University, Washington D.C.

Spears, Bonnie  
Professor, English  
B.A., Purdue University  
M.A., Western Illinois University

Stanford, William E.  
Professor, Music  
B.M., University of Redlands  
M.A., California State University, Fullerton

Starr, Susan  
Professor, Counseling  
B.A., Westminster College  
M.A., Azusa Pacific College

Stetkevich, Orest  
Professor, Athletics, Disability Programs and Services  
M.A., Chapman College

Stratton, Sean  
Associate Professor, English  
B.A., M.A., California State University, Northridge

Swift, Daniel  
Associate Professor, Hotel/Food Service Management  
A.S., Boise State University  
B.S., Johnson and Wales University, Rhode Island  
M.Ed., University of Hawaii at Manoa

Syrop, Mitchell  
Professor, Multimedia  
B.F.A., Pratt Institute  
M.F.A., California Institute of the Arts

Ta, Tuyet  
Professor, Mathematics  
B.A., University of Saigon, Viet Nam  
B.S., M.S., California State Polytechnic University, Pomona

Tang, Pak  
Assistant Professor, Political Science  
B.A., University of California, Los Angeles  
M.A., University of Southern California

Tardiff, Michelle  
Professor, Business and Office Technologies  
A.S., Chaffey College

Tavakoli, Mohammad  
Professor, Mathematics  
M.S., M.A., M.S., California State University, Fullerton

Taylor, Sherman  
Associate Professor, Automotive Technology  
A.S., Chaffey College

Thomas, Vanessa  
Associate Professor, Business Administration  
B.A., University of Oregon  
M.B.A., University of Phoenix

Thompson, Teresa  
Assistant Professor, Accounting  
B.S., University of California, Riverside

Tirado, Victoria  
Associate Professor, Spanish  
B.A., M.A., California State University, Sacramento

Tjandra, Sariwan  
Associate Professor, Chemistry  
B.A., M.S., Southern Illinois University  
Ph.D., University of California, Riverside

Toister, Robert  
Professor, Mathematics  
B.S., Massachusetts Institute of Technology  
M.S., Ph.D., University of California, Riverside

Tom, Wesley W.  
Professor, Mathematics  
A.B., University of California, Berkeley  
M.A., San Francisco State University

Utsler, Melissa A.  
Assistant Professor, English  
B.A., M.A., California State University, Fullerton

Valdez, Daniel B.  
Associate Professor, Mathematics  
B.S., M.S., California State Polytechnic University, Pomona

Van Riper, Maggie  
Professor, Counseling  
M.A., Claremont Graduate School  
M.S., California State University, Fullerton  
Ph.D., Claremont Graduate School

Vitzelio, Tommie  
Assistant Professor, Multidisciplinary Center  
A.A., Riverside Community College  
B.A., M.A., California State University, Fullerton

Vizio, Margaret  
Professor, English  
B.A., Pittzer College, Pomona  
M.A., California State Polytechnic University, Pomona

Walker, Cindy M.  
Associate Professor, Language Success Center  
B.A., California State University, Northridge  
M.A., California State University, San Bernardino

Wall, Jacqueline  
Associate Professor, Computer Information Systems  
B.A., DePaul University  
M.B.A., University of Phoenix

Wardak, Mohammad  
Assistant Professor, Mathematics  
B.A., M.A., California State University, San Bernardino

Warger, Jane  
Associate Professor, Geology/Earth Science  
B.A., Vassar College  
M.A., Columbia University  
M.A., State University of New York

Watkins, Neil  
Associate Professor, English  
B.A., University of California, Irvine  
M.A., Ph.D., Claremont Graduate University

Weingartner, Judith  
Assistant Professor, Reading  
B.S., Central Connecticut State College  
M.A., Virginia Polytechnic Institute and State University

Williams, Charles  
Assistant Professor, English  
B.A., M.A., California State University, San Bernardino

Williamson, Teresa  
Associate Professor, Business and Office Technologies  
B.A., American Intercontinental University

Wilson, Katherine M.  
Associate Professor, Counseling  
A.A., Chaffey College  
B.A., University of California, Riverside  
M.A., California State University, San Bernardino

Witt, Robin  
Associate Professor, Mathematics  
B.S., California State Polytechnic University, San Luis Obispo  
M.S., California State Polytechnic University, Pomona

Woods, Darcel  
Associate Professor, Correctional Science  
B.A., California State University, Fullerton  
M.A., University of La Verne

Yazigi, Wafa  
Professor, Mathematics  
B.S., New Mexico State University  
M.A., Mankato State University  
M.S., University of Washington

Zmudka, Cathy  
Assistant Professor, Nursing  
A.A., A.S., San Bernardino Valley College

---

**Child Development Center**

Condon, L’Tanya  
A.A., Chaffey College

Gomez, Erin  
B.S., University of La Verne

Preston, Jean  
A.A., San Bernardino Valley College  
Certification in Gerontology, University of California, Riverside

Wasson, Sharon  
A.A., Chaffey College

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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.
### FACULTY EMERITUS

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<tr>
<th>Name</th>
<th>Title</th>
<th>Department</th>
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<td>Aeronautics</td>
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<td>Abbott, Anthony</td>
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<td>Counseling</td>
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<td>Adams, Herbert M., Jr.</td>
<td>基本技能、学习障碍</td>
<td>Biological Sciences</td>
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<td>Calhoun, Clarence C.</td>
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<td>Felsch, Fred O.</td>
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<td>Aeronautics, Student Advisor</td>
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<td>Reference Librarian</td>
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<td>Gibbens, Loretta</td>
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<td>English, English as a Second Language</td>
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<td>Gonzalez, Crispin Jr.</td>
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<td>Graham, Marian</td>
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<td>Greenlaw, Helen M.</td>
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<td>Greever, Margaret Q.</td>
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<td>Dean, School of Physical, Life, and Health Sciences</td>
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<td>Dean of Admissions and Records</td>
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<td>Hafiz, M. David</td>
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<td>Dean, Admissions, Records, and Counseling</td>
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<td>Harmon, Wesley L.</td>
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<td>Haven, David F.</td>
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<tr>
<td>Hemenway, Francis P.</td>
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<td>Interior Design, Home Economics</td>
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<td>Hernandez, Gene M.</td>
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<td>Autobody Repair</td>
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<td>Hicks, Charles</td>
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<tr>
<td>Higbee, R. Eugene</td>
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<td>Spanish, English</td>
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<td>Higgins, Julianne</td>
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<tr>
<td>Himaya, Divina C.</td>
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<td>Philosophy</td>
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<tr>
<td>Hinrichsen, Kenneth C.</td>
<td></td>
<td>President</td>
</tr>
<tr>
<td>Holley, Helen</td>
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<td>Health Services Specialist</td>
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<tr>
<td>Hollist, Lynn O.</td>
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<td>Dean, Community Services</td>
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<tr>
<td>Horsch, L.J.</td>
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<td>Social Science</td>
</tr>
<tr>
<td>Howard, Elaine</td>
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<td>Office Technology</td>
</tr>
</tbody>
</table>
Howard, Gilbert A.  
Real Estate

Hubert, Wayne  
Dean, Language Arts

Huenergardt, Myrna  
Health Services

Hyams, Maureen  
Vocational Nursing

Jaeger, Paul F.  
Physical Education

Jack, Clyde  
Counseling, Psychology

Jahr, Doris  
Nursing

Jaramillo, Luz  
English, Spanish

Jarman, Carol  
Certified Nursing Assistant

Johnson, Catherine E.  
Theatre Arts

Johnson, Eleanor  
Basic Skills, English

Johnson, Lawrence X.  
Aeronautics

Johnson, Mildred  
Mathematics

Jones, Volena  
English

Judd, Wallace C.  
Law Enforcement

Kellogg, Stephen J.  
Biological Sciences

Ketchum, Donald J.  
Data Processing

Kilien, Richard R.  
English

Kimbel, Kyle  
Home Economics

Koyle, Ronald  
Drafting

Kuhlmann, Bobbie L.  
Accounting

Lambert, Bonnie  
Accounting

Latham, Robert  
Political Science

Lawlor, Joseph P.  
Director, Instructional Services

Lober, Robert M.  
Astronomy, Mathematics

Lockwood, L. Gordon  
Radiologic Technology

Luebbers, Emma O.  
Business

Mahoney, Andree  
Art

Malone, Michael  
English

Martin, Gerald E.  
English, German

Martyns, Leonard L.  
Business

Mason, Jack M.  
Music

Mather, Leonard S.  
Counseling, Education

Mather, Wiley W.  
Social Science

Mays, R. Juanita  
Associate Degree Nursing

McAllister, Bernice L.  
Anthropology, Archaeology

McGee, John R., Jr.  
Correctional Science

McPherson, Kenneth W.  
Cooperative Education

Merchant, Harold E.  
Chemistry

Metwalli, MaryEllen B.  
History

Michie, Jack  
Assistant Superintendent, Institutional Development

Miller, Charles S.  
History

Miller, Fred  
Automotive Technology

Miller, Ralph H.  
Life Science

Milliken, Daniel B.  
President

Mitchell, Barbara J.  
History

Mossman, Shirley Nash  
Interior Design

Myers, Edward E.  
Anthropology, Biology, Physiology

Myers, Milton C.  
Counseling

Myers, Pauline  
Counseling

Nehlsen, Carol  
Business and Office Technologies

Newton, Ralph J. E.  
Business Education

Noble, Erna Smith  
Dental Assisting

Norman, Rosamond  
English

Normand, Thomas  
Counseling

Olson, Betty M.  
Physical Education

O’Neill, Maura  
Philosophy

O’Sullivan, R. Timothy  
English

Parratt, Lloyd P.  
Biological Science, Health Science

Payne, Clara  
English

Payne-Jones, Joanna P.  
Child Development

Peaker, Allis B.  
English

Personius, Darwin N.  
Aeronautics

Peters, Thomas  
Mathematics

Pierce, John W.  
Drafting, Engineering

Pitts, Billie P.  
Business Education

Pomppura, Sylvia  
Nursing

Porter, Ralph A.  
Dean, Educational Services

Punter, Sam C.  
Administration of Justice

Purkiss, William  
Communication Studies

Ratliff, Gena Vee  
Business

Reeder, George A.  
Dance

Reynolds, Joseph E.  
French, English

Richardson, Evelyn O.  
Nursing

Roberts, Myron  
English

Robinson, Mary V.  
Business Education

Robinson, W. Dario  
Lithography

Romero, Gloria D.  
English

Romero, Gloria  
Director, High School Relations

Rose, Bea  
Philosophy

Rose, Florence  
Psychology, Sociology

Ross, Harley  
Biological Science

Sayles, Carol L.  
Dean, School of Social and Behavioral Sciences

Schesser, Frankie L.  
Business

Schesser, Robert D.  
Business

Schildberg, Jean  
Computer Information Systems

Schindler, Ruth H.  
Allied Health Coordinator

Sellers, Herbert D.  
Electricity

Serra, John A.  
Blueprint Reading and Drafting

Seymour, John A.  
History

Shannon, Floyd E.  
Drafting, Engineering

Shannon, Joyce H.  
Music

Sharp, Dawn  
History

Shaw, Marilyn  
Physical Education

Sheats, Terry L.  
Aeronautic Technology

Sheppard, Charles A.  
Theatre Arts

Simpson, Jean B.  
Business

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Autobody Repair
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### Phone Book

(All numbers are area code 909)

**CHAFFEY COLLEGE** . . . . 987-1737 or 822-4484

**CAMPUS NUMBERS:**

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<td>Assessment/Orientation Appointments 652-6200</td>
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<td>Breeze, The (Student Newspaper)</td>
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<td>(Emergency - off campus) 652-6911</td>
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<td>Extended Opportunity Programs and Services</td>
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<td>Gateways to Teaching</td>
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<td>International Student Office</td>
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<td>Job Placement, Student Employment 652-6186</td>
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<td>Language Arts, School of</td>
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<td>Learning Development Center</td>
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<td>Museum Gallery</td>
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<td>Planetarium</td>
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<tr>
<td>Student Activities</td>
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<td>Student Government</td>
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<td>Theatre Box Office</td>
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<tr>
<td>Transfer Center</td>
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<td>Tutorial Center . see Multi-Disciplinary Centers</td>
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<td>Veterans Services</td>
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<td>Visual, Performing, and Communication Arts, School of</td>
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<td>Workforce Preparation</td>
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**SUBJECT AREA/DEPARTMENT NUMBERS:**

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**August 27 – December 21**

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**NOTE:** Starting dates are all different, please refer to Computing Service’s report in roll sheet packet regarding Daily Census, Short-Yem, or Positive Attendance Classes.

Weekend classes meet following Friday holidays and before Monday holidays unless specifically designated as a holiday on this calendar.

### 2007 – 2008 Academic Calendar

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### Calendar Notes

- **Institutional Flex Days. No classes held.**
- **Deadline to ADD full-term classes (4:30 p.m.).**
- **INSTRUCTION BEGINS**
- **Deadline to DROP full-term classes (4:00 p.m.).**
- **INSTRUCTION ENDS**
- **Final Examinations**
- **Commencement**
- **Priority Registration**
- **Late Registration**
- **Deadline to ADD full-term classes without a "W"**
- **Deadline to DROP full-term classes without a "W"**
- **Application Period**
- **Deadline to apply for credit by exam, graduation, certificates**
- **Refund Deadline**
- **Veterans Day Holiday**
- **Labor Day Holiday**
- **Washington’s Birthday Holiday**
- **Martin Luther King, Jr. Holiday**
- **Spring Break**
- **Cascade Day**
- **Fall Break**
- **Holiday Break**
- **Weekend classes meet following Friday holidays and before Monday holidays unless specifically designated as a holiday on this calendar.**

### Legend

- **Instruction Begins**
- **Semester Break**
- **Holidays**
- **Institutional Flex Days. No classes held.**
- **Final Examinations**
- **Commencement**
- **Faculty Lecture of the Year**

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