Chaffey College

Providing quality education since 1883

www.chaffey.edu

CATALOG
2012-2013

Chaffey College
Celebrating 130 YEARS

ACKNOWLEDGEMENTS
2012-2013 CATALOG
PRODUCTION STAFF

CONTENT

Laura Hope
Dean, School of Instructional Support

Deborah Reed
Catalog and Schedule Coordinator

Theresa Rees
Educational Program Assistant
Instructional Support

Maggie Van Riper and Amy Nevarez
Articulation Officers

CURRICULUM DEVELOPMENT

Marie Boyd
Curriculum Committee Chairperson

Melissa Moreno
Administrative Assistant, Curriculm Office

And the members of the 2011-2012
Chaffey College Curriculum Committee

Ardon Alger, Wanda Baker, Susan Bartell, Marie Boyd, Baron Brown, Angela Burk-Herrick, Misty Burruel, Jenny Dannelley, Michael Dinielli, Shelley Eckvahl, Karen Encinas, Robert Hadaway, Tracy Hegeman, Annette Henry, Laura Hope, Daniel Kern, Shelley Marcus, Melissa Moreno, Jeff Moser, Amy Nevarez, Charmaine Phipps, Deborah Reed, Sean Stratton, Maggie Van Riper, Tom Vitzelio, Robin Witt

INTERIOR PHOTOGRAPHY,
LAYOUT, AND COVER ART

Peggy Cartwright
Director, Marketing and Public Relations

Cherie Ventola
Graphic Artist

Chaffey College has made every effort to assure the accuracy of the information in this catalog. Users of this catalog should be aware that policies, rules, procedures, and regulations change and that these changes may alter the information contained in this publication. The college reserves the right to change policies, regulations, fees, and courses of instruction upon direction by the Chaffey College Governing Board. The most current and complete information is available from the appropriate campus administrative agencies. To report errors and omissions, make suggestions for better readability, or offer comments, please send an email to **deborah.reed@chaffey.edu.**

Chaffey College

1883 - 2013

Providing quality education since 1883.

5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002
909/652-6000 • website: www.chaffey.edu

CONTENTS

THE CHAFFEY COLLEGE MISSION AND COMMITMENT

Chaffey College improves lives within the diverse communities it serves through equal access to quality occupational, transfer, general education, and foundation programs in a learning-centered environment where student success is highly valued, supported, and assessed.

From the President

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.

Chaffey College offers students a high-quality education taught by our stellar faculty. I believe you have taken an important step by enrolling at Chaffey. Our college plays a major role in the local economy and is a sound investment for the students and the community.

Students at Chaffey are provided with a well-rounded education. Whether you are upgrading your work skills, seeking to transfer to a four-year college or university, and/or plan to earn an associate degree and/or occupational certificate, you will find dedicated and qualified faculty and staff to assist you.

The Chaffey College mantra is "Student Success." The classrooms and co-curricular environments at Chaffey provide the student body with a challenging and highly intellectual environment to grow and develop. Utilize your time and talent well, and we will do our part to make your educational journey a success.

Best regards,

Henry D. Shannon

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

Chaffey College Senior Management

Sherrie Guerrero
Associate Superintendent, Instruction and Student Services

Ciriaco "Cid" Pinedo
Associate Superintendent, Business Services and Economic Development

Core Competencies

CHAFFEY COLLEGE STRIVES TO DEVELOP LIFELONG LEARNERS WHO EXHIBIT THE FOLLOWING:

COMMUNICATION
Students will demonstrate effective communication and comprehension skills. Examples will include, but are not limited to the following:

- Comprehend, analyze, and respond appropriately to oral, written and visual information.
- Effectively communicate/express information through speaking, writing, visual and other appropriate modes of communication/expression.

CRITICAL THINKING AND INFORMATION COMPETENCY
Students will demonstrate critical thinking skills in problem solving across the disciplines and in daily life. Examples will include, but are not limited to the following:

- Identify vital questions, problems, or issues and evaluate the plausibility of a solution.
- Analyze, compose and assess the validity of an argument.
- Compute and analyze multiple representations of quantitative information, including graphical, formulaic, numerical, verbal and visual.
- Compare, contrast and analyze scientific concepts and scientific observation.
- Select, analyze and evaluate the accuracy, credibility, relevance and reasonableness of information and its sources.

COMMUNITY/GLOBAL AWARENESS AND RESPONSIBILITY
Students will demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives. Examples will include, but are not limited to the following:

- Identify the social and ethical responsibilities of the individual in society.
- Demonstrate commitment to active citizenship by recognizing and evaluating important social, ecological, economical and political issues.
- Demonstrate an understanding and appreciation for individual, social and cultural diversity.

PERSONAL, ACADEMIC AND CAREER DEVELOPMENT
Students will assess their own knowledge, skills and abilities; set personal, educational and career goals; work independently and in group settings; demonstrate computer literacy and cultivate self-reliance, financial literacy, and physical, mental and social health. Examples will include by are not limited to the following:

- Demonstrate professional and ethical responsibilities of the individual.
- Identify personal, academic, psychological, and social needs, determine resources and access appropriate services.
- Develop, implement, and evaluate progress towards achieving personal goals, academic goals, career goals and career resilience.
- Demonstrate the ability to use technology to assess, evaluate, and present information.

Core Values

STUDENT SUCCESS
Chaffey College fosters a climate of inquiry, promotes evidence-based decision making, and provides access to essential learning support.

EDUCATIONAL EXCELLENCE
Chaffey College supports a spirit of innovation and excellence in teaching and learning as reflected in the core competencies.

CLIMATE OF INCLUSION AND RESPECT
Chaffey College honors representative voices and collaboration in a respectful and professional learning environment.

DYNAMIC STUDENT SERVICES
Chaffey College integrates comprehensive support services into a seamless, accessible, and sensitive network.

RESPONSIVENESS TO THE COMMUNITY
Chaffey College develops community partnerships, unique learning opportunities, and outreach programs to meet the needs of the community.

ENVIRONMENTAL RESPONSIBILITY
Chaffey College commits to the preservation, conservation, and responsible use of its resources.

Schools and Services of the College

Office of Instruction and Student Services

Sherrie Guerrero,
Associate Superintendant

Athletics and Physical Education

Eric Bishop, *Dean*

Nutrition and Food
Physical Education Activity, Lecture and Team

Counseling and Matriculation

Amy Nevarez, *Interim Dean*

ADA Facilities
AMAN/AWOMAN
Articulation/High School Tech Prep
Career Center
Cooperative Education
Counseling
Disability Programs and Services
Diversified Industries
Early Advantage
Early Assessment Placement
EOPS/CARE
Guidance
High School Partnerships
International Students
Learning and Educational Development
Learning Development Center
Math and English First
Matriculation (Credit/Non-credit)
Opening Doors to Excellence
Project Second Chance
Puente Project
Senior Early Assessment
Smart Start
Transfer Center
Veterans Services

School of Business and Applied Technology

Sidney Burks, *Dean*

Accounting and Financial Services
Aeronautics (Aviation Maintenance Technology)
Automotive Collision Repair Technology
Automotive Technology
Business Administration
Business Marketing
Business: Paralegal Studies
Business and Office Technologies
CISCO
Computer Information Systems
Computer Science
Consumer Studies
Fire Technology
Industrial Electrical Technology
Management
Nutrition and Food
Real Estate

School of Health Sciences

Teresa Hull, *Dean*

Acute Care Technician
Dental Assisting
Gerontology
Health Science
Home Health Aide
Nursing Assistant
Nursing: Associate Degree Nursing (ADN)
Nursing: Vocational Nursing (VN)
Pharmacy Technician
Radiologic Technology

School of Instructional Support

Laura Hope, *Dean*

Chaffey College Program at the California Institution for Women at Chino
College Catalog
Coordinated Scheduling
Curriculum
Distance Education
Enrollment and Success Management
Honors Program
Library
Professional Development
Schedule of Classes
Student Success Initiative
Student Learning Outcomes
Success Centers
- Faculty Success Center
- Language Success Center
- Math Success Center
- Multidisciplinary Success Center (Rancho, Chino and Fontana campuses)

Summer School
Supplemental Instruction
Test Proctoring Center

School of Language Arts

Michael Dinielli, *Dean*

American Sign Language
Arabic
Chinese
Communication Studies
English
English-as-a-Second Language
French
Journalism/Student Newspaper
Reading
Spanish

School of Mathematics and Science

Ted Younglove, *Dean*

Astronomy
Biology
Chemistry
Drafting
Earth Science
Engineering
Geography
Geology
Mathematics
Physical Science
Physics
Science
Statistics

School of Social and Behavioral Sciences

Cory Schwartz, *Dean*

Administration of Justice
Anthropology
Child Development and Education
Child Development Center
Correctional Science
Economics
History
Humanities
Philosophy
Political Science
Psychology
Social Science
Sociology

School of Visual and Performing Arts

Michael Dinielli, *Dean*

Art
Broadcasting
Cinema
Dance
Fine Arts
Music
Photography
Theatre Arts
Wignall Museum of Contemporary Art

Student Services and Discipline

Len Crow, *Interim Dean*

Admissions and Records
Cashier's Office
Financial Aid
Student Health Services

Student Activities

Susan Stewart, *Director*

Chino Campus

Teresa Hull, *Dean*

Fashion Design & Merchandising
Hotel & Food Service Management
Interior Design

Fontana Campus

Eric Bishop, *Dean*

General Information

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

ACCREDITATION

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 is enabling the college to construct and renovate a number of buildings on the Rancho Cucamonga, Chino, and Fontana Campuses.

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, ethnicities, and artistic pluralism that is strongly represented within our community.
We commit to respecting, celebrating, and integrating student's diverse cultures into all phases of campus life. We will provide leadership in creating a climate to ensure that all students, faculty, staff, and administrators share in the implementation of Chaffey College's equity goals.

Administration and Governing Board

The superintendent/president 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 six schools which provide an extensive range of the highest quality transfer and occupational courses: Business and Applied Technology; Health Sciences, Language Arts; Mathematics and Science; Social and Behavioral Sciences; and Visual and Performing 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 student success centers, transfer counseling, career planning assistance, job placement, financial aid, health care, child care, and help with public 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 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 learning and 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 1/2-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 2012-2013 college year appears in the back of this catalog.

In addition to the regularly scheduled 17 1/2-week classes, intensive short-term classes are offered. Some open-entry, open-exit classes allow for flexible scheduling, as do the growing number of online sections.

Day and evening classes are available for full-time and part-time students. Daytime classes are scheduled from 6:30 a.m. to 4:30 p.m. Monday through Friday. Evening classes usually begin at 5:30 p.m. Monday through Friday. 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 acres of man-made and natural vegetation. It is a college that provides excellent post secondary educational opportunities to a service area in excess of 798,355 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 Wignall Museum of Contemporary Art and the Chaffey College Theatre offer opportunities for both fine and performing arts. The museum 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 that are an extension of the college.

Passage of Measure L ($230 million) in 2002 has enabled the college to construct and renovate a number of buildings on the Rancho Cucamonga, Chino, and Fontana Campuses. Completed projects on the Rancho Cucamonga Campus include the Marie Kane Center for Student Services/Administration, the Don Berz Excellence Building, the Michael Alexander Campus Center, the Science Complex, the Central Plant, the Physical/Life/Health Science renovation, the Math Success Center renovation, the Center for the Arts, the Sports Center, and the gym renovation project. On the Fontana Campus, the Fontana Academic Building opened for the Fall 2011 semester. This building houses classrooms, laboratories, a library and bookstore and a dance studio. The Chino Campus Main Instructional Building opened for the Spring 2008 semester, and the Health Science and Community Center buildings opened in Spring 2009. The Chino Community Center houses the Hotel and Food Services Management program, Interior Design, and Fashion Design and Merchandising programs. Chino is also the home of the Robert Pile Information Technology Center which houses the Computer Information Systems and Industrial Electrical Technology programs.

There are also a number of landscaping projects that have been completed and several currently in progress to beautify all of the campuses. We are especially pleased with the completion of the Agricultural Demonstration Garden which consists of a two acre vineyard and one acre citrus grove located at the southeast corner of Haven and Wilson Avenue. Other projects include the expansion and renovation of our parking lots.

CHAFFEY COLLEGE CHINO CAMPUS
College Park
5897 College Park Avenue, Chino

The Chaffey College Chino Campus includes five buildings: three of which are at the College Park location and two buildings are at the downtown Chino location. The campus provides a full array of student services including admissions, assessment testing, cashiering, financial aid, academic counseling, limited transfer services, student health services, and a full service bookstore. Students also have access to a multidisciplinary success center to assist them in a variety of subjects. Students are offered instruction in a multitude of general education and occupational courses. Students can complete the following courses uniquely at the Chino Campus: Vocational Nursing, Industrial Electrical Technology, CISCO, Hotel and Food Service Management, Fashion Design/Fashion Merchandising and Interior Design. For additional information, call (909) 652-8000.

CHINO EDUCATIONAL CENTER
13106 Central Avenue, Chino

The Chino Educational Center opened its doors in Spring 2000 to better serve the residents of the southwestern portion of the district. Currently, the Center currently houses classes for Chaffey College's Economic and Workforce Development Program which offers short-term, intensive vocational training reflective of current business and industry needs.

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 Cisco academies (CCNA, CCNP) and industrial electrical technology. The center also hosts the Chaffey College Economic and Workforce Development Office which provides a myriad of services to local businesses and industries to enhance performance in the workplace. Such services include needs assessment, performance consultation, business solutions, and development of customized training to address identified needs. For additional information call (909) 652-8000.

CHAFFEY COLLEGE FONTANA CAMPUS
16855 Merrill Avenue, Fontana

The Chaffey College Fontana Campus is located in central Fontana and provides access to higher education for residents in the eastern portion of the college district. The campus includes three buildings and offers instruction in a multitude of general education and a limited number of vocational courses. The Ralph M. Lewis Center provides access to admissions, cashiering and financial aid. Students can also receive academic counseling and limited transfer services, as well as visit the EOPS and DPS offices in the Lewis Building. The Fontana Academic Center, which opened in Fall, 2011, has classrooms, science labs, a library resource center, a student lounge and a full service bookstore. The Fontana Center building also has classrooms, as well as the multidisciplinary success center where students can receive tutoring and instructional assistance. For additional information call (909) 652-7400.

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 Chaffey College Foundation is that no individual be denied an education at Chaffey College due to a lack of financial resources. The Foundation coordinates various fundraising activities and receives all donations made to the College and the Foundation. Donations allow the Foundation to award scholarships and continue to fund dreams – one student at a time. Foundation leaders are also 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, or any students interested in scholarship opportunities, please call (909) 652-6545.

The Chaffey College Alumni Association

Chaffey College alumni and former students continue to play a vital role in the campus community. The Chaffey College Alumni Association exists to showcase the successes of alumni and to celebrate Chaffey's rich history, traditions, and accomplishments in order to ensure Chaffey's reputation continues to grow. The Association promotes the interests and goals of alumni and former students and offers opportunities for meaningful involvement with the college through Association membership, regular communication, and special events. Alumni and former students are encouraged to get involved with the Alumni Association and show their Panther Pride; please contact the Alumni Office at (909) 652-6541 or via email at alumni@chaffey.edu.

Matriculation Process

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 Concurrent Enrollment or International Students for more information.

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 contact the International Student Office in CCE-123 on the Rancho Cucamonga campus or check the program's website at www.chaffey.edu/interational prior to beginning the application process.

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.

Official college transcripts from schools previously attended 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, registered nursing 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.

MYCHAFFEY WEB PORTAL
The MyChaffey web portal provides students access to online information and resources that they need to be successful at Chaffey College. Resources include MyChaffeyVIEW, Moodle, Library services, college announcements and messages, events calendar, as well as Chaffey and local news. For more information and login instructions, click on the First Time Users link located on the MyChaffey portal main page at http://my.chaffey.edu.

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 encouraged 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.

EARLY ASSESSMENT PROGRAM
The California State University, in collaboration with the California Department of Education and California Board of Education, implemented the Early Assessment Program (EAP) in 2004 to assist college-bound high school students in determining their readiness for college-level English and math courses. As a sign of college readiness, the EAP provides high school students with an opportunity to make the most effective use of their senior year to prepare for college if their test results indicate they are not ready for college-level courses. As an incentive to students to take the EAP test and to do their best, students who demonstrate college readiness on the EAP are exempt from taking the college's assessment and proper placement into college-level English and math courses will be assigned. For more information regarding EAP, please contact the Counseling Department at (909) 652-6200.

SENIOR EARLY ASSESSMENT
The Chaffey College Senior Early Assessment (SEA) Program provides a seamless service delivery to Chaffey College District high school students in the spring semester of their senior year. High school seniors participate in Chaffey College orientation and assessment and meet with a Chaffey College counselor to plan first semester courses. Participating high school seniors are also informed about Chaffey College programs and services, including Admissions & Records, Financial Aid, Counseling, and Extended Opportunities Programs and Services (EOPS). Students who complete the entire SEA sequence (orientation, assessment, and counseling) are eligible for early registration (i.e., are eligible to enroll for Chaffey College courses on the first day of new/returning student registration).

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. Photos must be an unobstructed, front view of the full face that is a representation of the true appearance of the card holder. No facial or hand gestures or foreign objects are to be included in the photo. Hats, sunglasses, and any other clothing that might obstruct the view of the face may not be worn. All headware must be removed, unless worn for valid religious, cultural or medical reasons. No picture retakes are allowed unless the picture is unusable due to closed eyes or other unforeseen problems. Please contact the Admissions & Records office for further information.

SCHEDULES OF CLASSES
The schedule of classes is available on the Chaffey College website at www.chaffey.edu prior to the registration period. Class offerings are organized by campus and/or by instructional type. The schedule contains detailed instructions concerning enrollment, registration, fees, and related deadlines, along with helpful information about programs and services of the college.

Registration

First-time Chaffey students will receive a registration date by email after submitted online application via CCCApply. Continuing students will receive information about how to access their registration date by email and/or by regular mail. Students may register online on or after their assigned registration date. Students who do not have access to a personal comuter may use the student computers in the Admissions and Records Office at the Rancho Cucamonga, Chino or Fontana campuses. High school students participating in the High School Partnership Program are required to register in person.

REGISTRATION DATE ASSIGNMENT
Continuing students are assigned a registration date according to the total number of units completed up to 90 units. This includes 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 exceeds 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) 652-6379, to receive authorization to register during the priority registration period. 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.

CLOSED CLASSES AND WAIT LISTS
If a desired class is closed, the student may register in an alternate class or place himself on the wait list. Wait lists open as soon as a class becomes full. When a seat becomes available, students will be notified and given permission via email to add the class, based on their rank on the wait list. Wait lists are limited to 20 students. A student must attend the first class meeting to be considered for admission to a closed class.

UNITS
Students may register for a maximum of 18 units during fall/spring terms and 7 units during summer term using online registration; exceptions must be approved by a counselor.

LATE REGISTRATION
During late registration for the fall/spring terms, students may register for any class with the instructor's permission. Instructor's permission is granted by issuing an Add Code. High school students, students with special petitions, financial restrictions, co-requisite waivers and students who are auditing must register in person. 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. Open entry/open exit and short term classes may be added up to the 14th week of the fall/spring term.

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. This includes all instructional formats, including online and hybrid classes.

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.

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 foundational 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.

PREREQUISITE/COREQUISITE COURSES 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) or P (pass). A grade of C- is not acceptable for completion of a prerequisite/corequisite course.

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 informtion presented in the corequisite is considered necessary for a student to be successful in the course.

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. 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.

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 on the Rancho campus or have a transcript on file in the Admissions Office, and complete a Prerequisite Validation Form (available in the Counseling Department and on the Chaffey College website) prior to registration. The validation forms are also accepted at the Chino and Fontana campuses, but are faxed or mailed to the Rancho campus to be processed. Some requests may require up to 7 business days to process but are usually processed within 48 hours. Students should receive notification of the decision by email or mail within a week of processing. If approved, the student will be allowed to register during their registrtion period.

Students who are enrolled in the prerequisite course at Chaffey at the time of their registration will be permitted to enroll in the subsequent course. Students who do not pass the prerequisite course will be dropped by the Admissions Office prior to the start of classes.
Any student planning to clear a math prerequisite for a math course by using their high school transcript must complete a Prerequisite/Corequisite Challenge form. See the section on Prerequisite/Corequisite Challenge for more information.

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 who wish to challenge 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) 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.
   b) To challenge a math course, you must submit a copy of your Chaffey College assessment test results, along with high school or college transcripts attached to your challenge form.
2. Meet with a counselor in the Counseling Department to assess whether you will benefit from the challenge process.
3. Register on or after your registration date. (Refer to the schedule of classes for the last day to add.)
4. The department coordinator will approve or deny the challenge within three (3) business days.
5. For approved challenge decisions, your form will be mailed back to you and you will be allowed to remain in the class.
6. For denied challenge decisions, you will be notified by telephone or email and your form will be returned to you by mail. The Matriculation Specialist will remove the prerequisite/corequisite course from your record, the Admissions Office will drop you from the class, and the Cashier's Office will process your refund.
7. If you wish to appeal the denied decision, you may do so by contacting the Dean in the school/department for the course you have challenged.

More information 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.

LIMITATION ON ENROLLMENT
A limitation on enrollment, such as a TB test, CPR certification and others, etc., 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 accrediting/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.

Counseling and Matriculation

Students are encouraged to meet with a counselor within their first six months at Chaffey College to develop a Student Educational Plan (SEP). Counselors will recommend appropriate coursework based on assessment results, review of previous college work and other information provided by the student. Appointments for an individual meeting with a counselor can be made by calling the Counseling Department at (909) 652-6200 or by visiting our website at www.chaffey.edu/counseling. For information on additional services provided by the Counseling Department, please refer to the Student Support Services section.

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 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 Concurrent Enrollment students must complete assessment, orientation, and counseling before they may register for classes.

ASSESSMENT OF FOUNDATION 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 campuses; specific dates and times can be obtained from the schedule of classes or by calling the Counseling Department at (909) 652-6200 or by visiting our website at www.chaffey.edu/counseling/assessment.

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 their initial assessment before re-testing.

ORIENTATION
Orientation is available online and may be completed in the testing center at the conclusion of the assessment test. Orientation introduces students to college services and educational programs and provides information on college policies, enrollment procedures, and important deadlines. Group sessions are arranged for specific groups such as international students and ESL students. Contact the Counseling Department at (909) 652-6200 for more information or check the college website at www.chaffey.edu/counseling. Students interested in a more detailed orientation and/or instruction in college success skills may enroll in a Guidance course.

STUDENT RIGHTS AND RESPONSIBILITIES
Students are entitled to certain rights under matriculation procedures. These rights include: 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 unlaw-

ful 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 are encouraged to 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:
- Have earned an associate degree or higher (diploma or transcripts required), or
- Have completed certain coursework at another college (transcripts required), or
- Will enroll in one course only, with no intention of earning a degree at Chaffey, or
- Will enroll in performance/activity courses only.

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 Concurrent 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 system, in person, or by mail. Fees may also be paid via the FACTS Deferred Payment Plan. For more information on the FACTS plan, please visit the website at www.chaffey.edu/cashier/facts.shtml. All fees are due at the time of registration. These include Enrollment fees, Health fees, Transportation 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, account entry error or insufficient funds does not constitute a withdrawal from classes and will result in a $25.00 charge.

Fees are subject to change. Consult the schedule of classes for the most current information.

AUDIT FEE
The cost to audit a course is $15.00 per unit. See page 26 for more information.

ENROLLMENT FEE (Tuition)
$46.00 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 and Non-U.S. Citizen) $255 per unit ($179 per unit, plus $30 capital outlay charge, plus $46 per unit enrollment fee)

HEALTH SERVICES FEE
$17.00 Fall and Spring; $14.00 Summer (Non BOG Waiver students). 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) 652-6331. Pursuant to section 76355 of the Education Code, students who can provide documentation of active membership in a religious organization that relies exclusively on prayer for healing may request to have the Health Fee waived. Applications for waiver are available in the Student Health Services office. BOGW (Board of Governor's Fee Waiver) eligible students will be responsible for all or a portion of the Student Health fees.

Please refer to the payment chart at www.chaffey.edu/cashier/fees.shtml.

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):

- 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.
- Textbook rental program that is administered in the Chaffey College Bookstore
- Opportunity drawings and giveaways
- Emergency book grants
- Campus improvements
- Departmental grants

PARKING (required on the Rancho Cucamonga, Chino, and Fontana Campuses)
- Auto Parking:
  $50.00 Fall and Spring Non BOG Waiver
  $30.00 Fall and Spring BOG Waiver
  $25.00 Summer
- Motorcycle Parking: $20.00
- Daily Permits: $2.00

TRANSPORTATION FEE
The transportation fee allows all students to ride any of Omnitrans' fixed route bus services at no charge during the semester by using their student ID card. The fee is $7.50 per student registered in six (6) or more units registered in the Fall and Spring semesters; $7.00 per student registered in less than six (6) units registered in the Fall and Spring semesters.

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

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.

REFUND POLICY
Automatic Refund Process
Refunds will be processed automatically for the following:
- Credit amounts of $20 or more
- Classes canceled by the college
- BOG Waiver reimbursements
  (No refund request required).

Automatic refunds will be processed after the last day to add full term classes and will be received within 45 business days. Students will receive a refund check by mail for payments made by cash, check or money order. To ensure prompt delivery, the student must verify that his/her address is correct on MyChaffeyVIEW. If payment was made with a credit card, the refund will appear as a credit on the student's statement.

Eligibility Requirement for Refunds
A student is eligible for a refund if he/she drops the class by the published refund deadline. The refund deadline date can be found on the registration receipt available on MyChaffeyVIEW. A student must officially drop or withdraw from a class before ten percent (10%) of the class length has passed. The following fees are subject to refund: enrollment, health, materials, college service, and non-resident tuition.
(California Code of Regulations, Title 5, Section 58508).

Students must review the Registration Receipt for specific refund dates. The Registration Receipt is available on MyChaffeyVIEW.

Refund for Parking Permits
The parking permit must be returned to the Cashier's Office on or before the appropriate refund deadline date for the current semester.

Refund for Canceled Classes
If the college cancels a class, students will receive a refund automatically. (No refund request required.)

Financial Aid BOG Waiver Account Re-Bill/Reimbursement
Students who paid for classes prior to receiving a BOG Waiver will receive a refund 45 business days from the day the BOG Waiver is processed. The BOG Waiver must be processed and posted to the student's account by the last day of the current semester. For information related to waiver of enrollment fees, contact the Chaffey College Financial Aid Office at 909/652-6199.

Refund Policy for Amounts Less than $20
Refunds for credit amounts less than $20 are not automatic and a request for said refund must be initiated by the student:

- A refund request for a credit amount less than $20 must be received by the Cashier's Office by the last day of the current semester.
- To make a refund request, the student must send an email to cashier.staff@chaffey.edu.
- For security reasons, the following information is required:
  Student's full name
  Chaffey ID Number
  Refund credit amount (see your registration receipt on MyChaffeyVIEW)

When all the required information is received, the Cashier's Office will begin the refund process for the student. Refunds will be received within 45 business days from date of the email request

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, cashier's check, Visa, or Mastercard. Failure to pay any outstanding balances will result in the student's name being submitted to the Franchise Tax Board for collection.

Financial Aid

The Financial Aid Office administers a number of programs funded by the federal, state and private sources designed to help students with limited resources meet their educational expenses. Programs include grants (Pell Grants, FSEOG, Cal Grants B & C), fee waivers (BOGW), federal work study, Chaffee Grants and scholarships. Refer to Funding Sources for more detailed information of each type of aid available. All Chaffey College students may be eligible for some form of assistance based on their financial need and may apply for aid by filing a Free Application for Federal Student Aid (FAFSA).

HOW & WHEN TO APPLY
Students must apply or reapply every year for financial aid by completing the Free Application for Federal Student Aid (FAFSA) which is available online at www.fafsa.gov. Students can apply for federal and state aid as early as January 1 for the new academic year. The ideal time to apply is between **January 1 and March 2** to assure your application is processed in timely manner in preparation for fall and spring terms. The priority deadline to apply is March 2nd, however, you can still apply after this date. Filing after the priority deadline may make students ineligible for certain types of aid. If you are planning on attending Chaffey College, you will need to indicate Chaffey College's school code on your FAFSA which is **001163**.

Process of Determining Financial Aid Eligibility
After completing the FAFSA, you will receive a "Student Aid Report" (SAR) within 24-48 hours by email or four weeks by mail from the federal processor. The Financial Aid Office will also receive a copy of your FAFSA results electronically. Carefully review your Student Aid Report (SAR). It may include an Expected Family Contribution (EFC), estimated aid amounts or indicate if additional documentation is required through a processed called verification.

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 a mandatory process required by the federal government and student must comply in order to receive financial aid. The Financial Aid Office will also receive a copy of your FAFSA results electronically. Once results are received by the Financial Aid Office, you will be contacted via email to submit a copy of your (and your parents if you are a dependent student) signed federal tax returns if selected for verification. You will receive an email notification through MyChaffeyView at www.chaffey.edu/chaffeyview indicating if awards are available or if additional documentation is needed. Use the "My Documents" section to view if further information is needed. Be sure to update your admissions records with a valid email address.

Basic Financial Aid Eligibility

- must be enrolled in a degree, certificate, or transfer program
- be a U.S. citizen or an eligible non-citizen, such as a permanent resident
- have a valid SSN
- have a high school diploma, GED or pass the Ability to Benefit (ATB) test or satisfactorily completed 6 credit hours of coursework applicable towards a degree or certificate program (transfer units are acceptable but must be verified by Chaffey Counseling Dept.)
- demonstrate financial need
- maintain Satisfactory Academic Progress (SAP)
- register with the U.S. Selective Services (if you are male 18 – 25 years)

FUNDING SOURCES
BOG Fee Waiver
The Board of Governors Fee Waiver (BOGW) program is available for qualified California residents. The BOGW waives the mandatory enrollment cost per unit and a portion of the parking fee. Fee waivers do not apply to class material fees or the College Services fee. Students are responsible for making sure all fees have been paid.

The BOG Fee Waiver 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 enroll in 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. To apply, fill out the FAFSA online. The Financial Aid Office will receive the results of the FAFSA and award the waiver automatically to eligible students. Awards may be viewed via MyChaffeyView at www.chaffey.edu/chaffeyview. Students who are currently receiving benefits from TANF/CalWorks, SSI/SSP, General Relief, or a certified veteran dependent by California Department of Veterans Affairs are eligible for a BOGW. A current proof of benefits (dated with the past 30 days) must be provided to the Financial Aid Office to obtain a BOGW applica-

tion. We strongly suggest you complete the FAFSA so that we can determine if you are eligible for other types of aid.

Federal Pell Grants
Federal Pell Grants are need-based and awarded to every undergraduate student who qualifies. In most cases, these grants DO NOT need to be paid back (see repayment or R2T4 section). These grants may be used for tuition, fees, books, transportation, and living expenses. The amount of the Pell Grant disbursed is based on your Expected Family Contribution and enrollment status. You may even receive a Pell Grant if you attend school less than half-time provided you are otherwise eligible. Pell Grant awards can range from $555 to $5550 a year. You will automatically be considered for the Pell Grant when you apply and file your FAFSA.

Federal Supplemental Educational Opportunity Grant (FSEOG)
Federal Supplemental Educational Opportunity Grant is a need-based federal grant available to undergraduate students with the highest need. Priority is given to Pell Grant recipients with a zero Expected Family Contribution (EFC) who meet the priority filing deadline (March 2nd). Funding for this program is limited with a maximum amount of $1000 for the academic year.

Federal Work Study (FWS)
Federal Work Study is a need-based federally funded part-time employment program which allows eligible students to earn money to help pay for educational expenses. Students may work up to 20 hours per week and earn a monthly paycheck. Federal Work Study awards are determined by financial need and are available to students enrolled in six (6) units or more per semester. FWS job listings are posted in the Student Employment Office for eligible FWS students and are filled on a first-come, first-served basis.

Cal Grants
Cal Grants are state funds awarded in addition to the Federal Pell Grant. Cal Grant recipients are selected by the California Student Aid Commission (CSAC). To apply for the Cal Grant program, you must meet the requirements for the federal Pell Grants, submit the FAFSA and a Cal Grant GPA Verification form to CSAC by March 2nd (priority deadline). If you do not meet the March 2nd priority filing deadline, you may have a second chance to compete for a Cal Grant by filing the FAFSA and GPA Verification form by September 2nd. There are three (3) types of Cal Grants: Cal Grant A, B and C.

Cal Grant A assists with tuition fees and can be used at four-year institutions. If you receive a Cal Grant A award but choose to attend a California Community College first, you may reserve your award for up to three years until you transfer to a four-year college. It is known as "CC Reserve," but you must contact CSAC to place it on reserve. When you transfer, be sure to let the Financial Aid Office where you are transferring to and CSAC know that you have a "CC Reserve" grant.

Cal Grant B assists low-income students attending community colleges with living expenses and books. The award is $1551 for the year and may be used for books, living expenses and transportation.

Cal Grant C assists students with tuition and training costs for technical, occupational, vocational or career training programs. The award includes up to $576 for books, tools and equipment. Funding is available for up to two years, depending upon the length of the program. To qualify, you must enroll in an occupational, technical or vocational program that is at least four months long at a California Community College. To find out more information visit www.csac.ca.gov.

Chaffee Grant
The California Chaffee Grant Program awards up to $5000 annually to eligible foster youth and former foster youth between the ages of 16 and 22 years to use for college courses or vocational school training. The Financial Aid Office disburses Chaffee Grant in accordance with the regulatory statutes of this program. For more information visit www.chaffee.csac.ca.gov.

Scholarships
Scholarships are usually, but not always, based on a combination of need and merit. Some scholarships are based on your major, community service, educational goals or other criteria. Scholarships do not need to be paid back. Available scholarships are listed year-round on the Financial Aid website (www.chaffey.edu/foundation/scholarships). Students may also contact Student Activities and the Chaffey College Foundation office for other available scholarship opportunities.

SATISFACTORY ACADEMIC PROGRESS
Students who receive financial aid at Chaffey College must maintain the Standards for Satisfactory Academic Progress. The Chaffey College Standards for Satisfactory Academic Progress measure a student's qualitative and quantitative progress toward the certificate or degree program for which they are receiving financial aid. Students may lose eligibility for some aid programs for failure to satisfy the minimum qualitative and quantitative requirements as outlined in the Standards for Satisfactory Academic Progress.

It is imperative that students understand their responsibility to maintain the Standards for Satisfactory Academic Progress. Students are encouraged to meet with an academic counselor to develop a Student Educational Plan and adhere to the plan in order to ensure compliance with this requirement.

RETURN TO TITLE IV (R2T4)
In the event that a financial aid recipient at Chaffey College enrolls in coursework and then completely withdraws from all coursework, federal regulations require that Financial Aid Office performs a calculation to determine how much financial aid the student has earned based on his/her last day of attendance. This calculation is called a " Return to Title IV" calculation. (Title IV refers to Federal Financial Aid programs). The Financial Aid office performs the calculation within 30 days of the date that it became aware of a student's withdrawn status.

In the event that a student has not earned all of the aid that was disbursed, the student may be required to return some of the financial aid received. The student will be notified in writing of the requirement to return financial aid funds. Students who fail to repay the funds within the established timeframe will be reported to the Department of Education and will be ineligible for financial aid at any institution until the amount owed is repaid in full.

WITHDRAWN STUDENTS
Financial aid recipients who may need to withdraw from classes are encouraged to discuss the consequences of their withdrawal with a financial aid advisor.

Students who fail to attend classes are not eligible for federal financial aid and must repay all financial aid funds received for the term in which they failed to attend.

POST WITHDRAWAL DISBURSEMENTS
In some cases, when a Return to Title IV calculation is performed, the Financial Aid Office may determine that a student earned more financial aid than was disbursed prior to the student's last day of attendance. In this case, a student may qualify for a "Post Withdrawal Disbursement". The Financial Aid Office will disburse funds within 45 days of the determination that the student is eligible to receive a Post Withdrawal Disbursement. This process is in compliance with regulatory requirements that govern the federal financial aid programs.

High School Concurrent Enrollment

High school students may enroll at Chaffey College through concurrent enrollment to pursue advanced scholastic or vocational education (Education Code 48800(a)). Eligible students must have completed the 10th grade and have a minimum cumulative GPA of 2.5. High school students attending Chaffey for the first time must complete an online application, and submit official transcripts, the High School Certification Form, the Parental Advisory Form, and the Emergency Contact/Internet Usage and Waiver of Liability Forms. Continuing high school students do not need to reapply online each semester, but must Submit the required documentation from the high school registration packet. The earlier the student submits the required forms, the earlier registration date he will be assigned.

Home schooled students must have a signature of a school affiliate on their High School Certification 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.

The student's registration date student ID number, and a link to the High School Registration Packet will be included in their registration letter which is sent by e-mail. Students may not register until they have completed all the steps in the registration packet including returning all required documents and completing assessment, orientation, and counseling.

The High School Certification Form must be completed by the high school principal or designee. Only this person may complete the area of the form listing the recommended courses, which cannot be remedial in nature (courses numbered 500-599). Enrollment in P.E. Activity courses and P.E. Team courses are restricted to adult students who are no longer enrolled in high school. However, high school students may continue to enroll in P.E. Lecture courses such as PELEC 15 – "Diet and Fitness" with the permission of the high school counselor or designee. All high school students participating in the High School Partnership Program must attend the first day of class. Both the principal or designee and the student must sign the Certification Form.

The Parental Advisory Form must be completed and signed by the parent or legal guardian. The Emergency Contact/Internet Usage and Waiver of Liability Forms must be completed and signed by the parent or legal guardian and the student. All of the above required documents must be returned to the Admissions Office, along with official high school transcripts. Students should fulfill all the High School Partnership requirements at least two weeks prior to the student's assigned registration date to avaoid registration delays.

High school students must register in person in the Admissions and Records Office at any Chaffey College campus on or after their assigned registration date. Up to eight units may be taken per term, selected from the recommended courses on the High School Certification Form. Enrollment, health, and college service fees are waived for high school students who reside in and/or attend a high school within the Chaffey College District. Other costs (e.g. materials fees, books, 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 concurrent enrollment must attend the first day of class. For more information on high school concurrent enrollment, visit our Web site at www.chaffey.edu and select the High School Partnership link. For information on assessment, orientation and counseling, contact the Counseling Department at (909) 652-6200.

HIGH SCHOOL APPEALS PROCESS

The appeals process applies to high school students who do not meet the high school admissions criteria, but have strong potential for academic success in a college setting. For more information on the appeals process, visit our Web site at www.chaffey.edu and select the High School Partnership link

HIGH SCHOOL TECH PREP PROGRAM

High school students participating in Tech Prep courses may be eligible to earn Chaffey College placement or credit. For additional information, contact the high school counselor or the Chaffey College Articulation/Tech Prep Office at (909) 652-6510.

Student Classifications and Programs

AIR FORCE RESERVE OFFICER TRAINING CORPS

Air Force Reserve Officer Training Corps (AFROTC) is offered through an agreement with the University of Southern California (USC). The program is open to most students pursuing an undergraduate or graduate degree with at least 2.5 years of school remaining. Competitive one- to four-year scholarships valued at up to 100% of tuition and fees are available to qualified applicants. Additionally, students may be eligible to receive money to cover the cost of books as well as a monthly tax-free stipend of up to $500 per month. Classes are offered on the USC and Harvey Mudd College campuses and include one hour of academics for freshman and sophomores and three hours of academics for juniors and seniors. All students will also participate in two hours of leadership laboratory and undergo practical leadership training and development as Air Force officer candidates. Students who successfully complete the program will commission as an officer into the United States Air Force upon graduation. Students who qualify for and are selected to enter competitive programs including Air Force pilot, navigator, air battle manager, medical, and nursing career fields will be given specialized training following entry into the Air Force. For more information contact the USC Department of Aerospace Studies at (213) 740-2670 or visit www.usc.edu/afrotc.

AMAN/AWOMAN

"Connect to Succeed" is the philosophy of the AMAN/AWOMAN Project. This project is a culturally responsive approach to reaching students and providing an environment to survive and thrive. Participants receive a variety of tools and resources that will assist them in navigating the Chaffey College campus and completing their goals. Through mentoring and counseling, students from a wide variety of backgrounds are connected to strategies and activities that promote achievement and self-esteem. Although the program is specifically designed to assist African-American students, all students are welcome to join. For more information, contact Donna Colondres at (909) 652-6226.

CALIFORNIA INSTITUTION FOR WOMEN (CIW)

The college has partnered with the California Institution for Women in Chino (a state correctional facilty) to provide education to a select cohort. The students follow an educational plan which leads to an Associate of Arts degree in Liberal Arts and prepares them for transfer to four-year institutions. All courses are taught

through distance education by Chaffey faculty (e.g., taped lectures on campus and written correspondence) because of state restrictions on face-to-face instruction in a facility closed to the public. By working through the Extended Opportunities for Students (EOPS) program, the college ensures that the CIW students receive the same services traditional students enjoy. The prison has a Success Center, tutors and a small computer lab available to increase academic success.

COOPERATIVE EDUCATION (WORK EXPERIENCE)

Cooperative Education/Work Experience provides students with the opportunity to use their part-time, full-time, or internship position to earn elective credit. On-campus work-study positions also qualify. Students obtain practical on-the-job experience and knowledge related to their career or educational goals. Students gain an understanding of the relationship between classroom theory and the world of work and improve their career development skills and their employment opportunities while enrolled in Cooperative Education. Under the supervision of college faculty and the job supervisor, students prepare a job-related learning agreement which serves as a guide to their Cooperative Education experience.

The Cooperative Education Office is located on the Rancho Cucamonga Campus co-located with the Student Employment Office within the Global Career Center. Students may contact the Cooperative Education Office at (909) 652-6190 to schedule an appointment.

EARLY ADVANTAGE

In order to assist students when they need support, Chaffey College uses an alert system that allows an instructor to notify students if their success in a course appears to be in jeopardy. This system is designed to provide students with individualized attention while there is still time to successfully complete their course. The Early Advantage Office may send a letter or email, followed up with a telephone call, to discuss classroom performance and on-campus resources.

HONORS PROGRAM

The Honors Program improves the quality of education, provides challenges, and motivates 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 certain UCs, CSUs and private colleges and universities. A complete list is available in the Honors Office in SSA-145.

Affiliation

Chaffey is a member of the National Collegiate Honors Council, the Western Regional Honors Council, and the Honors Transfer Council.

Criteria for Enrollment

- High school GPA of 3.2 or college GPA of 3.2 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 3.2 in transferable courses.
- GPA of 3.2 in honors courses.
- Completion of 18 semester units in Chaffey Honors Program (up to 6 units may be accepted from another institution).
- Completion of Associate Degree, or fulfillment of admissions requirements to a 4-year institution.
- Submission of "Intent to Complete Honors Transfer Program" form.
- Community service and enrichment activities.

Student Honor Society

Phi Theta Kappa is the national student honor society. Honor students with a 3.50 cumulative GPA may become members of Phi Theta Kappa and may graduate with honors.

INTERNATIONAL STUDENTS

Chaffey College welcomes students from all over the world. Approximately 200 students from 34 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 contact the International Student Center in CCE, Room 123, on the Rancho Cucamonga Campus or check the program's website at www.chaffey.edu/international 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 Center or the Admissions and Records Office at (909) 652-6600.

Office hours are: Monday through Friday 8:00am-4:30pm.

For appointments and information regarding the program, students may call the International Student Center at (909) 652-6195 or e-mail the center at intlstudents@chaffey.edu.

A variety of services are provided to international students, including early registration, 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 to 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.

Transcript Evaluation for International Transcripts:

Chaffey College accepts the following Transcript Evaluation Services of international transcripts:

- Academic and Professional International Evaluations, Inc.
- Academic Credentials Evaluation Institute
- 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 included on the Chaffey academic transcript. For specific information, contact the Admissions and Records Office.

MATH AND ENGLISH FIRST
The Math and English First Program promotes academic scholarship and readiness early in the students' academic career. Supported by the philosophy and practice that students who enroll in their mathematics and English requirements in their first few semesters are better able to succeed in all of their college courses, the ME 1st program gives students the opportuntity to receive priority registration opportunities for 3 semesters. To participate in this program, students must have an eligible assessment/placement recommendation for English 450 or English 550 and Math 410, must agree to take math and English for 3 semesters, and must maintain a full-time load. Additional information regarding this program is at www.chaffey.edu/me1st.

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. For more information about the program, please call (909) 652- 6113.

OPENING DOORS TO EXCELLENCE
Chaffey College offers comprehensive programs to assist students experiencing academic difficulty. **Opening Doors** assists students on second level probation. **Smart Start** assists students whose assessment results indicate that they could benefit from additional assistance. **Project Second Chance** provides support for individuals who did not graduate from high school and want to continue their education at Chaffey College.

All three programs offer specialized counseling, orientation and information sessions, guidance courses and directed learning activities at the Success Centers. For more information, contact the Opening Doors to Excellence program at (909) 652-6201.

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, introductory tours of UC and Cal State campuses, and helpful personal mentoring.

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 Counseling and online at www.chaffey.edu/puente or contact Monica Molina at (909) 652-6208.

VETERANS
The Veterans Administration (VA) specifies a minimum load for educational benefits:

FALL AND SPRING	STATUS
12 units or more	Full-time Student
9-11 units	3/4 time Student
6-8 units	1/2 time Student
Less than 6 units	Less than half time

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 evaulated prior to this meeting.

Veteran students may request priority registration; however, students wishing to collect benefits must first meet with the Veteran Certifying Office in Admissions and Records to begin the process. Students not wishing to collect benefits may request priority. For additional details, please go to www.chaffey.edu and click on Veteran Services.

If the grade point average of a student 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 GPA's less than 2.0 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 approved, the student may be granted 2 semester units of elective credit towards graduation for every 180 days of active service (including basic training), to a maximum of 8 semester units (E.C. 78230). 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. The DD214 is also used to clear Area E on the CSU-GE pattern (per CSU Executive Order 1035).

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

Academic Information

Definitions

CATALOG RIGHTS/MATRICULATION
Requirements shown in this catalog apply to any student entering (matriculating) Chaffey College during the Fall 2011, Spring 2012, or Summer 2012 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

Class	Unit of Credit	Hours per Term
Lecture	1	16-18
Laboratory (including open-entry)	1	48-54
Independent Study	1	16-18
Studio	1	32-36
Work Experience	1	60(unpaid) 75(paid)

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.

Attendance and Participation

GENERAL
Ideally, students are expected to attend every meeting of every class for which they are enrolled.

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. Students taking online classes are required to log in on their required day and time to satisfy the first class meeting requirement.

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.

Accelerated Learning (Fast Track Classes)

Chaffey's multi-pronged Fast-Track initiative is designed to shorten the time needed by students to complete requirements for graduation and/or transfer. Some accelerated offerings consist of two sequential courses packaged together in a single semester, with both the first and second class taught by the same instructor in the same time/day slot. Students are either able to enroll in both classes at the same time, or are given priority registration into the second class upon successful completion of the first.

Another unique Fast Track pairing is a four-pack of math and science classes targeted to non-math/science majors. These classes meet CSU-GE (area B) and/or IGETC (areas 2 and 5) requirements for students intending to transfer.

Other non-paired Fast Track classes provide students the ability to complete two general education and/or program applicable courses in a single term.

Distance Education

Chaffey College has an extensive course listing in several different distance education modalities and offers several certificates that can be obtained via distance education. Distance education courses are taught by distinguished Chaffey faculty and fulfill general education, elective and/or major requirements. They are academically equivalent to on-campus courses, with some classes transferable to four-year institutions. Chaffey offers two basic types of distance education classes: online and hybrids. In online classes, students attend classes via the Internet. While these classes have due dates and times for assignments, students can attend class anytime or anywhere a computer with Internet capabilities is accessible. Hybrid courses are a combination of face-to-face and online instruction. Students meet on campus on the designated days and times, as well as receive instruction online.

For more information about Distance Education and to determine if you, as a student, are ready for Distance Education class contact the Chaffey College Distance Education office at (909) 652-6975; 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.

Scholastic Achievement

RECOGNITION
Scholastic achievement, leadership, and community service 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.

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.

HONORS AT GRADUATION
Students who have earned an associates degree and have a 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 for spring commencement.

VALEDICTORIAN FOR SPRING COMMENCEMENT CEREMONIES
To be eligible for selection as valedictorian for Spring commencement ceremonies, students must have earned an associates degree and a cumulative 4.00 GPA in degree applicable units, and have completed a minimum of 12 degree applicable units at Chaffey College each consecutive term, except the first term in college may be fewer than 12 units.

PARTICIPATION IN COMMENCEMENT CEREMONIES
Students may participate in the Spring commencement ceremonies only during the academic year that they have completed all required coursework.

Credit by Examination

Chaffey College Internal Testing
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. 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 previously 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 12-unit residency requirement for graduation.

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

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

d) Applications for credit by examination are available in the Admissions Office at any of our three campus locations.

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 P 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 External Examinations
Chaffey College awards credit for specific examinations and scores of external programs. Approved programs are the College Board Advanced Placement (AP) Examinations, the College Level Examination Program (CLEP) and the International Baccalaureate (IB). Some general education categories for Chaffey College, CSU-GE Breadth and IGETC may be fulfilled by AP and IB examinations with approved scores. Chaffey College and the CSU also recognize certain CLEP examinations/scores toward completion of general education areas. The University of California does not award credit for CLEP examinations.

The institution to which a student transfers determines the total number of units awarded for successful completion of external examinations, and the applicability of the examination to course equivalency, major and other graduation requirements. Students planning to use AP, IB or CLEP credit toward transfer requirements are advised to consult with a Chaffey College counselor, the Transfer Center and the planned transfer institution for information on policies and procedures. Publications and on-line references for the CSU, UC and private institutions are available at the Chaffey College Transfer Center.

Chaffey College recognizes course equivalency for a limited number of AP tests as indicated under "Advanced Placement (AP) Examinations". Transfer students are reminded that the decision to determine course equivalency is the responsibility of the transfer institution regardless of Chaffey College recognition. Students should consult a counselor before enrolling in any course for which AP, IB or CLEP credit has been granted. Total units awarded may differ from units recognized in a GE category.

Students who would like to use an external examination to meet a prerequisite or receive recognition of course equivalency may file a Prerequisite/Corequisite Validation form to be evaluated by the discipline faculty. Consult with a counselor to determine if equivalency has already been established.

Advanced Placement (AP) Examinations
The General Education AP Examination Table on pages 20-21 provides the title of the AP Examination, minimum required score of "3", the area in which the AP examination is used in general education requirements for Chaffey College, the CSU-GE Breadth and IGETC, and the number of units awarded for each GE area.

At the time of printing, the listed AP examinations are equated with courses at Chaffey College. This equation is internal to Chaffey College only and does not extend to transfer institutions.

International Baccalaureate (IB)
The International Baccalaureate Organization awards either a diploma or a certificate for individual IB exams. Students who receive IB certificates with a score of 5, 6, or 7 on higher level exams may earn unit credit towards Chaffey College general education, CSU-GE Breadth and IGETC areas. Chaffey College and the CSU recognize some scores of 4 in general education categories.

The International Baccalaureate (IB) Table on page 22 provides the IB examination title, minimum score for Chaffey/CSU and IGETC, 3 semester units awarded for Chaffey, CSU and IGETC general education areas. There are no standard equated courses.

CHAFFEY COLLEGE GE/CSU-GE/IGETC CREDIT FOR ADVANCED PLACEMENT (AP) TESTS

Students may earn credit for College Entrance Examination Board (CEEB) Advanced Placement (AP) Tests with scores of 3, 4, or 5. AP credit can be used to meet IGETC, CSU-GE and Chaffey College general education (GE) requirements. Course credit and units granted at Chaffey College may differ from course credit and units granted by a transfer institution.

AP EXAM AP Score: 3, 4 or 5	CHAFFEY COLLEGE - GE	UNITS EARNED	CSU-GE	IGETC
Art History	3 semester units toward Humanities: Art	6 semester units	Area C1 or C2 3 semester units	Area 3A or 3B
Biology	4 semester units toward Natural Science	6 semester units	Area B2 and B3 4 semester units	Area 5B with lab 4 semester units
Calculus AB[1]	3 semester units toward Language and Rationality; Math Competency	3 semester units	Area B4 3 semester units	Area 2A
Calculus BC[1]/AB Subscore	3 semester units toward Language and Rationality; Math Competency	6 semester units	Area B4 3 semester units	Area 2A
Chemistry	4 semester units toward Natural Science	6 semester units	Areas B1 and B3 4 semester units	Area 5A with lab 4 semester units
Chinese Language and Culture	3 semester units toward Humanities	6 semester units	Area C2 3 semester units	Area 3B and 6A
Computer Science A[2]	N/A	3 semester units	N/A	N/A
Computer Science AB[2]	N/A	6 semester units	N/A	N/A
English - Language & Composition	3 semester units toward Language and Rationality	6 semester units	Area A2 3 semester units	Area 1A
English - Literature & Composition	3 semester units toward Language and Rationality or Humanities	6 semester units	Area A2 and C2 6 semester units	Area 1A or 3B
European History	3 semester units toward Social/Behavioral Sciences	6 semester units	Area C2 or D6 3 semester units	Area 3B or 4F
Environmental Science	4 semester units toward Natural Sciences	4 semester units	Area B1 and B3 4 semester units	Area 5A with lab 3 semester units
French Language	3 semester units toward Humanities	6 semester units	Area C2 3 semester units	Area 3B and 6A
French Literature	3 semester units toward Humanities	6 semester units	Area C2 (Removed F09) 3 semester units	Area 3B and 6A
Government & Politics - Comparative	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D8 3 semester units	Area 4H

[1]AP Calculus Exam Limitations: Only one exam may be used for transfer/unit credit.

[2]AP Computer Science Exam limitations: Only one exam applies to transfer/unit credit.

CHAFFEY COLLEGE GE/CSU-GE/IGETC CREDIT FOR ADVANCED PLACEMENT (AP) TESTS

Students may earn credit for College Entrance Examination Board (CEEB) Advanced Placement (AP) Tests with scores of 3, 4, or 5. AP credit can be used to meet IGETC, CSU-GE and Chaffey College general education (GE) requirements. Course credit and units granted at Chaffey College may differ from course credit and units granted by a transfer institution.

AP EXAM AP Score: 3, 4 or 5	CHAFFEY COLLEGE - GE	UNITS EARNED	CSU-GE	IGETC
Human Geography	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D5 3 semester units	Area 4E
Italian Language & Culture	3 semester units toward Humanities	6 semester units	Area C2 (Removed F09) 3 semester units	Area 3B and 6A
Japanese Language & Culture	3 semester units toward Humanities	6 semester units	Area C2 3 semester units	Area 3B and 6A
Latin - Literature	3 semester units toward Humanities	6 semester units	Area C2 (Removed F09) 3 semester units	Area 3B and 6A
Latin - Vergil	3 semester units toward Humanities	3 semester units	Area C2 3 semester units	Area 3B and 6A
Macroeconomics	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D2 3 semester units	Area 4B
Microeconomics	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D2 3 semester units	Area 4B
Physics B[3]	4 semester units toward Natural Sciences	6 semester units*	Areas B1 and B3 4 semester units	Area 5A with lab 4 semester units
Physics C – Electricity/Magnetism[3]	4 semester units toward Natural Science	4 semester units*	Areas B1 and B3 4 semester units	Area 5A with lab 3 semester units
Physics C - Mechanics[3]	4 semester units toward Natural Science	4 semester units*	Area B1 and B3 4 semester units*	Area 5A with lab 3 semester units
Psychology	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D9 3 semester units	Area 4I
Spanish Language	3 semester units toward Humanities	6 semester units	Area C2 3 semester units	Area 3B and 6A
Spanish Literature	3 semester units toward Humanities	6 semester units	Area C2 3 semester units	Area 3B and 6A
Statistics	3 semester units toward Language and Rationality; Math Competency	3 semester units	Area B4 3 semester units	Area 2
Studio Art – 2D	N/A	3 semester units	N/A	N/A
Studio Art – 3D	N/A	3 semester units	N/A	N/A
Studio Art – Drawing	N/A	3 semester units	N/A	N/A
U.S. Government and Politics	3 semester units toward Social/Behavioral Sciences	3 semester units	Area D8 + US-2 3 semester units	Area 4H
U.S. History	3 semester units toward Social/Behavioral Sciences or Humanities	6 semester units	(Area C2 or D6) + US-1 3 semester units	Area 3B or 4F
World History	3 semester units toward Social/Behavioral Sciences or Humanities	6 semester units	Area C2 or D6 3 semester units	Area 3B or 4F

[3]AP Physics Exam Limitations: Maximum 4 semester units toward GE and 6 semester units toward transfer/unit credit.

References: CSU-GE: CSU Office of the Chancellor, Memorandum 5/10/10, Code: AA-2010-09; IGETC:IGETC Standards V 1.2

CHAFFEY COLLEGE GENERAL EDUCATION/CSU-GE/IGETC CREDIT FOR IB TESTS

Students may earn credit for International Baccalaureate (IB) tests. IB credit can be used to meet CSU-GE, IGETC and A.A. general education requirements(GE). Minimum test scores may be different for CSUGE and IGETC. Chaffey accepts the IB test score and awards unit credit in accordance with the CSU. Students must have the College Board send IB exam results to the Admissions Office for use on GE patterns. **Course credit and units granted at Chaffey College may differ from course credit and units granted by another college or transfer institution.**

EXAM	Minimum IB SCORE Chaffey/CSU-GE	Minimum IB SCORE IGETC	CCC units awarded	AA (GE) CHAFFEY COLLEGE	Semester Credits Toward CSU-GE Breadth Certification	CSU American Institutions and/or GE Breadth Area	IGETC Area
Biology HL	5	5	6 semester	N/A No lab credit	3 semester units	B2	Area 5B (without lab)
Chemistry HL	5	5	6 semester	N/A No lab credit	3 semester units	B1	Area 5A (without lab)
Economics HL	5	5	6 semester	3 units toward Social/ Behavioral Sciences	3 semester units	D2	Area 4B
Geography HL	5	5	6 semester	3 units toward Social/ Behavioral Sciences	3 semester units	D5	Area 4E
History (any region) HL	5	5	6 semester	3 units toward Social/ Behavioral Sciences	3 semester units	C2 or D6	Area 3B or 4F
Language A1[1] (any language) HL	4	5	6 semester	3 units toward Humanities	3 semester units	C2	Area 3B (and 6A)
Language A2[1] (any language) HL	4	5	6 semester	3 units toward Humanities	3 semester units	C2	Area 3B (and 6A)
Language B (any language) HL	4	5	6 semester	3 units toward Humanities	3 semester units	N/A	6A
Mathematics HL	4	5	6 semester	3 units toward Language and Rationality;Math Competency	3 semester units	B4	Area 2A
Physics HL	5	5	6 semester	N/A no lab credit	3 semester units	B1	Area 5A (without lab)
Psychology HL	5	5	3 semester	3 units toward Social/ Behavioral Sciences	3 semester units	D9	Area 4I
Theatre HL	4	5	6 semester	3 units toward Humanities: Arts	3 semester units	C1	Area 3A

CHAFFEY COLLEGE GE: This chart represents IB test scores that can be applied to clear general education areas. This chart does not represent course-to-course articulation. Chaffey course credit may be granted at the discretion of the Chaffey College discipline faculty. CSU-GE: The IB examinations may be incorporated into the certification of CSU General Education-Breath requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breath area if the examination is included as part of a full or subject-area certification. Code: AA-2010-09 CSU System wide Credit for External Examinations. 5/10/2010

IGETC: IB exams must be used in area indicated regardless of where the certifying CCC's discipline is located. IGETC Standards V 1.2, 7.0 Credit by External Exams, 6/9/10

[1]Language (any language) A-HL or B-HL are recognized in IGETC Area 3B. IGETC recognizes any language EXCEPT English to clear LOTE, 6A.

CHAFFEY COLLEGE GENERAL EDUCATION / CSU-GE CREDIT FOR CLEP TESTS

Students may earn credit for College-Level Examination Program (CLEP) tests. CLEP credit can be used to meet CSU GE and Chaffey College A.A. general education (GE). **UC does not award units for CLEP credit.** Students must have the College Board send CLEP results to the Admissions Office for use on the A.A. or CSU-GE patterns. **Course credit and units granted at Chaffey College may differ from course credit and units granted by another college or transfer institution.**

EXAM	AA (GE) CHAFFEY COLLEGE	Minimum CLEP SCORE	Minimum Semester Credits Earned	Semester Credits Toward GE Breadth Certification	CSU American Institutions and/or GE Breadth Area
CLEP American Government	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D8
CLEP American Literature	3 units toward Humanities	50	3 semester units	3 semester units	C2
CLEP Analyzing and Interpreting Literature	3 units toward Humanities	50	3 semester units	3 semester units	C2
CLEP Biology	N/A No lab credit	50	3 semester units	3 semester units	B2
CLEP Calculus	3 units toward Language and Rationality; Math Competency	50	3 semester units	3 semester units	B4
CLEP Chemistry	N/A No lab credit	50	3 semester units	3 semester units	B1
CLEP College Algebra	3 units toward Language and Rationality; Math Competency	50	3 semester units	3 semester units	B4
CLEP College Algebra - Trigonometry	3 units toward Language and Rationality; Math Competency	50	3 semester units	3 semester units	B4
CLEP College Mathematics	N/A	50	0	0	N/A
CLEP English Composition (no essay)	N/A	50	0	0	N/A
CLEP English Composition with Essay	N/A	50	0	0	N/A
CLEP English Literature	3 units toward Humanities	50	3 semester units	3 semester units	C2
CLEP Financial Accounting	N/A	50	3 semester units	0	N/A
CLEP French* Level I	N/A	50	6 semester units	0	N/A
CLEP French* Level II	3 units toward Humanities	59	12 semester units	3 semester units	C2
CLEP Freshman College Composition	N/A	50	0	0	N/A
CLEP German* Level I	N/A	50	6 semester units	0	N/A
CLEP German* Level II	3 units toward Humanities	60	12 semester units	3 semester units	C2

CHAFFEY COLLEGE GENERAL EDUCATION / CSU-GE CREDIT FOR CLEP TESTS

Students may earn credit for College-Level Examination Program (CLEP) Tests. CLEP credit can be used to meet CSU GE and Chaffey College A.A. general education (GE). **UC does not award units for CLEP credit.** Students must have the College Board send CLEP results to the Admissions Office for use on the A.A. or CSU-GE patterns. **Course credit and units granted at Chaffey College may differ from course credit and units granted by another college or transfer institution.**

EXAM	AA (GE) CHAFFEY COLLEGE	Minimum CLEP SCORE	Minimum Semester Credits Earned	Semester Credits Toward GE Breadth Certification	CSU American Institutions and/or GE Breadth Area
CLEP History, United States I	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D6 + US 1
CLEP History, United States II	3 units toward Social/Behavioral sciences	50	3 semester units	3 semester units	D6 + US 1
CLEP Human Growth and Development	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	E
CLEP Humanities	3 units toward Humanities	50	3 semester units	3 semester units	C2
CLEP Information Systems and Computer Applications	3 units toward Language and Rationality	50	3 semester units	0	N/A
CLEP Introduction to Educational Psychology	N/A	50	3 semester units	0	N/A
CLEP Introductory Business Law	N/A	50	3 semester units	0	N/A
CLEP Introductory Psychology	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D9
CLEP Introductory Sociology	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D0
CLEP Natural Sciences	N/A No lab credit	50	3 semester units	3 semester units	B1 or B2
CLEP Pre-Calculus	3 units toward Math Competency	50	3 semester units	3 semester units	B4
CLEP Principles of Accounting	N/A	50	3 semester units	0	N/A
CLEP Principles of Macroeconomics	3 units toward Social Behavioral sciences.	50	3 semester units	3 semester units	D2
CLEP Principles of Management	N/A	50	3 semester units	0	N/A
CLEP Principles of Marketing	N/A	50	3 semester units	0	N/A
CLEP Principles of Microeconomics	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D2

CHAFFEY COLLEGE GENERAL EDUCATION / CSU-GE CREDIT FOR CLEP TESTS

Students may earn credit for College-Level Examination Program (CLEP) Tests. CLEP credit can be used to meet CSU GE and Chaffey College A.A. general education (GE). **UC does not award units for CLEP credit.** Students must have the College Board send CLEP results to the Admissions Office for use on the A.A. or CSU-GE patterns. **Course credit and units granted at Chaffey College may differ from course credit and units granted by another college or transfer institution.**

EXAM	AA (GE) CHAFFEY COLLEGE	Minimum CLEP SCORE	Minimum Semester Credits Earned	Semester Credits Toward GE Breadth Certification	CSU American Institutions and/or GE Breadth Area
CLEP Social Sciences and History	N/A	50	0	0	N/A
CLEP Spanish* Level I	N/A	50	6 semester units	0	N/A
CLEP Spanish* Level II	3 units toward Humanities	63	12 semester units	3 semester units	C2
CLEP Trigonometry	3 units toward Language and Rationality; Math Competency	50	3 semester units	3 semester units	B4
CLEP Western Civilization I	3 units toward Humanities or Social/Behavioral Sciences	50	3 semester units	3 semester units	C2 or D6
CLEP Western Civilization II	3 units toward Social/Behavioral sciences.	50	3 semester units	3 semester units	D6

*If a student passes more than one CLEP test in the same language other than English, then only one examination may be applied to the baccalaureate.

CHAFFEY COLLEGE GE: This chart represents CLEP test scores that can be applied to clear general education areas. There is no course-to-course articulation, no course equivalency granted based on CLEP or AP test scores. Chaffey course credit may be granted at the discretion of the Chaffey College discipline faculty.

CSU-GE: The CLEP examinations may be incorporated into the certification of CSU General Education-Breath requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breath area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breath requirements.

Reference: CSU Office of the Chancellor, Memorandum: Systemwide Credit for External Examinations Code: AA-2010-09 5/10/2010

College Level Examination Program (CLEP)
Students who successfully complete CLEP examinations are awarded units by Chaffey College and the California State University. The University of California does not award credit for CLEP examinations. CLEP credit awarded can be applied to the Chaffey College general education and CSU-GE breadth areas. The College Level Examination Program (CLEP) Table on pages 23-25 indicates the CLEP examination, minimum CLEP score (varies between 50 and 63) and 3 semester units awarded for Chaffey General Education categories and CSU-GE breadth areas.

DANTES/DSST
The military's Defense Activity for Non-Traditional Education Support (DANTES) provides a Credit by Exam Program that includes Dantes Subject Standardized Test (DSST) examinations. Recognition of DSST examinations is determined by each California Community College and CSU campus. The University of California does not award credit for DSST examinations.

Chaffey College will review DSST examinations by student petition. The decision to award credit is based on the following factors: ACE recommendation as a baccalaureate level course and minimum score, and faculty review. When approved, 3 units of elective credit will be granted. Discipline faculty will determine if a DSST examination can be substituted in lieu of a specific course for the Associate Degree general education area, major, certificate or prerequisite. DSST examinations cannot be used for CSUGE and/or IGETC certification.

Credit for Transfer Work

GRANTING OF CREDIT
Credit for college-level courses completed at other accredited education institutions will be evaluated for content quality 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. Any University of California
2. Any California State University
3. Other California community colleges
4. United States Armed Forces Institute (USAFI)
5. University of California Extension
6. Out-of-state colleges and universities
7. Nursing schools
8. Foreign colleges and universities (see page 16)
9. Correspondence courses
10. Military experience
11. 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. Note: Chaffey College will only accept units from colleges/universities from Regional Institutional Accrediting Organizations. For specific information, please contact the Admissions and Records Office.

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 once the semester has begun. Students cannot elect to audit after the last day to drop with a "W". 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.

Program Changes

ADDS
During late registration for the fall/spring terms, students may register for any class with the instructor's permission. Instructor's permission is granted by issuing an Add Code. High school students, students with special petitions, financial restrictions, co-requisite waivers and students who are auditing must register in person. The last day to add is addressed in the schedule of classes. Students are not permitted to add classes after the last day to add deadline. Open entry/open exit and short term classes may be added up to the 14th week of the fall/spring term.

DROPS OR WITHDRAWAL
Drops or withdrawals must be done online via My ChaffeyVIEW. A student may drop or withdraw, or be dropped by an instructor, only before 61% completion of a class. Students may not drop or be dropped by an instructor after 61% 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 22% 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.

A student who drops a class or is dropped by an instructor after 22% of the course, and on or

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:

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

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

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

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

MEANING OF GRADE SYMBOLS

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

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

Grade	Grade Points	Definition
A+, A	4.00	Excellent
A-	3.70	Excellent
B+	3.30	Good
B	3.00	Good
B-	2.70	Good
C+	2.30	Satisfactory
C	2.00	Satisfactory
D+	1.30	Less than satisfactory
D	1.00	Less than satisfactory
D-	0.70	Less than satisfactory
F	0	Failing
FW	0	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.
CR	N/A	Credit. At least satisfactory. CR grades are not used in calculating GPA. *(Only assigned for courses with CR/NC designation and credit by exam.)*
*P	N/A	Passing; At least satisfactory. P grades are not used in calculating GPA. (Only assigned for course with P/NP designation and credit by exam)
NC	N/A	No credit. Student did not fulfill academic requirements of course. NC grades are not used in calculating GPA. *(Only assigned for courses with CR/NC designation.)*
*NP	N/A	No Pass; Less than satisfactory or failing. (Only assigned for course with P/NP designation)
W	N/A	Withdrawal. Assigned for students who officially withdraw from a class after 22% and before 61% of the course has elapsed. "W" grades are not used in calculating GPA, but are used as factors in probation and dismissal procedures.
I	N/A	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.
IP	N/A	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 use in calculating GPA.
RD	N/A	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.
MW	N/A	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.

*Chaffey College began using the P/NP (Pass/No Pass) grading symbol in Fall 2008.

before 61% 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.

Grading

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 or by dealing directly with the instructor, 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.

Withdrew/Unofficially/Withdrew 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 (Withdrew) 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.

PASS/NO PASS GRADING
Courses offered on a Pass/No Pass only basis and courses where Pass/No Pass grading is an option are clearly identified in the college catalog and schedule of classes. In courses with a letter grade or Pass/No Pass option, it is the student's responsibility to request the Pass/No Pass option through an application process. Students who elect this option must pick up the appropriate application forms from the Admission and Records Office. A student may reverse his/her enrollment from Pass/No Pass status to receive an evaluative grade provided the reversal is completed prior to the deadline to add classes for the section number in question. Note: short term classes add deadlines vary; see the schedule of classes for deadline information. Students may enroll in a maximum of eight optional Pass/No Pass units per semester; however, courses offered only on a Pass/No Pass basis are exempt from the eight unit maximum. A maximum of 16 units of credit for optional Pass/No Pass courses may apply toward graduation requirements; this does not apply to courses offered only on a Pass/No Pass basis.

IMPORTANT NOTICE TO TRANSFER STUDENTS
Transfer institutions may consider No Pass grades to be equivalent to "F" grades. Additionally, they may not accept course work for which a Pass grade has been issued. Students planning to transfer to a four-year institution should review the Pass/No Pass acceptance policy of the transfer institution before applying for the Pass/No Pass option.

Course Repetition

COURSE REPETITION IN A NON-REPEATABLE COURSE
1. Students who received a satisfactory grade ("A", "B", "C", "CR", or "P") may not normally repeat the course. Exceptions exist for recency, extraordinary circumstances, and legally-mandated training requirements as a condition of continued paid or volunteer employment (see exceptions below for details). Such exceptions require a petition, available from the Admissions and Records Office.

2. Students who have received an incomplete grade ("I") may not repeat the course. Required coursework must be completed within one year, or the "I" grade will default to an alternate grade indicated by the instructor (usually substandard).

3. Students who have received an In-Progress grade ("IP") must repeat the course by enrolling in it in the next subsequent term (excluding summer). Coursework must be completed in that 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 requirements, or team-sports that have seasons that overlap semesters.

4. Students who have received an unsatisfactory grade ("D", "F", "FW", "NC", or "NP") or have withdrawn from the course ("W") may repeat the course once. If unsuccessful in the second attempt, the student must file a petition to be considered for a third or subsequent attempt at the course. Petitions are obtained from the Admissions and Records Office. The academic dean over the subject area being petitioned evaluates and approves/disapproves each petition on a case-by-case basis.

5. Students who have withdrawn for verified military service ("MW") may repeat course(s) from which they have withdrawn. The "MW" grade does not affect GPA, nor does it count toward the permitted number of repetitions.

COURSE REPETITION IN A REPEATABLE COURSE
Repeatable courses are those in which course content differs each time offered, the course is an activity or performance where the student gains skills or enhanced proficiencies by supervised repetition, or where active participatory experience in individual study or group assignments is the basic means by which course learning objectives are obtained.
1. Repeatable courses are identified in the description for each course so designated. Courses may be repeated only for the number of times specified. In addition, certain activity courses have collective limitations on the number of repeats based on the entire group/cluster of courses (for example, when an activity subject has both beginning and advanced course levels.)

2. All attempts at a repeatable course count in the limitation on repeats, including any that result in an unsatisfactory grade ("D", "F", "FW", "NC", and "NP") or a withdrawal annotation ("W") on the student's permanent record.

3. When an repeatable course is taken and a substandard grade ("D", "F", "FW", NC", and "NP") earned, a student may elect to have the satisfactory grade earned in the first subsequent repeat of the course used to alleviate the substandard grade. Forms for this election are available in the Admissions and Records Office.

EFFECT OF COURSE REPETITION FOR SUBSTANDARD GRADE ON PERMANENT RECORD
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 flagged with an "R" coding on the student's permanent record. The "R" coded grade and grade points are then disregarded in the computation of the student's grade point average.

EXCEPTIONS TO REPETITION RESTRICTIONS
Recency: A student may petition to repeat a course that is not designated as repeatable and in which he or she has received a satisfactory grade ("A", "B", "C", "CR", or "P") when that student's level of competency in the course material has diminished over a period of time. The most recent grade is 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.

Extraordinary circumstance: A student may repeat a course in which the previous grade is, at least in part, the result of extenuating circumstances (verified cases of accidents, illness, or other circumstances beyond the control of the student).

Training requirement: A student may 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 is considered an official repeat; therefore, units and grade points earned will be used in calculations of units earned and grade point averages.

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, NC, and/or NP 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, NC, and/or NP 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 the Coordinator of the Opening Doors to Excellence program at (909) 652-6201.

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, NC, or NP in 50% or more of all enrolled units during three consecutive semesters, excluding summer session.

Note to Veterans:
Rules regarding academic probation and dismissal apply to VA students.

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. The petition, along with instructions on how to complete the process, are mailed to students upon notification of their dismissed standing. Petititons are also available at the Opening Doors to Excellence program office in the Counseling Department on the Rancho Cucamonga Campus.

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, or NP drops below 50%.

SPECIAL PROBATION
A student readmitted on Special Probation 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, NC or NP drops below 50%. The readmitted student on Special Probation will complete a Readmission Contract for dismissed students. The contract requires that the student on Special Probation list courses to be completed in the subsequent term and agrees to pass all courses with grades of C or better and not withdraw with a grade of W. Students on a special probation contract are subject to dismissal for one or more semesters if the provisions of their contract are not satisfied. Dismissed students in violation of their special probation contract are subject to administrative withdraw of subsequent terms of enrollment upon verification of grades earned for the contracted term.

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 or pass/no pass 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 (Title 5 - 55046) 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.

CRITERIA
Approval of the request for Academic Renewal is subject to the following criteria:

A) A time period of at least two (2) years must have elapsed since the end of the term of substandard work to be disregarded. Only those requested courses with substandard grades of D, F, FW, NP, and NC will be disregarded.

B) A maximum of twenty-four (24) semester units may be alleviated, within a maximum of two (2) semesters or three (3) quarters and a summer session, which need not be consecutive.

C) Since completion of the work to be disregarded, the student's cumulative grade point average for all units completed at the time of adjustment must be one of the following:

- 16 semester units with a minimum of 3.0 GPA
- 20 semester units with a minimum of 2.5 GPA
- 24 semester units with a minimum of 2.0 GPA

D) Academic Renewal will only be granted ONCE from Chaffey College and Academic Renewal actions are irreversible.

PROCEDURES
The following procedures are to be followed to Petition for Academic Renewal:

1) The student completes an Academic Renewal Petition. Forms are available in the Counseling Department.
   a. The student makes an appointment to meet with a counselor.
   b. The counselor will review the petition for compliance with policy and procedures.
   c. If petitioning for an Associate degree or vocational certificate, the student must adhere to graduation/certification application deadlines as stated in the class schedule.
2) The student will submit the completed Academic Renewal Petition to the Admissions and Records Office for processing.
   a. The Admissions and Records Office will notify the student of the approval or denial of the request. Notification will be sent to the email address provided by the student on the Academic Renewal Petition.
   b. If approved, the permanent academic record shall be annotated in such a manner that all work remains legible, ensuring the true and complete academic history.

FURTHER INFORMATION REGARDING ACADEMIC RENEWAL
A) Academic renewal granted by Chaffey College does not guarantee that other institutions will approve such action. This determination will be made by the respective transfer institution.

B) Student's permanent records from other institutions will not be altered.

Graduation Requirements and Transfer Information

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 55061 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:
  - integrating critical thinking skills with effective written and oral exposition and argument;
  - employing practical applications for problem solving using mathematical principles;
  - investigating various modes of scientific research and methodology;
  - developing an awareness of the role of arts in contemporary society;
  - developing a sensitivity to diversity and a respect for differences among individuals;
  - gaining perspective of various view points relative to historical developments;
  - developing ethical and moral frameworks to interpret contemporary society;
  - developing 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 specific requirements listed below.

"All degree requirements including General Education must be completed with an overall grade point average of 2.0 (C) or better. In addition, all courses that count toward the Associate Degree major or area of emphasis must be satisfactorily completed with grades of A, B, C, or P." (Title 5, 55063)

UNIT AND SUBJECT REQUIREMENTS FOR THE ASSOCIATE DEGREE

I. GENERAL EDUCATION *(minimum 18 units from the following:)*

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.

A. LANGUAGE AND RATIONALITY *(minimum of 2 courses)*

ENGLISH COMPOSITION

English 1A

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, 425, 430
Philosophy 75, 76
Social Science 10
Statistics 10

B. NATURAL SCIENCES *(one laboratory science course)*

Anthropology 1 & 1L
Astronomy 35
Biology 1, 2, 3, 20, 22, 23 & 23L, 61, 424 & 424L
Chemistry 7, 9, 10, 24A
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, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 44, 62A, 63, 82
Broadcasting 3
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45, 421
Fine Arts 50
Interior Design 11,12
Music 1, 2A, 2B, 3A, 4, 12, 21, 22, 26, 32, 33, 60, 62A, 62B, 67, 68
Photography 1, 7, 9, 10, 13
Theatre Arts 1, 4, 5, 10, 12

C2 HUMANITIES *(one course)*

American Sign Language 1, 2, 3, 4, 18
Arabic 1, 2, 3, 4
Biology 16
Chinese 1, 2, 3, 4
Economics 8
English 1C, 7A, 7B, 7D, 7E, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81
French 1, 2
History 1, 2, 5, 6, 7, 9, 10, 12
Humanities 5, 6, 20
Philosophy 70, 72, 77, 78, 80, 81, 82
Spanish 1, 1SS, 2, 2SS, 3, 4, 8, 13, 14, 16

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
Geography 10
History 12, 16, 17, 18, 25, 50, 51, 70, 71
Political Science 1, 2, 3, 7, 10, 21, 25, 32

D2. BEHAVIORAL SCIENCES *(one course)*

Anthropology 2, 3
Child Development and Education 2, 4
Communication Studies 12, 74, 76, 78
Correctional Science 8
Geography 1, 3, 11
Gerontology 11, 18, 23
History 4
Political Science 4
Psychology 1, 21, 25, 41, 65
Social Science 24
Sociology 10, 15, 18, 25, 26

II. MAJOR REQUIREMENTS *(minimum 18 units)*

- Complete an associate degree program as described under "Programs of Study" area in the Chaffey College catalog.

III. 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
Successful completion of the composition course English 1A.

II. READING
Reading proficient or placement into Reading 1 as determined by the Chaffey assessment process, or successful completion of Reading 550 or a more advanced level reading course.

III. MATHEMATICS
Placement into Mathematics 25 or higher as determined by the Chaffey assessment process, or successful completion of one of the intermediate algebra or higher level math or statistics courses listed below:

Mathematics 425, 430, 4, 25, 31, 60, 61, 65A, 65B, 75, 81, 85
Social Science 10
Statistics 10

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 2012-2013 school year. Students who enrolled at Chaffey prior to Fall 2012 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 at Chaffey began. In the event that required courses have been discontinued, students may petition for course substitution by making an appointment with a counselor in the Counseling Center.

Four-Year Universities and Colleges

Chaffey College offers courses that parallel the first two years (lower division) at four-year colleges and universities. Because requirements vary among these institutions, students are encouraged 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 admission requirements for their major and general education courses while attending Chaffey College.

Prospective transfer students are invited to visit the Transfer Center located in SSA 120 on the Rancho Campus or contact the Transfer Center representative at Chino or Fontana for more information about transfer options, details on the transfer process and assistance in filing applications. Information about specific colleges and universities can also be found on the institution's website. Additional helpful online resources include;

www.csumentor.edu for
California State Universities

www.universityofcalifornia.edu/admissions
for UC campuses

www.assist.org for articulation/major
requirements for CSU and UC

www.californiacolleges.org
college/major search tool

www.aiccu.org for information on
private/independent institutions

www.chaffey.edu/transfer for
Transfer Center activities and resources

Cross Enrollment - California residents currently enrolled at a California community college may enroll in one under-graduate course per academic term at CSU or UC campus provided the student has met course prerequisites and space is available. Students are responsible for a nominal enrollment fee, books and parking. Cross enrollment does not constitute regular admission.

Eligible students must have completed one term at their home campus, have a 2.0 GPA, be enrolled in at least six units at their community college and have paid fees for the term. More information and application forms are available through the Transfer Center.

California State University

There are 23 CSU campuses in California. In addition to checking the university's website, students can obtain more information about CSU campuses via the Transfer Center's services and resources.

CSU - Bakersfield www.csub.edu

CSU - Channel Islands www.csuci.edu

CSU - Chico www.csuchico.edu

CSU - Dominguez Hills www.csudh.edu

CSU - East Bay www.csueastbay.edu

CSU - Fresno www.csufresno.edu

CSU - Fullerton www.fullerton.edu

Humboldt State University
www.humboldt.edu

CSU - Long Beach www.csulb.edu

CSU - Los Angeles www.calstatela.edu

California Maritime Academy
www.csum.edu

CSU - Monterey Bay www.csumb.edu

CSU - Northridge www.csun.edu

California State Polytechnic University, Pomona www.csupomona.edu

CSU - Sacramento www.csus.edu

CSU - San Bernardino www.csusb.edu

San Diego State University www.sdsu.edu

San Francisco State University
www.sfsu.edu

San Jose State University www.sjsu.edu

California Polytechnic State University, San Luis Obispo www.calpoly.edu

CSU - San Marcos www.csusm.edu

Sonoma State University www.sonoma.edu

CSU - Stanislaus www.csustan.edu

All the campuses of the California State University welcome applications from community college transfer students. Students who complete any college units after high school are considered transfer students. The number of units a student has completed at the time he/she enters the CSU determines the admission standards that will apply to the application. The majority of transfer students enter as upper-division transfers with 60 semester or 90 quarter units completed. Not all CSU campuses accept lower division transfers, so students who want to transfer with fewer units should check with their intended campus before applying.

Admission offices at all 23 campuses use a common set of factors to make admissions decisions. All campuses have higher standards for out-of-state and international students, some campuses have higher standards for certain majors and some highly impacted campuses have higher standards for all applicants.

Upper Division Transfer Admission Requirements

Minimum requirements for upper division transfer include: 2.00 GPA in all transferable coursework (2.40 for non-California residents) and 60 transferable units that must include 30 units of general education work and completion of general education courses in written communication, oral communication, critical thinking and mathematics.

For most students planning to transfer to the CSU, completing general education classes should be a priority along with major preparation courses. The CSU provides California Community College transfers with two systemwide options for fulfilling CSU lower division general education requirements: CSU General Education (GE) and the Intersegmental General Education Transfer Curriculum (IGETC). See pages 36-37 of this catalog. Within either pattern, the highest priority classes are the three courses in the English language-English composition, oral communication, and critical thinking and a college-level mathematics course. Completion of general education courses prior to transfer is usually the most efficient and cost-effective path for community college transfer students. However, students pursuing high-unit majors in science, engineering and math need to work closely with a counselor to plan their transfer courses to be sure they meet all the admission and major prep requirements and complete as much general education as possible.

Lower Division Transfer Admission Requirements

CSU campuses admitting lower-division students will make admissions decisions based on the courses completed in high school, high school grades and test scores and any college work completed after high school. More details on lower-division transfer requirements can be found at www.csumentor.edu.

Courses Transferable to the California State University

Chaffey College courses numbered from 1-99 are transferable for baccalaureate degree credit at the California State University and marked ***(CSU)*** in the "Course Descriptions" section of this catalog.

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION

CERTIFICATION COURSE PATTERN 2012-2013

Each candidate for the bachelor's degree from a CSU institution shall complete a pattern of general education courses which total a minimum of 48 semester units. Chaffey may certify a maximum of 39 semester units toward meeting this requirement; the remaining 9 semester units must be completed at the CSU at the upper-division level. ***Full general education certification from Chaffey College requires a minimum of 39 units distributed as follows:***

AREA A 9 units required [(1)]

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 ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (*Minimum 9 units)*

A1 Oral Communication *(one course)*
Communication Studies 2, 4, 6, 8

A2 Written Communication *(required)*
English 1A

A3 Critical Thinking *(one course)*
Communication Studies 72
English 1B
Philosophy 75, 76

AREA B SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING
(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 26, 35*
Chemistry 7*, 8, 9*, 10*, 12*, 24A*, 24B*, 70*, 75A*, 75B*
Earth Science 1, 1& 1L*, 5, 5 & 5L*
Geography 4, 4 & 5*, 6°
Geology 1*, 2*, 6, 30^
Physical Science 10*
Physics 5, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44*•, 45*, 46*, 47*

B2 Life Science
Anthropology 1, 1& 1L*
Biology 1*, 2*, 3* 10, 11, 12, 20*, 22*, 23, 23 & 23L*, 61*, 62*, 63*
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, 65B, 75, 81, 85
Social Science 10
Statistics 10

AREA C ARTS AND HUMANITIES
(Minimum 9 units-choose at least one course from each area.)

C1. Arts
Art 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 44
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Fine Arts 50
Interior Design 11, 12
Music 1, 2A, 2B, 3A, 3B, 4, 21, 22X, 26
Photography 1, 10
Theatre Arts 1, 4, 5, 10, 12

C2 Humanities
American Sign Language 1, 2, 3, 4
Arabic 1, 2, 3, 4
Chinese 1, 2, 3
English 1C, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81
French 1, 2
History 1, 2, 4, 7, 12, 16, 20, 21∞, 25, 40X
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 1 or 1SS•, 2 or 2SS, 3, 4, 8, 13, 14

AREA D SOCIAL SCIENCES
(Minimum 9 units - choose courses from two different disciplines)

Administration of Justice 1+
American Sign Language 18
Anthropology 2, 3
Child Development and Education 2, 4, 6
Communication Studies 12, 74, 76, 78
Consumer Studies 11
Correctional Science 5∞, 8∞
Economics 1, 2, 4, 8
Geography 1, 3, 10, 11X,
Gerontology 11, 18, 22, 23
History 1, 2, 4, 5, 6, 7, 9, 10, 12, 16, 17, 18, 20, 21∞, 40X, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 25
Psychology 1, 20, 21, 25, 65
Social Science 24
Sociology 10, 14, 15, 16•, 18, 25, 26, 70

AREA E LIFELONG LEARNING AND SELF-DEVELOPMENT [1]
(Minimum 3 units)

Biology 14
Child Development and Education 2#
Consumer Studies 40
Gerontology 22
Guidance 3
Nutrition and Food 5, 15, 22
Physical Education Lecture 15
Psychology 5, 25
Social Science 17
Sociology 16

* = Laboratory science course
+ = Course must be completed Fall 2003 or later.
° = Course must be completed Spring 2005 or later.
# = Course must be completed Fall 2005 or later.
X = Course must be completed Spring 2006 or later.
• = Course must be completed Spring 2007 or later.
^ = Course must be completed Fall 2010 or later.
∞ = Course must be completed Fall 2011 or later.
1 = Veterans may meet Area E requirements via DD-214.

COURSES COUNT IN ONE AREA ONLY.

CSU REQUIREMENT

The State Requirement in U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS may be met by completion of History 17 or 18, and Political Science 1

INTERSEGMENTAL GENERAL EDUCATION

TRANSFER CURRICULUM (IGETC) 2012-2013

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 requirements. Depending on the major/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.

Courses used for certification must be completed with grades "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 IGETC list during the year in which it was taken by the student. Students beginning in Fall 2012 must follow the 2012-2013 IGETC requirements.

Partial IGETC certification is allowed with a maximum of two courses missing, which have to be completed after transfer. Students need Areas 1 and 2 of the transfer curriculum completed to meet minimum transfer admission requirements. Partial certification acknowledging a deficiency in Area 1 and/or Area 2 may also indicate a student does not meet the minimum transfer requirements.

AREA 1 ENGLISH COMMUNICATION

Group A: English Composition *(Required CSU/UC)*
English 1A

Group B: Critical Thinking-English Composition *(Required CSU/UC)*
English 1B

Group C: Oral Communication (*CSU Requirement Only - 1 course)*
Communication Studies 2, 6, 8

AREA 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING *(Required CSU/UC - 1 course)*
Mathematics 25#*, 60, 61*, 65A, 65B, 75, 81, 85
Social Science 10#*
Statistics 10

AREA 3 ARTS AND HUMANITIES
(Required CSU/UC - 3 courses minimum, with at least one course from Arts and one from Humanities)

ARTS:
Art 1, 3, 5, 6, 7, 9, 11
Cinema 25, 26
Dance 1
Fine Arts 50
Music 2A, 2B, 3A, 3B, 4, 21•, 22X, 26•
Theatre Arts 1, 4, 5

HUMANITIES:
American Sign Language 3, 4
Arabic 3, 4
English 1C, 32, 33, 68, 70A, 70B, 71, 74#, 75A, 75B, 76, 77, 79, 80A, 80B, 81
History 1, 2, 4#, 5, 6, 7, 9, 10, 12, 16#, 20, 25, 40X, 50, 51,70, 71
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 3, 4, 8, 13, 14

AREA 4 SOCIAL AND BEHAVIORAL SCIENCES
(Required CSU/UC - 3 courses minimum, from at least two different disciplines)
American Sign Language 18
Anthropology 2, 3
Child Development and Education 2*, 4
Communication Studies 12, 74
Economics 1*, 2, 4, 8
Geography 1•, 3, 10, 11X,
Gerontology 18*
History 4#, 5, 6, 7, 9, 10, 12, 16#, 17, 18, 20, 40X, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 25
Psychology 1, 20*, 25*, 65
Social Science 24
Sociology 10, 14, 15, 16•, 18*, 25, 26, 70

AREA 5 PHYSICAL AND BIOLOGICAL SCIENCES
(Required CSU/UC - 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 26*, 35
Chemistry 8•, 9*, 10*, 12•, 24A*, 24B*, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5•, 5 & 5L•
Geography 4, 4 & 5, 6°
Geology 1, 2, 6∞, 30
Physical Science 10
Physics 5*, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44*•, 45*, 46*, 47*

BIOLOGICAL SCIENCES:
Anthropology 1, 1 & 1L
Biology 1*, 2, 10*, 11, 12, 20, 22, 23, 23 & 23L, 61, 62, 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 complete one of the following courses:

American Sign Language 2
Arabic 2
Chinese 2
French 2*
Spanish 2*, 2SS*
(American Sign Language 3 or 4, ***or*** Arabic 3 or 4,
or Spanish 3, 4 or 8 may be used to validate this requirement.

Other methods for verifying language competency exist. See the college catalog or contact counseling.

= Course must be completed Fall 2003 or later.
+ = Course must be completed Spring 2005 or later.
° = Course must be completed Fall 2005 or later.
X = Course must be completed Spring 2006 or later.
• = Course must be completed Spring 2007 or later.
∞ = Course must be completed Fall 2011 or later.
* = Transfer credit may be limited by either UC or CSU, or both.

COURSES MAY COUNT IN ONLY ONE AREA

GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS

(CSU requirement only. Not part of IGETC; may be completed prior to transfer.)

CSU requires 2 courses

Political Science 1 and either

History 17 or 18

Courses used to meet this requirement may not be used to satisfy requirements for IGETC. ***Please consult with a counselor for additional information.***

University of California

The University of California includes nine undergraduate campuses throughout the state and a tenth campus in San Francisco that offers graduate and professional programs in the health sciences. Students interested in learning more about the undergraduate campuses are encouraged to visit Chaffey's Transfer Center at the Rancho campus or contact the Transfer Center representative at Chino or Fontana. The Transfer Center offers a variety of services to help potential transfer students identify options, choose a transfer destination and complete required applications. Helpful information is also available online at www.universityofcalifornia.edu/admissions and on each campus' website.

1 University of California, Davis
www.ucdavis.edu

2 University of California, Berkeley
www.berkeley.edu

3 University of California, Santa Cruz
www.ucsc.edu

4 University of California, Santa Barbara
www.ucsb.edu

5 University of California, Los Angeles
www.ucla.edu

6 University of California, Riverside
www.ucr.edu

7 University of California, Irvine
www.uci.edu

8 University of California, San Diego
www.ucsd.edu

9 University of California, Merced
www.ucmerced.edu

Upper Division Transfer Requirements

Most transfer students enter UC at the junior level. This means they have completed 60 semester units, general education and most, if not all, of their lower-division major prerequisites. To be considered for admission as a junior, students must fulfill the following:

1. Complete 60 semester or 90 quarter units of transferable college credit with a GPA of at least 2.4 (2.8 for nonresidents of California).
2. Complete the following course pattern requirements, earning a grade of C or better in each course:
   - Two transferable college courses in English composition (English 1A and English 1B)
   - One transferable college course in mathematical concepts and quantitative reasoning (typically Math 25)
   - Four transferable college courses chosen from at least two of the following subject areas: arts and humanities, social and behavioral sciences, physical and biological sciences. Each course must be at least 3 semester units.

Applications from prospective transfer students undergo a comprehensive review process involving specific criteria:

- Completion of a specified pattern or number of courses that meet breadth or general education requirements.
- Completion of a specified pattern or number of courses that provide continuity with upper division courses in the student's major
- GPA in all transferable courses
- Participation in academically selective honors courses or programs
- Special talents, achievements and awards in a particular field such as visual and performing arts or athletics; special skills such as demonstrated written and oral proficiency in other languages; special interests such as intensive study of other cultures; experiences that demonstrate unusual promise for leadership; or other significant experiences or achievements that demonstrate promise for contributing to the intellectual vitality of a campus.

Transfer Admission Guarantee - Seven UC campuses (Berkeley and Los Angeles do not participate) offer guaranteed admission to California community college students who meet specific requirements. By participating in a Transfer Admission Guarantee (TAG) program, students will receive an early review of their academic records, early admission notification and specific guidance about major preparation and general education coursework. To pursue a TAG, students should meet with a Chaffey counselor to review/update a plan to address remaining UC requirements and then complete an online TAG application. When the TAG is approved, fulfill all remaining coursework and GPA requirements in the TAG agreement and then apply for admission to UC during the appropriate filing period.

Interested students can find more information about eligibility criteria for each participating campus online under the "Transfer" heading at www.universityofcalifornia.edu/admissions or by contacting the Transfer Center. TAG details will also be posted on the Transfer Center's website at www.chaffey.edu/transfer.

Lower Division Transfer Requirements
While all UC campuses welcome a large pool of junior-level transfers, most admit only a limited number of lower-division transfers. However, it can happen. Here's how:

- Students who were eligible for admission to UC when they graduated from high school - meaning they satisfied the subject, examination and scholarship requirements or were identified by UC during their senior year as Eligible in the Local Context (ELC) and completed the subject and examination requirements in the senior year - are eligible for transfer if they have a 2.0 GPA in their transferable college coursework (2.8 GPA for nonresidents).

- Students who met the scholarship requirement in high school, but did not satisfy the 15-course subject requirement, must take transferable college courses in the missing subjects, earn a C or better in each required course and have an overall 2.0 GPA in all transferable coursework to be eligible to transfer (a 2.8 GPA is required for nonresidents).

Courses Transferable to the University of California

Chaffey College courses numbered from 1-99 are transfer-level courses; those accepted for baccalaureate degree credit at the University of California are marked (UC) in the "Course Descriptions" section of this catalog.

Private/Independent Colleges and Universities Out-of-State Colleges and Universities

Admission requirements to private and out-of-state colleges and universities vary with each institution. Specific information regarding eligibility requirements and applications procedures is generally published in the institution's catalog and on their website. Students may also visit the Transfer Center for assistance.

Chaffey College Transfer Center

Students are encouraged to utilize the resources and services available through the Transfer Center. Transfer fairs, specific contact information, individual appointments with university representatives and trips to visit local campuses will help students select a transfer campus. Students are also urged to work closely with their counselors to develop and maintain an educational plan to support their transfer goals.

The Transfer Center is located on the Rancho campus in room SSA-120; limited services are also available at Chino and Fontana. (909) 652-6233 or www.chaffey.edu/transfer.

PROGRAMS OF STUDY

Educational programs are "an organized sequence of courses leading to a defined objective, a degree, a certificate, a diploma, a license, or transfer to another institution of higher education (Title 5, section 55000)." Programs of study at Chaffey College are designed to provide students with certificates/licensure and/or degrees, training for a variety of career and technical fields, and/or preparation for transfer to four-year colleges. Chaffey's currently active certificate and degree programs may be found on pages 41-42. Detailed information about each program's constituent coursework and any additional requirements may be found on pages 43-96.

ASSOCIATE DEGREES FOR TRANSFER

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer", a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that accepts the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high-unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or a college or university that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

Currently, Chaffey has eight (8) approved transfer degrees: Administration of Justice, Communication Studies, Geology, Mathematics, Political Science, Psychology, Sociology, and Theatre Arts. Additional transfer degree majors are being developed. Please see a counselor for more information.

The following is required for all AA-T or AS-T degrees:

1. Minimum of 60 CSU-transferable semester units.

2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. Students should keep in mind that while a minimum of 2.0 is required for admission, some majors may require a higher GPA. Consult with a counselor for more information.

3. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major as detailed in the Programs of Study section of the catalog. All courses in the major must be completed with a grade of C or better or a "P" if the course is taken on a "pass-no pass" basis (title 5 § 55063).

4. Certified completion of the California State University General Education-Breadth pattern (CSU GE, on page 36) OR the Intersegmental General Education Transfer Curriculum pattern (IGETC, on page 37).

ASSOCIATE DEGREES

Chaffey offers both Associate in Arts (AA) and Associate in Science (AS) degrees. Associate in Arts degrees are two-year degrees in Liberal Studies disciplines that provide a broad exploration of a specific area of emphasis. Associate in Science degrees typically are two-year occupational degrees that prepare students for career and technical fields. Most AA degree and many AS degrees provide a solid foundation for further academic study for students wishing to transfer.

CERTIFICATES

Certificate programs focus on a specific vocational topic/subject area, and are designed to provide students with knowledge and skills immediately applicable to employment. Certificate programs typically do not require or include general education type courses, and most can be completed in less than two years – sometimes within a single term. Certificates are awarded to students who have successfully completed the required sequence of courses in an occupational field. A minimum grade of "C" or "P" is required for every course required for the certificate. All certificates have been approved by the Chaffey Curriculum Committee, and are listed – along with their constituent courses – elsewhere in this catalog. Chaffey offers two types of certificates:

STATE APPROVED Certificates of Achievement are state-approved certificate programs consisting of 18 or more units of degree-applicable coursework. These certificates appear by name on student's transcripts.

LOCALLY APPROVED Certificates of Career Preparation are locally-approved certificate programs consisting of fewer than 18 units of degree-applicable coursework. These certificates do not appear on student's transcripts.

Degree and Certificate Programs

These are the Associate Degree majors/areas of emphasis and Certificates currently available at Chaffey. The courses to fulfill the requirements for each listed program are detailed in the following pages. All courses used to fulfill Associate Degree majors and state- or locally-approved Certificates must be completed with a minimum grade of C. All programs are subject to change; students should consult with a counselor for further information.

PROGRAM	Transfer Degree	Associate Degree	State Approved Certificate	Locally Approved Certificate*
Accounting		✓	✓	
Bookkeeping				✓
Government and Not-For-Profit Organizations				✓
Paraprofessional			✓	
Financial Planning				✓
Payroll and Income Tax Preparer				✓
Administration of Justice	✓		✓	
Anthropology		✓		
Art				
Art Emphasis		✓		
Ceramics Studio Emphasis		✓		
Drawing/Painting Studio Emphasis		✓		
New Media Emphasis		✓		
Art/Digital Media				
Computer Graphics for Print Media Emphasis		✓	✓	
Design for Multimedia Emphasis		✓	✓	
Web Design Emphasis		✓	✓	
Art History		✓		
Art/Visual Communication: Illustration		✓	✓	
Automotive Technology				
Master Automotive Technician		✓	✓	
Automotive Electrical Systems				✓
Engine Performance (Smog Check) Technician			✓	
Engine Rebuilding				✓
General Automotive Service Technician		✓	✓	
High Performance Engines Building & Blueprinting				✓
Aviation Maintenance Technology				
Airframe		✓	✓	
Powerplant		✓	✓	
Biology		✓		
Broadcasting and Cinema		✓		✓
Business Administration		✓	✓	
Marketing				✓
Small Business Entrepreneur		✓		
Small Business Entrepreneur Level I				✓
Small Business Entrepreneur Level II			✓	
Business: Management		✓	✓	
Management – Level I				✓
Management – Level II			✓	
Logistics Management		✓	✓	
Retail Management		✓	✓	
Supervision		✓		
Supervision Level I				✓
Supervision Level II			✓	
Business: Paralegal Studies			✓	

PROGRAM	Transfer Degree	Associate Degree	State Approved Certificate	Locally Approved Certificate*
Business and Office Technologies				
General Office Assistant Level I				✓
General Office Assistant Level II				✓
Microsoft Office Excel Applications				✓
Microsoft Office Specialist				✓
Microsoft Office Expert			✓	
Microsoft Word Specialist				✓
Office Management		✓	✓	
Professional Administrative Assistant: Executive		✓	✓	
Professional Administrative Assistant: Exe./Bilingual		✓	✓	
Professional Administrative Assistant: Medical		✓	✓	
California State University-GE (CSU-GE)			✓	
Chemistry		✓		
Child Development and Education		✓		
Communication Studies	✓			
Computer Information Systems		✓	✓	
Cisco CCNA Examination Preparation Level I				✓
Cisco CCNA Examination Preparation Level II				✓
Cisco CCNA Examination Preparation Level III				✓
Cisco CCNA Examination Preparation Level IV			✓	
Cisco CCNP Examination Preparation Level V			✓	
Cisco CCNP Examination Preparation Level VI			✓	
Cisco CCNP Examination Preparation Level VII			✓	
Cisco CCNP Examination Preparation Level VIII			✓	
Correctional Science		✓	✓	
Culinary Arts			✓	
Dance		✓		
Dental Assisting		✓	✓	
Dietetic Service Supervisor			✓	
Drafting				
Architectural		✓	✓	
Mechanical		✓	✓	
Earth Science		✓		
Economics		✓		
Education Paraprofessional		✓		
Education Paraprofessional Level I				✓
Education Paraprofessional Level II			✓	
Engineering		✓		
English		✓		
Fashion Design		✓	✓	
Costume Design		✓	✓	
Custom Dressmaking			✓	
Industrial Sewing				✓
Patternmaking for Apparel			✓	
Fashion Merchandising		✓	✓	

continued on next page

Degree and Certificate Programs

PROGRAM	Transfer Degree	Associate Degree	State Approved Certificate	Locally Approved Certificate*
Fine Arts: Music		✓		
Fine Arts: Theatre Arts		✓		
Fire Technology: Professional Firefighter		✓	✓	
Geography		✓		
Geology	✓			
Gerontology		✓	✓	
Community Caregiver				✓
History		✓		
Hotel and Food Service Management				
Food Production Management			✓	
Food Service		✓	✓	
Food Service/Waitstaff Personnel				✓
Hotel Management		✓	✓	
Humanities		✓		
Industrial Electrical Technology				
Electromechanical Technology		✓		
Electromechanical Technology Level I				✓
Electromechanical Technology Level II			✓	
Electromechanical Technology Level III			✓	
Industrial Electrical Technology		✓		
Industrial Electrical Technology Level I				✓
Industrial Electrical Technology Level II			✓	
Industrial Electrical Technology Level III			✓	
Fiber Optic Cabling Technician				✓
Network Cabling Technician				✓
Instrumentation Technology		✓		
Instrumentation Technology Level I				✓
Instrumentation Technology Level II			✓	
Interior Design		✓	✓	
Intersegmental GE Transfer (IGETC)			✓	
Journalism			✓	
Mathematics	✓			
Music		✓		
Commercial Music		✓		
Nursing				
Acute Care Technician				✓
Associate Degree Nursing (A.D.N.)		✓		
Associate Degree Nursing: V.N. to R.N.		✓		
Home Health Aide				✓
Nursing Assistant				✓
Vocational (V.N.)		✓	✓	
Nutrition and Food		✓	✓	
Pharmacy Technician		✓	✓	
Philosophy		✓		
Religious Studies		✓		

PROGRAM	Transfer Degree	Associate Degree	State Approved Certificate	Locally Approved Certificate*
Photography		✓		
Still Photography			✓	
Physical Education		✓		
Coaching			✓	
Physical Science		✓		
Physics		✓		
Political Science	✓			
Psychology	✓			
Radiologic Technology		✓		
Real Estate		✓	✓	
Real Estate Salesperson				✓
Sign Language Studies		✓		
Sociology	✓			
Spanish		✓		
Theatre				
Performing Arts		✓		
Theatre Arts	✓			
University Studies				
Arts and Humanities Emphasis		✓		
Social and Behavioral Sciences Emphasis		✓		
Mathematics and Science Emphasis		✓		
Business and Technology Emphasis		✓		

**Locally approved certificates do not appear on a transcript.*

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting to business reporting.
2. Demonstrate the ability to work effectively as a member of a team.
3. Apply the conceptual framework of managerial accounting.
4. Apply the conceptual frameworks of individual taxation to make appropriate decisions.
5. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
6. Demonstrate an understanding of the legal and ethical environment of business appropriate decisions.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S005/04756/0502.00]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
ACCTG 70	Cost Accounting (or ACCTG 430*, Accounting for Governmental and Not-for-Profit Organizations, 4, or ACCTGFS 453*, U.S. and California Income Tax Preparation, 4)	3
BUS 28A	Business Law I	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
CIS 1	Introduction to Computer Information Systems	3
STAT 10	Elementary Statistics	4
	Total units for the major	**24-25**

Requirements for the Accounting Certificate:
[T005/20675/0502.00]
Same as the major requirements for the A.S. Degree ***plus:***

Nine units from the following:		
ACCTG 430*	Accounting for Governmental and for Not-for-Profit Organizations	4
ACCTG 435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
ACCTGFS 453*	U.S. and California Income Tax Preparation	4
ACCTGFS 454	Introduction to the Taxation of Corporations and Partnerships	4
CIS 68	Using the Internet	1.5
	Total units for the certificate	**33-34**

*ACCTG 430 and ACCTGFS 453 may not be counted twice

Accounting and Financial Planning Certificate Programs

The Accounting/Financial Planning certificate programs are designed to prepare non-transfer accounting students for entry level positions and provide non-accounting majors with sufficient expertise to enable them to make intelligent use of accounting information.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting to business reporting.
2. Demonstrate the ability to work effectively as a member of a team.
3. Apply the conceptual framework of managerial accounting.
4. Apply the conceptual framework of financial and managerial accounting and reporting in business.
5. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
6. Apply the conceptual frameworks of individual taxation to make appropriate decisions.
7. Apply the conceptual frameworks of financial planning to make appropriate decisions.
8. Demonstrate an understanding of the legal and ethical environment of business appropriate decisions.

Requirements for the Accounting Certificate: [T005/20675/0502.00]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
ACCTG 70	Cost Accounting (or ACCTG 430*, Accounting for Governmental and Not-for-Profit Organizations, 4 or ACCTGFS 453*, U.S. and California Income Tax Preparation, 4)	3
BUS 28A	Business Law I	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
CIS 1	Introduction to Computer Information Systems	3
STAT 10	Elementary Statistics	4

Plus nine units from the following:		
ACCTG 430*	Accounting for Governmental and for Not-for-Profit Organizations	4
ACCTG 435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
ACCTGFS 453*	U.S. and California Income Tax Preparation	4
ACCTGFS 454	Introduction to the Taxation of Corporations and Partnerships	4
CIS 68	Using the Internet	1.5
	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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting to business reporting.
2. Apply the conceptual framework of financial and managerial accounting and reporting in business.

Requirements for the Government and Not-for-Profit Organizations Certificate *(Non-transcripted)*: [L008/99999/0502.00]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 430	Accounting for Governmental and Not-For-Profit Organizations	4
ACCTG 435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
	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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting to business reporting.
2. Demonstrate the ability to work effectively as a member of a team.
3. Apply the conceptual framework of financial and managerial accounting and reporting in business.
4. Apply the conceptual frameworks of individual taxation to make appropriate decisions.
5. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
6. Demonstrate an understanding of the legal and ethical environment of business appropriate decisions.

Requirements for the Accounting Paraprofessional Certificate: [L006/07370/0502.00]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
BUSOT 60A	Microsoft Office Word - Specialist	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 455	Fundamentals of English for Business	3
CIS 1	Introduction to Computer Information Systems	3
Plus six units from the following:		
ACCTG 430	Accounting for Governmental and for Not-for-Profit Organizations	4
ACCTG 435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
ACCTGFS 453	U.S. and California Income Tax Preparation	4
	Total units for the certificate	**26**

Bookkeeping

This program is intended for individuals desiring to enter the accounting profession with a minimum of course requirements. Upon successful completion of this Chaffey certificate, candidates will possess the knowledge and analytical tools necessary to manage and use accounting data effectively.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting to business reporting.
2. Apply the conceptual framework of financial and managerial accounting and reporting in business.
3. Demonstrate the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Bookkeeping Certificate (Non-transcripted): [E115/99999/0502.00]		Units
ACCTG-435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
ACCTG 480	Applied Accounting I	3
ACCTG 481	Applied Accounting II	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
	Total units for the certificate	**15**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual frameworks of financial planning to make appropriate decisions.
2. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
3. Apply the conceptual frameworks of individual taxation to make appropriate decisions.
4. Apply the conceptual framework of business taxation to make appropriate decisions.
5. Apply the conceptual frameworks of financial planning and accounting to make appropriate decisions.
6. Apply the conceptual framework of financial and managerial accounting and reporting in business.
7. Demonstrate an understanding of the legal and ethical environment of business appropriate decisions.

Requirements for the Financial Planning Certificate *(Non-transcripted)*: [E116/99999/0504.00]		Units
ACCTGFS 440	Introduction to Financial Planning	3
ACCTGFS 442	Fundamentals of Finance and Investing	3
ACCTGFS 453	U.S. and California Income Tax Preparation	4
ACCTGFS 465	Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Financial Accounting, 4)	3
Plus three units from the following:		
ACCTG 460	Commercial Accounting Software	3
ACCTGFS 450	Tax Preparation for Small Business	1.5
BUS 60	Business Ethics	3
	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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply the conceptual framework of financial and managerial accounting for business reporting.
2. Apply the conceptual frameworks of individual taxation to make appropriate decisions.
3. Apply the conceptual framework of financial and managerial accounting and reporting in business.
4. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
5. Demonstrate an understanding of the legal and ethical environment of business appropriate decisions.
6. Apply the conceptual frameworks of financial planning to make appropriate decisions.

Requirements for the Payroll and Income Tax Preparer Certificate: ***(Non-transcripted)*** [E117/99999/0502.10]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 435	Payroll Accounting	3
ACCTG 460	Commercial Accounting Software	3
ACCTGFS 453	U.S. and California Income Tax Preparation (or ACCTGFS 454, Introduction to the Taxation of Corporations and Partnerships)	4
	Total units for the certificate	**14**

Administration of Justice for Transfer

The Associate in Science in Administration of Justice for Transfer degree prepares students for a variety of careers in the criminal justice system. Courses within the program acquaint students with the American Justice system, crimes' causes, the role of law enforcement, roles of administration of justice practitioners, procedural and constitutional rights of defendants, legal defenses, criminal courtroom procedures, evidence procedures, juvenile procedures, and misdemeanor and felony violations of criminal law.

The program is suited to the needs of students who will complete their education at Chaffey College with an A.S. degree, as well as those students who will complete their Chaffey A.S. degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Administration of Justice guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the field of public law enforcement agencies such as municipal police, probation officers, county deputy sheriffs, correctional officers, game wardens, state parks officials, and private security.

To obtain the Associate in Science in Administration of Justice for Transfer degree, students must:

- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU-GE) or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. List the most common and frequently occurring crimes in California, citing the appropriate and corresponding California Penal Code sections. This will prepare them for entry-level and career positions in the CJS.
2. Develop the ability to identify and then analyze the basic elements of a crime, as defined by the California Penal Code or the Model Penal Code, in order to prepare them for entry-level and career positions in the Criminal Justice System (CJS), and to prepare them for transfer to a four-year college or university majoring in the Criminal Justice or related field.
3. List and explain the three primary levels of government as well as contrast and compare the levels to one another, then provide examples of law enforcement agencies that operate within each respective level of government. This will prepare students to search for criminal justice-related careers in the three levels of government, and will provide them with the knowledge of the jurisdiction and authority of various agencies working within the CJS.
4. Define the three major classifications of crimes, in order to prepare them for entry-level and career positions in the CJS, and to prepare them for transfer to a four-year college or university, majoring in Criminal Justice or related field.
5. Demonstrate skills that foster capacities of analysis, critical reflection, problem solving, communication, career development, and global and community awareness.

Major requirements for the Associate in Science Transfer (AS-T) Degree: [S133/31248/2105.00]		Units
Core (6 units)		
AJ 1	Introduction to the Criminal Justice System	3
AJ 2	Concepts of Criminal Law	3
List A - Any 2 courses (6 units)		
AJ 3	Criminal Court Process	3
AJ 4	Community-Based Problem Solving and the Justice System	3
AJ 5	Legal Aspects of Evidence	3
AJ 6	Juvenile Procedures	3
AJ 7	Criminal Investigation	3
AJ 9	Crime Scene Management and Forensic Evidence	3
CRSCI 1	Introduction to Corrections	3
List B - Any 2 courses (6-7 units)		
Any List A courses not used above, and/or:		
AJ 8	Criminology	3
PSYCH 1	Introduction to Psychology	3
SOC 10	Introduction to Sociology	3
STAT 10	Elementary Statistics	4
	Total units for the major	**18-19**
	***plus* CSU General Education or IGETC Pattern**	**39-41**
	***plus* transfer-level course electives (as needed)**	**0-3**
	Total Units	**60**

Major requirements for the Administration of Justice certificate: [L132/20737/2105.00]		Units
AJ 1	Introduction to the Criminal Justice System	3
AJ 2	Concepts of Criminal Law	3
AJ 3	Criminal Court Process	3
AJ 4	Community-Based Problem Solving and the Justice System	3
AJ 5	Legal Aspects of Evidence	3
AJ 6	Juvenile Procedures	3
AJ 407	California Substantive Law	3
Plus one course from the following:		
AJ 7	Criminal Investigation	3
AJ 8	Criminology	3
AJ 408	Patrol Operations	3
AJ 410	Narcotics and Vice Investigation	3
AJ 412	Writing for Criminal Justic Professionals	3
AJ 413	Police Supervision, Leadership, and Management	3
AJ 415	Principles and Practices of Interviewing and Investigation	1.5
	Total units for the certificate	**22.5-24**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate an understanding of humans in an evolutionary context using a scientific approach.
2. Demonstrate an appreciation for biological and cultural diversity.
3. Demonstrate an understanding of "culture" and its role in everyday life.
4. Demonstrate an understanding of the integrative or holistic nature of anthropology.
5. Develop critical thinking skills to apply key anthropological concepts to relevant current events.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree: [A015/04814/2202.00]		Units
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

Plus four units from the following:
Biology 1, 11, 12, 61
Chemistry 10, . 24A, 24B
Geography 1, 4, 5
Geology 1, 2
Physics 5 & 6, 20A

Plus three units from the following:
Economics 1, 2
History 5, 6
Philosophy 70, 76, 80, 81, 82
Political Science 7, 10
Psychology 1
Sociology 10

Total units for the major **24**

NOTE: A foreign language is highly recommended for transfer students.

Art

The Art program provides preparation for university and college transfer and/or careers in fine arts, visual communications, and graphic communications/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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Communicate in speech and in writing about the history, theories, disciplines, and practices of the visual arts.
2. Engage creativity and original thinking in the study of visual art.
3. Know and apply technical skills, concepts, research practices, and technologies in the creation of written and/or visual products.
4. Know and apply critical thinking and technical skills in the creation, analysis, and interpretation of visual art in written, verbal or visual format.
5. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of visual art.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
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 488	Portfolio and Presentation *(Take ART 488 near the end of program.)*	4

continued next page

Plus completion of one of the following emphases:

Art Emphasis

[A020/04776/1002.00]

		Units
Core requirements, ***plus:***		15
ART 16	Introduction to Painting	3
ART 18	Introduction to Ceramics	3
PHOTO 10	Beginning Photography (or PHOTO 7, Introduction to Digital Photography)	4
Plus one course from the following:		
ART 1	Contempory Art: 1945-Present	3
ART 3	Art History of Western World: Ancient to Medieval	3
ART 5	Art History of Western World: Renaissance to Modern	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
Plus one course from the following:		
ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ART 35	Intermediate Ceramics	3
	Total units for the major	**31-32**

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

Ceramics Studio Emphasis

[A025/04777/1002.30]

		Units
Core requirements, ***plus:***		15
ART 1	Contemporary Art: 1945-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	**31**

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

[A030/10366/1002.10]

		Units
Core requirements, ***plus:***		15
ART 1	Contemporary Art: 1945-Present (or ART 6, Women Artists in History)	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	**32**

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

New Media Emphasis

[A040/10367/1002.00]

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.

		Units
Core requirements, ***plus:***		15
ART 1	Contemporary Art: 1945-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	**28**

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Communicate in speech and in writing about the history, theories, disciplines, and practices of the visual arts.
2. Engage creativity and original thinking in the study of visual art.
3. Know and apply technical skills, concepts, research practices, and technologies in the creation of written and/or visual products.
4. Know and apply critical thinking and technical skills in the creation, analysis, and interpretation of visual art in written, verbal or visual format.
5. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of visual art.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

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 488	Portfolio and Presentation *(Take ART 488 near the end of program.)*	4

Plus completion of one of the following emphases:

Computer Graphic Design for Print Media Emphasis

[A045/12210/0614.60]

		Units
Core requirements, ***plus:***		16
ART 1	Contemporary Art: 1945-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 (or PHOTO 7, Introduction to Digital Photography)	4
	Total units for the major	**41**

Requirements for the Computer Graphic Design for Print Media Certificate: Units
[T046/20696/0614.60]
Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate **41**

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

Design for Multimedia Emphasis

[A046/12211/0614.10]		Units
Core requirements, ***plus:***		16
ART 1	Contemporary Art: 1945-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
CINEMA 25	Survey of World Cinema	3
PHOTO 10	Beginning Photography (or PHOTO 7, Introduction to Digital Photography)	4
	Total units for the major	**37-38**

Requirements for the Design for Multimedia Certificate: Units
[T047/20691/0614.10]
Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate **37-38**

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

Web Design Emphasis

[A048/12213/0614.30]		Units
Core requirements, ***plus:***		16
ART 1	Contemporary Art: 1945-Present	3
ART 73	Typography and Layout	4
ART 83	Internet and Web Design	4
	Total units for the major	**27**

Requirements for the Web Design Certificate: Units
[T049/20692/0614.30]
Same as the major requirements for the A.A. Degree (core + emphasis)

Total units for the certificate **27**

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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Communicate in speech and in writing about the history, theories, disciplines, and practices of the visual arts.
2. Engage creativity and original thinking in the study of visual art.
3. Know and apply technical skills, concepts, research practices, and technologies in the creation of written and/or visual products.
4. Know and apply critical thinking and technical skills in the creation, analysis, and interpretation of visual art in written, verbal or visual format.
5. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of visual art.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S045/04782/1013.00]		
ART 8	Contemporary Media, Art and Visual Language	3
ART 14	Introduction to Drawing	3
ART 30	Figure Drawing	3
ART 62A	Illustration I	3
ART 63	Introduction to Graphic Design	4
ART 73	Typography and Layout	4
ART 488	Portfolio and Presentation *(Take ART 488 near the end of program)*	4
Plus one course from the following:		
ART 1	Contemporary Art: 1945-Present	3
ART 5	Art History of Western World: Renaissance to Modern	3
ART 6	Women Artists in History	3
ART 12	Fundamentals of Design in Three Dimensions	4
ART 16	Introduction to Painting	3
ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ART 62B	Illustration II	3
ART 407	History of Design	3
ART 478	Illustration on the Computer	3
	Total units for the major	**27-28**
Required General Education course:		
ART 10	Fundamentals of Design in Two Dimensions	4

Requirements for the Illustration Certificate:		
[T045/20718/1013.00]		
ART 8	Contemporary Media, Art and Visual Language	3
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 16	Introduction to Painting	3
ART 30	Figure Drawing	3
ART 62A	Illustration I	3
ART 63	Introduction to Graphic Design	4
ART 73	Typography and Layout	4
ART 488	Portfolio and Presentation *(Take ART 488 near the end of program)*	3

Plus two courses from the following:

ART 1	Contemporary Art: 1945-Present	3
ART 5	Art History of Western World: Renaissance to Modern	3
ART 6	Women Artists in History	3
ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ART 62B	Illustration II	3
ART 407	History of Design	3
ART 478	Illustration on the Computer	3
	Total units for the certificate	**41-43**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply critical thinking skills in the creation, analysis, and interpretation of visual art.
2. Communicate in speech and in writing about the history, theories, disciplines, and practices of the visual arts.
3. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of visual art.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[A036/15259/1001.00]		
ART 1	Contemporary Art: 1945-Present	3
ART 3	Art History of the Western World: Ancient to Medieval	3
ART 5	Art History of the Western World: Renaissance to Modern	3

Plus one Studio course:

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 18	Introduction to Ceramics	3
PHOTO 7	Introduction to Digital Photography	4
PHOTO 10	Beginning Photography	4

Plus one course from the following:

ART 9	Art of the Pre-Columbian Americas (Non-Western)	3
ART 11	Asian Art History (Non-Western)	3

Plus two courses from the following:

ART 6	Women Artists in History	3
ART 407	History of Design	3
PHOTO 1	History of Photography	3

or:

Plus two courses from the following:*

ART 10	Fundamentals of Design in Two Dimensions	4
ART 12	Fundamentals of Design in Three Dimension	4
ART 14	Introduction to Drawing	3
ART 18	Introduction to Ceramics	3
PHOTO 7	Introduction to Digital Photography	4
PHOTO 10	Beginning Photography	4
	Total units for the major	**21-24**

** Courses may not be counted twice.*

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 provides instruction pursuant to the standards defined by the National Automotive Technician Education Foundation (NATEF).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Complete the tasks required for employment and certification as an automotive technician.
2. Master the information required for ASE certification.
3. Comply with personal and environmental safety practices associated with clothing, eye protection, hand tools, power equipment, proper ventilation, and the handling, storage and disposal of chemicals/materials in accordance with local, state and federal safety and environmental regulation.
4. State that their learning environment was safe, clean and comfortable, and that they had adequate access to the equipment, tools, and materials needed to meet course objectives.

General Automotive Service Technician

The General Automotive Technician curriculum is designed to provide students with the skills and knowledge necessary to obtain entry-level employment as automotive service and repair technicians. Students who successfully complete the requirements for the General Automotive Technician Associate of Science Degree will be able to perform basic automotive maintenance and service operations and be immediately productive on the job.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S056/30658/0948.00]		
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service and Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC-418, Suspension and Steering Systems, 4)	12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Controls, 5 and AUTOTEC-416, Basic Automotive Air Conditioning, 2)	12
	Total units for the major	**21-24**

Master Automotive Technician

Students who successfully complete the requirements for the Master Automotive Technician 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.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S055/04770/0948.00]		Units
AUTOTEC 423	Engine Management Systems and Drivability	4
AUTOTEC 427	Engine Operation and Service	5
AUTOTEC 429	Automotive Electrical Systems	4
AUTOTEC 432	Manual and Automatic Transmissions, Transaxles, and Drive Trains	5
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service and Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)	12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Electricity and Electronics, 2 and AUTOTEC-416, Basic Auto Air Conditioning, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Controls, 5	12
	Total units for the major	**39-42**

AUTOMOTIVE TECHNOLOGY CERTIFICATE PROGRAMS

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: *(Non-transcripted)* [E445/99999/0948.00]		Units
AUTOTEC 10	Service and Repair	4
AUTOTEC 15	Automotive Electricity and Electronics	2
AUTOTEC 407	Introduction to Hybrid Vehicles	2.5
AUTOTEC 416	Basic Automotive Air Conditioning Systems	2
AUTOTEC 429	Automotive Electrical Systems	4
	Total units for the certificate	**14.5**

Engine Performance (Smog Check) Technician

The Engine Performance 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: [L448/15527/0948.00]		Units
AUTOTEC 10	Service and Repair	4
AUTOTEC 15	Automotive Electricity and Electronics	2
AUTOTEC 422	Fuel, Ignition and Emission Control Systems	5
AUTOTEC 423	Engine Management Systems and Drivability	4
AUTOTEC 429	Automotive Electrical Systems	4
AUTOTEC 443	Clean Air Emission Control	4
	Total units for the certificate	**23**

Engine Rebuilding

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

Requirements for the Engine Rebuilding Certificate *(Non-transcripted)*: [L449/99999/0948.00]		Units
AUTOTEC 430	Engine Rebuilding - Upper Engine	5
AUTOTEC 431	Engine Rebuilding - Lower Engine	5
	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: [L446/15528/0948.00]		Units
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service and Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)	12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Controls, 5)	12
	Total units for the certificate	**21-24**

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: ***(Non-transcripted)***		Units
[E110/99999/0948.00]		
AUTOTEC 430	Engine Rebuilding – Upper Engine	5
AUTOTEC 431	Engine Rebuilding – Lower Engine	5
AUTOTEC 435	High Performance Engine Building and Blueprinting	5
	Total units for the certificate	**15**

Master Automotive Technician

Students who successfully complete the requirements for the Master Automotive Technician 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.

Requirements for the Master Automotive Technician Certificate:		Units
[T055/20708/0948.00]		
AUTOTEC 423	Engine Management Systems and Drivability	4
AUTOTEC 427	Engine Operation and Service	5
AUTOTEC 429	Automotive Electrical Systems	4
AUTOTEC 432	Manual and Automatic Transmissions, Transaxles, and Drive Trains	5
AUTOTEC 450	General Automotive Technician A (or AUTOTEC 10, Service and Repair, 4 and AUTOTEC 417, Brakes, 4 and AUTOTEC 418, Suspension and Steering Systems, 4)	12
AUTOTEC 455	General Automotive Technician B (or AUTOTEC 15, Electricity and Electronics, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Controls, 5 and AUTOTEC 416, Basic Auto Air Conditioning, 2)	12
	Total units for the certificate	**39-42**

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 Aviation Maintenance Technology 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.

Student Learning Outcomes:
Students completing the Aviation Maintenance Technology Airframe and/or Powerplant programs will be able to demonstrate skills that foster capacities of analysis, critical reflection, problem solving, communication, career development, and global and community awareness.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
AMT 12	Aviation Science, Materials, Processes, Inspections, and Regulations	12
AMT 14ABCD	General Aeronautics Laboratory	1-1-1-1

Plus completion of one of the following emphases:

Airframe

[S011/04772/0950.10]		
Core requirements, ***plus:***		16
AMT 30	Airframe Structures	4.5
AMT 31	Airframe Primary Structures	4.5
AMT 32	Airframe Auxiliary Systems	4.5
AMT 33ABC	Airframe Laboratory	1.5-1.5-1.5
AMT 34ABCDEF	Airframe Laboratory	1-1-1-1-1-1
	Total units for the major	**40**

Requirements for the Airframe Certificate:
[L011/20711/0950.10]
Same as the major requirements for the Airframe A.S. Degree (core + emphasis)

Total units for the certificate	**40**

Powerplant

[S012/04773/0950.20]		
Core requirements, ***plus:***		16
AMT 20	Powerplant Theory and Maintenance	4.5
AMT 21	Powerplant Systems and Components I	4.5
AMT 22	Powerplant Systems and Components II	4.5
AMT 23ABC	Powerplant Aeronautics Laboratory	1.5-1.5-1.5
AMT 24ABCDEF	Powerplant Aeronautics Laboratory	1-1-1-1-1-1
	Total units for the major	**40**

Requirements for the Powerplant Certificate:
[L012/20712/0950.20]
Same as the major requirements for the Powerplant A.S. Degree (core +emphasis)

Total units for the certificate	**40**

Biology

The Biological Sciences Major is designed for students who plan to earn a Bachelor's Degree in Biology. The program includes courses that explore life at the molecular, cellular, organismal and ecological levels, providing a foundation for further study in the life sciences and related fields of study (e.g. medicine, dentistry, veterinary science, agriculture, botany, microbiology, zoology, entomology, ecology).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Achieve a level of comprehension of human biology, health and disease that prepares them for success in allied health programs.
2. Demonstrate an ability to effectively use and interpret scientific literature.
3. Distinguish questions that can be addressed scientifically from those that cannot, and identify basic components of the scientific method.
4. Recognize unifying theories and concepts in biology.
5. Acquire a mechanistic understanding of biological processes.
6. Demonstrate skill in scientific thinking, communication, problem solving, and experimental methodology.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S065/04755/0401.00]		
BIOL 61	Introduction to Cell and Molecular Biology	5
BIOL 62	Biology of Organisms	5
BIOL 63	Evolutionary Ecology	4
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
MATH 65A	Calculus I	4
Plus at least three units from the following:		
BIOL 11	Evolution, Sex, and Behavior	3
BIOL 16	Bioethics	3
BIOL 23	General Microbiology	3
CHEM 75A	Organic Chemistry	5
MATH 65B	Calculus II	4
PHYS 20A	College Physics I	4
PHYS 30A	Physics for the Medical and Life Sciences I	4
PHYS 45	Physics for Scientists and Engineers	4
	Total units for the major	**31**

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, postproduction 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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Synthesize a basic overview of the historical practices and personnel involved in the three production phases of the motion picture and broadcasting process.
2. Conceptualize and arrange subject matter (such as script, film and/or radio content, storyboarding) in aspects of broadcasting and cinema.
3. Complete a production of his/her own announcing voice and/or film/TV production reel.
4. Operate industry standard equipment and computer software programs.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S070/04764/0604.00]		
BRDCAST 3	Survey of Broadcasting and Electronic Media	3
BRDCAST 474	High Definition Television Production	3
CINEMA 20	Scriptwriting	3
CINEMA 25	Survey of World Cinema	3
CINEMA 30	Cinema Production	3
CINEMA 80	Producing for Broadcast and Cinema	3
FINART 50	Introduction to Fine Arts	3
Plus nine units from the following:		
BRDCAST 55	Broadcast Audio and Announcing	3
BRDCAST 60	Television Production	3
BRDCAST 62	Multi-Camera Television Production	3
BRDCAST 65	Radio Production	3
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
CINEMA 26	Survey of American Cinema	3
CINEMA 96ABCD	Internships in Cinema or Broadcasting	1-4
	Total units for the major	**30**

Requirements for the Broadcasting and Cinema Certificate: ***(Non-transcripted)***		
[L070/99999/0604.00]		
BRDCAST 3	Survey of Broadcasting and Electronic Media	3
BRDCAST 55	Broadcast Audio and Announcing	3
BRDCAST 60	Television Production	3
BRDCAST 65	Radio Production	2
CINEMA 20	Scriptwriting	3
Plus one course from the following:		
BRDCAST 62	Multi-Camera Television Production	3
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
BRDCAST 474	High Definition Television Production	3
CINEMA 30	Cinema Production	3
CINEMA 80	Producing for Broadcast and Cinema	3
	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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S075/04757/0505.00]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
BUS 10	Introduction to Business	3
BUS 28A	Business Law I	3
BUSMGT 40	Introduction to Management	3
ECON 2	Principles of Macroeconomics (or ECON 4, Principles of Microeconomics)	3
ENGL 1A	Composition (or BUSOT 88, Written Communication for Business)	3
	Total units for the major	**23**

Requirements for the Business Administration Certificate:
[L075/20677/0505.00]
Same as the major requirements for the A.S. Degree, ***plus:***

Plus nine units from the following:		
BUS 28B	Business Law II	3
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUS 435	The Law of Marketing and Business Competition	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMKT 40	Marketing Principles	3
CIS 1	Introduction to Computer Information Systems	3
	Total units for the certificate	**32**

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S390/07371/0506.40]		Units
ACCTGFS 450	Tax Preparation for Small Business	1.5
ACCTGFS 465	Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Financial Accounting, 4)	3
BUS 10	Introduction to Business	3
BUS 430	Business Plan Preparation	1.5
BUSMGT 40	Introduction to Management	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMKT 40	Marketing Principles	3
BUSMKT 402	Introduction to Import/Export	3

Plus nine units from the following:		
ACCTG 435	Payroll Accounting	3
BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 460	Quality Management Principles	3
BUSMGT 480	Principles of Supervision	3
BUSMKT 13	Professional Selling	3
BUSMKT 55	Advertising	3
BUSOT 88	Written Communication for Business	3
	Total units for the major	**30-31**

Requirements for the Small Business Entrepreneur Level I Certificate:
(Non-transcripted)
[L390/99999/0506.40]

ACCTGFS 450	Tax Preparation for Small Business	1.5
ACCTGFS 465	Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Financial Accounting, 4)	3
BUS 430	Business Plan Preparation	1.5
BUSMGT 45	Small Business Ownership and Management	3

Plus six units from the following:

BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3

Total units for the certificate **15**

Requirements for the Small Business Entrepreneur Level II Certificate:
[L391/20681/0506.40]
Same as the major requirements for the A.S. Degree.

Total units for the certificate **30-31**

Business Administration/Marketing

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

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

Requirements for the Business Administration/Marketing Certificate *(Non-transcripted)*: Units
[L080/99999/0509.00]

BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
BUSMKT 55	Advertising	3

Plus two courses from the following:

BUS 10	Introduction to Business	3
BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUS 435	The Law of Marketing and Business Competition	3
BUSMGT 40	Introduction to Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 45	Small Business Ownership and Management	3

Total units for the certificate **15**

Business: 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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units
[S285/04758/0506.00]

ACCTGFS 465	Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Financial Accounting, 4)	3
BUS 10	Introduction to Business	3
BUS 28A	Business Law I	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSOT 88	Written Communication for Business (or ENGL 1A, Composition)	3
CIS 1	Introduction to Computer Information Systems	3

Plus nine units from the following:

BUS 28B	Business Law II	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 460	Quality Management Principles	3
BUSMGT 480	Principles of Supervision	3
BUSMKT 40	Marketing Principles	3
CIS 68	Using the Internet	1.5
COMSTD 8	Fundamentals of Speech Communication	3

Total units for the major **33-34**

Requirements for the Management Level One Certificate (Non-transcripted):
[L285/99999/0506.00]

ACCTGFS 465	Financial Accounting for the Non-Accounting Major (or ACCTG 1A, Financial Accounting, 4)	3
BUS 10	Introduction to Business	3
BUS 28A	Business Law I	3
BUSMGT 40	Introduction to Management	3
BUSMGT 44	Introduction to Human Relations	3

Total units for the certificate **15-16**

Requirements for the Management Level Two Certificate:
[L286/20678/0506.00]
Same as the major requirements for the A.S. Degree.

Total units for the certificate: **33-34**

Business: Management - Logistics

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

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate the ability to work effectively as a member of a team.
3. Demonstrate the ability to convey an idea orally or in writing such that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
4. Understand the different career opportunities in the field of logistics.
5. Demonstrate a working knowledge of transportation, warehousing and supply chain management, in addition to the skills needed to efficiently operate a warehouse.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S289/16802/0510.00]		
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSMGT 13	Supply Chain Management	3
BUSMGT 14	Transportation Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 430	Warehouse Management and Material Handling	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
Plus one course from the following:		
BUS 60	Business Ethics	3
BUSMGT 460	Quality Management Principles	3
BUSMKT 402	Introduction to Import/Export	3
	Total units for the major	**26**

Requirements for the Logistics Management Certificate:		
[L289/20683/0510.00]		
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSMGT 13	Supply Chain Management	3
BUSMGT 14	Transportation Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 430	Warehouse Management and Material Handling	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSOT 88	Written Communication for Business	3
Plus one course from the following:		
BUS 60	Business Ethics	3
BUSMGT 460	Quality Management Principles	3
	Total units for the certificate	**29**

Business: Management - Retail

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S295/04759/0506.50]		
ACCTG 1A	Financial Accounting	4
	(or BUSOT 452, Office Financial Recordkeeping, 3)	
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 440	Principles of Leadership	2
BUSMKT 40	Marketing Principles	3
BUSOT 88	Written Communication for Business	3
CIS 1	Introduction to Computer Information Systems	3
COMSTD 4	Fundamentals of Interpersonal Communication	3
	Total units for the major	**29-30**

Requirements for the Retail Management Certificate:

[L295/20682/0506.50]

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

	Total units for the certificate	**29-30**

Business: 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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Examine and consider the social and/or ethical responsibilities of businesses and business persons.
2. Demonstrate a working knowledge of the functional areas of business encompassed under their degree or certificate program.
3. Demonstrate a working knowledge of the functional areas of international business.
4. Demonstrate the ability to work effectively as a member of a team.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S410/14401/0506.30]		Units
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSOT 88	Written Communication for Business	3
CIS 1	Introduction to Computer Information Systems	3
COMSTD 4	Fundamentals of Interpersonal Communication	3
Plus two courses from the following:		
BUS 10	Introduction to Business	3
BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
CIS 68	Using the Internet	1.5
	Total units for the major	**27.5-29**

Requirements for the Supervision Level I Certificate *(Non-transcripted):* [L411/99999/0506.30]		
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
	Total units for the certificate	**14**

Requirements for the Supervision Level II Certificate:
[L410/20679/0506.30]
Same as the major requirements for the A.S. Degree.

	Total units for the certificate	**27.5-29**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Produce professional quality documents of the type used in the legal profession.
2. Demonstrate competence and understanding of basic job skills to enter the paralegal profession.
3. Have a basic understanding of different career opportunities available in the business and legal sectors.
4. Demonstrate legal problem-solving skills, supported by appropriate analytical and critical thinking techniques.
5. Demonstrate effective interpersonal communication and teamwork skills in a collaborative setting.

Requirements for the Paralegal Studies Certificate: [L400/17631/1402.00]		Units
AJ 1	Introduction to the Criminal Justice System	3
BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 410	International Business Law	3
BUSPL 400	Introduction to Paralegal Studies	3
BUSPL 401	Legal Research and Writing	3
BUSPL 402	Civil Litigation	3
BUSPL 403	Evidence	3
BUSPL 404	Law Office Operations	3
	Total units for the certificate	**27**

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.

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply effective work procedures and practices for maintaining a productive work environment.
2. Supply appropriate job application documents and demonstrate appropriate interviewing techniques.
3. Use electronic input devices to accurately enter data at industry-standard speeds and techniques.
4. Analyze and compile effective, credible, and relevant oral and written business communications.
5. Use the fundamental features of spreadsheet, word processing, desktop publishing, and presentation software.
6. Produce final mailable business documents from rough-draft, hand-written, and/or dictated material.

Requirements for the General Office Assistant Certificate:		Units
Level One *(Non-transcripted)*		
[L055/99999/0514.00]		
BUSOT 40A	Beginning Computer Keyboarding	3
BUSOT 50	Filing and Records Management	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 452	Office Financial Recordkeeping	3
BUSOT 455	Fundamentals of English for Business	3
	Total units for the certificate	**13.5**

Recommended:

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

Level Two *(Non-transcripted)*		
[L056/99999/0514.00]		
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word - Specialist	3
BUSOT 88	Written Communication for Business (or BUSOT 460, Proofreading: Text Editing Skills)	3
BUSOT 470	Office Systems and Procedures	3
	Total units for the certificate	**12**

Recommended:

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

Plus a minimum keyboarding speed of 35 wam for 5 minutes verified by the Business and Office Technologies Department Proficiency Certificate.

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply effective work procedures and practices for maintaining a productive work environment.
2. Integrate imported and exported data into charts, graphs, web pages, pivot tables and pivot charts, and objects.
3. Interpret data to create formulas for business calculations used in spreadsheets.

Requirements for the Microsoft Office Excel Applications Certificate:		Units
(Non-transcripted)		
[E355/99999/0514.00]		
BUSOT 40A	Beginning Computer Keyboarding	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64A	Microsoft Office Access – Specialist	1.5
BUSOT 452	Office Financial Recordkeeping (or ACCTG 1A, Financial Accounting, 4)	3
Plus three units from the following:		
BUSOT 60A	Microsoft Office Word – Specialist	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 64B	Microsoft Office Access – Expert	1.5
BUSOT 400	Job Search and Interviewing Techniques	1.5
	Total units for the certificate	**13.5-14.5**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Apply effective work procedures and practices for maintaining a productive work environment.
2. Use the fundamental features of spreadsheet, word processing, desktop publishing, and presentation software.
3. Supply appropriate job application documents and demonstrate appropriate interviewing techniques.

Requirements for the Microsoft Office Specialist Certificate:		Units
(Non-transcripted)		
[E350/99999/0514.00]		
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word – Specialist	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64A	Microsoft Office Access - Specialist	1.5
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 410A	Microsoft Office Publisher – Specialist	1.5
	Total units for the certificate	**15**

Plus a minimum keyboarding speed of 35 wam 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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Apply effective work procedures and practices for maintaining a productive work environment.
2. Use the fundamental features of spreadsheet, word processing, desktop publishing, and presentation software.
3. Supply appropriate job application documents and demonstrate appropriate interviewing techniques.

Requirements for the Microsoft Office Expert Certificate:		Units
[L354/15318/0514.00]		
Same requirements as the Microsoft Office Specialist Certificate ***plus:***		15
BUSOT 60B	Microsoft Office Word – Expert	3
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 64B	Microsoft Office Access – Expert	1.5
BUSOT 410B	Microsoft Office Publisher – Expert	1.5
	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 wam for five minutes verified by the Business and Office Technologies Department Proficiency Certificate.

Microsoft Word Specialist

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

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Apply effective work procedures and practices for maintaining a productive work environment.
2. Use the fundamental features of spreadsheet, word processing, desktop publishing, and presentation software.
3. Analyze and compile effective, credible, and relevant oral and written business communications.

Requirements for the Microsoft Word Specialist Certificate: ***(Non-transcripted)***		Units
[L352/99999/0514.00]		
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word - Specialist	3
BUSOT 60B	Microsoft Office Word - Expert	3
BUSOT 455	Fundamentals of English for Business	3
	Total units for the certificate	**12**

Recommended:

BUSOT 496ABCD	Internships in Business and Office Technologies	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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Analyze and compile effective, credible, and relevant oral and written business communications.
2. Produce final business documents from rough-draft, hand-written, and/or dictated material.
3. Utilize speedwriting to take office messages and instructions using speedwriting forms.
4. Apply effective work procedures and practices for maintaining a productive work environment.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S321/04761/0514.40]		
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 50	Filing and Records Management (or BUSOT 64A*, Microsoft Office Access - Specialist, 1.5)	3
BUSOT 60B	Microsoft Office Word - Expert	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 88	Written Communication for Business	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 452	Office Financial Recordkeeping (or ACCTG 1A, Financial Accounting, 4)	3
BUSOT 455	Fundamentals of English for Business	3
BUSOT 460	Proofreading: Text-Editing Skills	3
BUSOT 470	Office Systems and Procedures	3
BUSOT 471	Administrative Office Management	3

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

Plus three units from the following:

BUS 28A	Business Law I	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 64A*	Microsoft Office Access – Specialist	1.5
BUSOT 64B	Microsoft Office Access - Expert	1.5
BUSOT 465	Speedwriting and Notetaking	3
BUSOT 496ABCD	Internships in Business and Office Technologies (only one unit will be applied to the certificate)	1
	Total units for the major	**33-35.5**

*BUSOT 64A may not be counted twice

Requirements for the Office Management Certificate:
[L321/20690/0514.40]
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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Analyze and compile effective, credible, and relevant oral and written business communications.
2. Produce final business documents from rough-draft, hand-written, and/or dictated material.
3. Utilize speedwriting to take office messages and instructions using speedwriting forms.
4. Apply effective work procedures and practices for maintaining a productive work environment.
5. Integrate word processing, spreadsheet, database, and electronic information management.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 50	Filing and Records Management (or BUSOT 64A*, Microsoft Office Access - Specialist, 1.5)	3
BUSOT 60B	Microsoft Office Word - Expert	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 88	Written Communication for Business	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 452	Office Financial Recordkeeping	3
BUSOT 455	Fundamentals of English for Business	3
BUSOT 460	Proofreading: Text-Editing Skills	3
BUSOT 462	Machine Transcription and Voice Recognition Software	3
BUSOT 470**	Office Systems and Procedures (or any combination of BUSOT 61*, 62*, 64A*, or 64B* Microsoft Office courses, to equal 3 units)	

Plus three units from the following:

BIOL 30	Beginning Medical Terminology	3
BUSOT 61*	Microsoft Office PowerPoint	1.5
BUSOT 62*	Microsoft Office Outlook	1.5
BUSOT 64A*	Microsoft Office Access – Specialist	1.5
BUSOT 64B*	Microsoft Office Access - Expert	1.5
BUSOT 465	Speedwriting and Notetaking	3
BUSOT 471	Administrative Office Management	3
BUSOT 496ABCD	Internships in Business and Office Technologies (only one unit will be applied to the certificate)	1

*Courses may not be counted twice.

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

Plus specialization for completion in one of the following areas:

Executive

[S316/07372/0514.00]

BUSOT 470**	Office Systems and Procedures	3

Executive - Bilingual

[S317/10351/0514.00]

BUSOT 470**	Office Systems and Procedures	3
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)	6

**BUSOT 470 may not be counted twice

Medical

[S319/10353/0514.20]

BIOL 424	Anatomy and Physiology	3
BUSOT 475	Medical Office Procedures	3

Total units for the majors **36-43.5**

Requirements for the Professional Administrative Assistant Certificate:

[Executive-L325/20685/0514.00; Executive-Bilingual-L317/20687/0514.00; Medical-L319/20688/0514.20]

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

Total units for the certificates **36-43.5**

California State University - General Education (CSU-GE)

The CSU-GE Certificate of Achievement is designed for students who plan to transfer to one of the campuses of the California State University. Completion of courses for this certificate will assist students to transfer without the need to take additional lower-division general education courses to satisfy university general education requirements.

Each candidate for the bachelor's degree from a CSU institution shall complete a pattern of general education courses which total a minimum of 48 semester units. Chaffey may certify a maximum of 39 semester units toward meeting this requirement; the remaining 9 semester units must be completed at the CSU at the upper-division level. ***Full general education certification from Chaffey College requires a minimum of 39 units distributed as follows:***

AREA A	9 units required
AREAS B, C, & D	A minimum of 9 units is required in each area
AREA E	3 units required

To meet the CSU-GE Breadth Certification requirements, courses in Areas A1, A2, A3, and B4 must be completed with a grade of C or better. To earn this Chaffey CSU-GE certificate, ***ALL*** courses must be completed with a C or better.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate effective communication and comprehension skills.
2. Demonstrate critical thinking skills in problem solving across the disciplines and in daily life.
3. Demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives.
4. Assess their knowledge, skills and abilities; set personal, educational and career goals; work independently and in group settings; demonstrate computer literacy; and cultivate self-reliance, financial literacy and physical, mental and social health.

continued next page

Requirements for the CSUGE Certificate: Units
[T001/30503/4901.10]

AREA A ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (*Minimum 9 units*) **9**

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 75, 76

AREA B SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING **9**
(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 26, 35*
Chemistry 7*, 8, 9*, 10*, 12*•, 24A*, 24B*, 70*, 75A*, 75B*
Earth Science 1, 1& 1L*, 5, 5 & 5L*
Geography 4, 4 & 5*, 6°
Geology 1*, 2*, 6, 30^
Physical Science 10*
Physics 5, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44*•, 45*, 46*, 47*

B2 **Life Science**
Anthropology 1, 1& 1L*
Biology 1*, 2*, 3* 10, 11, 12, 20*, 22*, 23, 23 & 23L*, 61*, 62*, 63*
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, 65B, 75, 81, 85
Social Science 10
Statistics 10

AREA C ARTS AND HUMANITIES **9**
(Minimum 9 units-choose at least one course from each area.)

C1. Arts
Art 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 44
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Fine Arts 50
Interior Design 11, 12
Music 1, 2A, 2B, 3A, 3B, 4, 21, 22X, 26
Photography 1, 10
Theatre Arts 1, 4, 5, 10, 12

C2 **Humanities**
American Sign Language 1, 2, 3, 4
Arabic 1, 2, 3, 4
Chinese 1, 2, 3
English 1C, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81
French 1, 2
History 1, 2, 4, 7, 12, 16, 20, 25, 40X
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 1 or 1SS•, 2 or 2SS, 3, 4, 8, 13, 14

AREA D SOCIAL SCIENCES **9**
(Minimum 9 units - choose courses from two different disciplines)

Administration of Justice 1+
American Sign Language 18
Anthropology 2, 3
Child Development and Education 2, 4, 6
Communication Studies 12, 74, 76, 78
Consumer Studies 11
Correctional Science 5∞, 8∞
Economics 1, 2, 4, 8
Geography 1, 3, 10, 11X,
Gerontology 11, 18, 22, 23
History 1, 2, 4, 5, 6, 7, 9, 10, 12, 16, 17, 18, 20, 21∞, 40X, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 25
Psychology 1, 20, 21, 25, 65
Social Science 24
Sociology 10, 14, 15, 16•,18, 25, 26, 70

AREA E LIFELONG LEARNING AND SELF-DEVELOPMENT [1] **3**
(Minimum 3 units)

Biology 14
Child Development and Education 2#
Consumer Studies 40
Gerontology 22
Guidance 3
Nutrition and Food 5, 15, 22
Physical Education Lecture 15
Psychology 5, 25
Social Science 17
Sociology 16

Total units for the certificate **39**

CSU REQUIREMENT - The State Requirement in U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS may be met by completion of History 17 or 18, and Political Science 1.

* = Laboratory science course
\+ = Course must be completed Fall 2003 or later.
° = Course must be completed Spring 2005 or later.
\# = Course must be completed Fall 2005 or later.
X = Course must be completed Spring 2006 or later.
• = Course must be completed Spring 2007 or later.
^ = Course must be completed Fall 2010 or later.
∞ = Course must be completed Fall 2011 or later.
1 = Veterans may meet Area E requirements via DD-214.

COURSES COUNT IN ONE AREA ONLY.

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Apply chemical and physical concepts, symbolism, language, atomic structure and use of periodic table to describe the changes that matter undergoes and the application of chemistry.
2. Apply experimental techniques to the laboratory environment as demonstrated by safe handling and disposal of chemicals, obtaining accurate and precise data, evaluating and validating scien...
3. Provide technical information in a clear and concise manner to demonstrate effective written and oral communication skills for chemical and physical concepts.
4. Apply critical thinking and hypothesis driven methods of scientific inquiry to chemical and physical principles.
5. Know important chemical and physical concepts, symbolism and language used in chemistry, and apply the needed mathematical skills to apply to chemical events and processes.
6. Know the scientific approach to effective written and oral communication skills; apply those skills to chemical and physical concepts, results of laboratory experiments, and articles in the scientific literature.
7. Apply and appreciate how chemical advances have positively and negatively impacted their personal lives through applying the chemical concepts to our world and everyday life.
8. Approach, evaluate options and decide on the correct course of action to resolve problems that have ethical dilemmas.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S085/04808/1905.00]		Units
CHEM-24B	General Chemistry II	5
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-24A	General Chemistry I	5
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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Design and demonstrate developmentally appropriate early childhood curriculum that supports children's cognitive, language, creative, physical, social, and emotional growth.
2. List, describe, and interpret NAEYC's quality standards for early childhood programming.
3. Describe the importance of play.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S090/04797/1305.00]		Units
CDE 1	Introduction to Principles and Practices in Early Childhood Education	3
CDE 2	Child Growth and Development	3
CDE 3	Child Study and Observation	3
CDE 4	Child, Family and Community	3
CDE 5	Health and Safety of the Young Child	3
CDE 6	The Child in a Multicultural Society	3
CDE 23	Introduction to Children with Special Needs	3
CDE 24	Curriculum Theory I: Principles and Practices	2
CDE 24W	Supervised Occupational Work Experience Practicum I	1
CDE 25	Curriculum Theory II: Advanced Principles and Practices	2
CDE 25W	Supervised Occupational Work Experience Practicum II	1
CDE 26	Community Internship Seminar: Child Development and Education	2
CDE 415	Dynamics of Play	3
CDE 416	Brain Research and Implications for Classroom Teaching	3
	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 Associate in Arts for Transfer

The Communication Studies Associate in Arts for Transfer degree is an interdisciplinary area of inquiry with a foundation in tradition rhetoric and contemporary social-scientific theories of human communication. 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. 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.

The program is suited to the needs of students who will complete their education at Chaffey College with an A.A. degree, as well as those students who will complete their Chaffey A.A. degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Communication Studies guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the field of business, industry, government, social service, and/or education in such areas as teaching, public speaking, consulting, law, announcing and public relations.

To obtain the Communication Studies Associate in Arts for Transfer degree, students must:

- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU-GE) or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Conceive, develop and deliver a focused, cogent, and clear oral presentation.
2. Demonstrate the ability to think critically through problem solving and decision making.
3. Identify the transactional and transformative nature of human communication.

Major requirements for the Associate in Arts Transfer (AA-T) Degree: [A096/30702/1506.00]		**Units**
Core (3 units)		
COMSTD 2	Fundamentals of Effective Speaking	3
List A - Any 2 courses (6 units)		
COMSTD 4	Fundamentals of Interpersonal Communication	3
COMSTD 6	Fundamentals of Small Group Communication	3
COMSTD 72	Logic and Argumentation	3
List B - Any 2 courses (6 units)		
COMSTD 12	Mass Communication and Society	3
COMSTD 14	Oral Interpretation of Literature	3
COMSTD 74	Intercultural Communication	3
List C - Any 1 course (3 units)		
ANTHRO 3	Introduction to Social and Cultural Anthropology	3
COMSTD 8	Fundamentals of Speech Communication	3
COMSTD 76	Gender and Communication	3
COMSTD 78	Family Communication	3
JOUR 10	Newswriting	3
PHOTO 10	Beginning Photography	4
PSYCH 1	Introduction to Psychology	3
SOC 10	Introduction to Sociology	3
	Units for the major	**18-19**
	***plus* CSU General Education or IGETC Pattern**	**39-42**
	***plus* transfer-level course electives (as needed)**	**0-3**
	Total Units	**60**

Computer Information Systems

The Computer Information Systems program is designed to (1) prepare students for the employment market at the entry level in computer and information technology in all sizes and types of organizations, (2) provide a foundation for those students who plan to complete a four-year program in computer information systems or related fields of study, and (3) upgrade current skills to facilitate assumption of assume greater responsibility in a current employment position. This major prepares students for Information Technology careers in networking, hardware support, programming, Internet and Web development, game development, or other emerging technologies depending on the courses selected.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate the use, synthesis, and application of computer and information technology skills required to assume an entry-level position in all sizes and types of organizations.
2. Demonstrate the use, synthesis, and application of computer and information technology skills required to upgrade current skills to assume greater responsibility in a current or new employment position.
3. Demonstrate the use, synthesis, and application of computer and information technology skills required to transfer to a four-year college or university program in Computer Information Systems or a related major.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S100/04765/0702.00]		Units
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Fundamentals of Microsoft Windows	1.5
CIS 50	Introduction to Computer Networks	3
CIS 68	Using the Internet	1.5
CISPROG 1	Introduction to Computer Programming	3
CISIWEB 70	Creating Web Pages with HTML	1.5
Plus a minimum of 17.5 units from the following:		
General:		
CIS 15	Microsoft Access Database Design and Development	3
CIS 420	Computer Security Basics	1.5
CIS 431	Project Management for Information Technology	3
CIS 435	Fundamentals of Microsoft Visio	1.5
Cisco Internetworking:		
CISCO 1	Cisco Internetworking I	4
CISCO 2	Cisco Internetworking II	4
CISCO 3	Cisco Internetworking III	4
CISCO 4	Cisco Internetworking IV	4
CISCO 415	Cisco Internetworking V	4
CISCO 416	Cisco Internetworking VI	4
CISCO 417	Cisco Internetworking VII	4
CISCO 418	Cisco Internetworking VIII	4
CISCO 419	Cisco Internetworking IX	4
Game Development:		
CISGAME 401	Fundamentals of Game Development	1.5
CISGAME 402	Fundamentals of Game Development II	3
CISGAME 403	Fundamentals of Game Programming	3
CISGAME 420	Game Development Using Flash	3
Hardware and Support:		
CISHDSP 401	Microcomputer Hardware	3
CISHDSP 405	A+ Certification Preparation	1.5

Internet and Web Development:

CISIWEB 410	WebMaster Tools	1.5
CISIWEB 412	Web Development: Microsoft FrontPage/Expression	3
CISIWEB 414	Creating Dynamic Web Content Using Javascript/AJAX	3
CISIWEB 420A	Web Development: Flash	3
CISIWEB 436	Web Development: PHP/MySQL	3
CISIWEB 438	Web Development: Ruby on Rails	1.5

Networking:

CISNTWK 11	Microsoft Network Server	3
CISNTWK 413	TCP/IP	1.5
CISNTWK 440	Introduction to Network Security Administration	3

Programming:

CISPROG 3	Fundamentals of Visual Basic Programming	3
CISPROG 403	Advanced Visual Basic Programming	3

Computer Science:

CS 1	Fundamentals of Computer Science	3
CS 21	Fundamentals of C++ Programming	3

Total units for the major **31**

Requirements for the Computer Information Systems Certificate:
[L100/20697/0702.00]
Same as the major requirements for the A.S. Degree.

Total units for the certificate **31**

Computer Information Systems Cisco 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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Demonstrate skills that foster capacities of analysis, critical reflection, problem solving, communication, career development, and global and community awareness.

Requirements for the Cisco CCNA Examination Preparation Level I Certificate *(Non-transcripted)*: Units
[L451/99999/0708.10]

CIS 1	Introduction to Computer Information Systems	3
CISCO 1	Cisco Internetworking I	4

Total units for the certificate **7**

Requirements for the Cisco CCNA Examination Preparation Level II Certificate *(Non-transcripted)*: Units
[L452/99999/0708.10]

Level I Certificate, or CISCO 1 or equivalent, ***plus:***		0-7
CISCO 2	Cisco Internetworking II	4

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

Requirements for the Cisco CCNA Examination Preparation Level III Certificate *(Non-transcripted)*: Units
[L453/99999/0708.10]

Level II Certificate, or CISCO 2 or equivalent, ***plus:***		0-11
CISCO 3	Cisco Internetworking III	4

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

Requirements for the Cisco CCNA Examination Preparation Level IV Certificate: Units
[L454/15533/0708.10]

Level III Certificate, or CISCO 3 or equivalent, ***plus:***		0-15
CISCO 4	Cisco Internetworking IV	4

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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Demonstrate skills that foster capacities of analysis, critical reflection, problem solving, communication, career development, and global and community awareness.

Requirements for the Cisco CCNP Examination Preparation Level V Certificate: Units
[L455/15534/0708.10]

CISCO 4 or equivalent, or passing the Cisco CCNA examination, ***plus:***		0-19
CISCO 415	CISCO Internetworking V	4

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

Requirements for the Cisco CCNP Examination Preparation Level VI Certificate: Units
[L456/15534/0708.10]

CISCO 4 or equivalent, or passing the Cisco CCNA examination ***plus:***		0-23
CISCO 416	CISCO Internetworking VI	4

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

Requirements for the Cisco CCNP Examination Preparation Level VII Certificate: Units
[T457/15534/0708.10]

CISCO 4 or equivalent, or passing the Cisco CCNA examination, ***plus:***		0-27
CISCO 417	CISCO Internetworking VII	4

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

Requirements for the Cisco CCNP Examination Preparation Level VIII Certificate: Units
[T458/15534/0708.10]

CISCO 4 or equivalent, or passing the Cisco CCNA examination, ***plus:***		0-31
CISCO 418	CISCO Internetworking VIII	4

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

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Recognize and be able to compare and contrast the Five Correctional Philosophies.
2. Explain the impact of crime on victims as well as society.
3. Have the ability to analyze complex situations, employ a reasonable plan for resolution and devise methods for appraisal of desired outcomes.
4. Relate their understanding of the Criminal Justice system components by their ability to differentiate between the roles and responsibilities of each.
5. Explain the significance of gender, race, ethnicity and socio-economic as they relate to past and present as well as future trends within the Criminal Justice system in America.
6. Identify and define the three main crime causation theories.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units

[S105/04811/2105.10]

CRSCI 1	Introduction to Corrections	3
CRSCI 2	Control and Supervision of Inmates	3
CRSCI 3	Correctional Law	3
CRSCI 5	Crime and Delinquency	3
CRSCI 6	Correctional Interviewing and Counseling	3
CRSCI 8	Ethnic Group Relations	3

Plus three courses from the following:

AJ 1	Introduction to the Criminal Justice System	3
AJ 2	Concepts of Criminal Law	3
AJ 3	Criminal Court Process	3
AJ 4	Community-Based Problem Solving and the Justice System	3
AJ 5	Legal Aspects of Evidence	3
CRSCI 4	Public Relations and Corrections	3
CRSCI 7	Probation and Parole	3
CRSCI 10	Violence in America	3
CRSCI 409	Women and the Criminal Justice System	3
CRSCI 410	Street Gangs and Subcultures	3
CRSCI 411	Juvenile Corrections	3
CRSCI 450	Correctional Report Writing	3
	Total units for the major	**27**

Requirements for the Correctional Science Certificate:

[L105/20738/2105.10]

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

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the ability to work effectively as a member of a team.
2. Describe safe food preparation, preservation, serving, and storage techniques.
3. Manage the professional preparation, presentation and service of quality food.
4. Communicate accurately and effectively, both verbally and in writing.
5. Develop, examine, question and explore perspectives or alternatives to problems in hospitality operations.

Requirements for the Culinary Arts Certificate: Units

[L255/07398/1306.30]

HOTFS 10	Introduction to Hospitality Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 18	Sanitation, Safety and Equipment Management	2
HOTFS 20	Purchasing, Cost Controls, and Menu Planning	2
HOTFS 424	Dining Systems and Restaurant Operations	3
HOTFS 432	Hospitality and Healthcare Law	3
HOTFS 434	Catering and Banquet Organization	3
HOTFS 436A	Culinary Arts I	2
HOTFS 436B	Culinary Arts II	2
HOTFS 436C	Culinary Arts III	2
HOTFS 496ABCD	Work Experience: Hotel and Food Service Management	2
NF 11	Food Service Management Supervision	3
NF 15	Nutrition I: The Science of Nutrition (or NF 5, Nutrition for Life, or NF 25, Culture and Nutrition)	3
	Total units for the certificate	**33**

Dance

The Chaffey College Dance program provides a two-year program of academic study and training in dance for students pursuing an Associate of Arts degree in Dance and/or transferring to a four-year university or other institution, as well as preparation for careers in the commercial dance field or related fields. The wide-ranged curricula, providing a practical and theoretical dance foundation, offers professional technical training, choreographic inquiry and study, performance/production opportunities, and historical and cultural studies of dance. The series of core courses and electives, including dance history and appreciation, ballet, modern, jazz, and tap techniques, ballroom dance forms, hip hop/commercial dance, as well as movement for the stage, provides foundational training and skills for further study of dance and preparation for careers in dance or dance-related fields. For students emphasizing choreography and/or performance, the program also provides artistic development and training through improvisational and compositional studies, and dance performance and repertory studies. The main stage dance concerts and musicals, informal performances, and technical coursework provide opportunities for students to experience the creative process as part of their course of study. Critical thinking, problem solving, and expressive communication competencies through dance study, and the conceptual and physical application of dance training will enable the dance student to extend knowledge and skills to numerous subject areas and fields of study. These areas include teaching careers for those desiring to be instructors in public schools (K-12), private studios, health and fitness gyms and spas, special and adult education programs, day care centers, and recreation programs; performance-related careers in theatrical, television, and film production as performers and choreographers; dance administration, public relations, and arts council; dance therapy; dance critic, historian, and researcher; stage manager; events coordinator; and designer.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Differentiate between dance as a theatrical art and social form throughout history through technical skills development in the studio and theoretical analysis.
2. Develop and exhibit dance technical skills and styles within a wide spectrum of dance forms, while applying embodied knowledge of the mechanical principles of physical movement in performance for an expressive, communicative purpose.
3. Exhibit improved poise, self-confidence, strength, flexibility, coordination, body awareness and control, and rhythmic awareness, as well as collaborative problem-solving and diversity awareness through technical skills, acquired style, and performance/choreographic skills.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree: [A115/04781/1008.00]		Units
DANCE 1	Survey of Dance	3
DANCE 4A	Ballet IA	1.5
DANCE 4B	Ballet IB	1.5
DANCE 6A	Ballet IIA	1.5
DANCE 6B	Ballet IIB	1.5
DANCE 10A	Jazz Dance IA	1
DANCE 10B	Jazz Dance IB	1
DANCE 20A	Modern Dance IA	1
DANCE 20B	Modern Dance IB	1
DANCE 30A	Tap Dance IA	1
DANCE 50A	Jazz Dance IIA	1
DANCE 50B	Jazz Dance IIB	1
DANCE 400	Hip Hop Dance	1
DANCE 420	Social Dance	1
Plus one course from the following:		
DANCE 30B	Tap Dance IB	1
THEATRE 10	Beginning Acting	3
Plus one course from the following:		
DANCE 42	Dance Production	3
THEATRE 50	Main Stage Production Workshop I	3
Plus two courses from the following:		
DANCE 2	Theatrical Dance (also available as THEATRE 2)	3
DANCE 60A	Tap Dance IIA	1
DANCE 60B	Tap Dance IIB	1
THEATRE 12	Intermediate Acting	3
	Total units for the major	**24-30**

Dental Assisting

The Dental Assisting Program is accredited by the Commission on Dental Accreditation and Dental Board of the State of California. The program features full-time, part-time, and fast-track schedules. The full-time schedule is completed in one year. The part-time schedule must be completed within three years of continuous enrollment. The fast-track schedule is completed in a shorter time depending on student and clinical availability.

Students receive a comprehensive education including dental sciences, hands-on practice laboratory, dental radiation safety certification, coronal polishing and sealant certificates, 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 (CDA) as well as the Registered Dental Assistant Examination (RDA).

Graduates are eligible for employment in private dental practices, clinics, and hospitals as assistants, technicians, and dental practice management positions.

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 degree major or certificate must be completed with a minimum grade of C.
3. Before entering the preclinical portion of the Dental Assisting Program, students must pass a health examination as evidence of good mental and physical 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 or other accredited Dental Assisting program courses 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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the ability to achieve a level of success by being able to demonstrate the skills necessary for employment in the dental assisting profession.
2. Demonstrate the ability to achieve a level of success to master current methods, materials, supplies and equipment to occupational requirements in the dental assisting profession.
3. Demonstrate the ability to achieve a level of success in being able to give back to the community as a representative of the dental profession.

continued next page

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S120/04791/1240.10]		
DENTAL 400	Dental Assisting Core Sciences	6
DENTAL 410	Dental Assisting Preclinical Sciences	6
DENTAL 420	Radiography for Dental Assistants	6
DENTAL 430	Clinical Practice	6
	Total units for the major	**24**

Requirements for the Dental Assisting Certificate:
[T120/20723/1240.10]
Same as the major requirements for the A.S. Degree

	Total units for the certificate	**24**
Recommended course:		
DA 496ABCD	Occupational Work Experience: Dental Assisting	1-4

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. The 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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Assess the impact of age, culture and gender on diet and nutrition.
2. Describe food preparation, preservation, serving, and storage techniques that prevent food poisoning.
3. Design a meal plan based on the food guide pyramid including divisions, recommended serving and serving sizes.
4. Identify and describe the effect of nutrition on health and body mass.
5. Operate effectively as part of a health care team.

Requirements for the Dietetic Service Supervisor Certificate:		Units
[L256/07389/1306.20]		
HOTFS 14	Quantity Food Production Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 18	Sanitation, Safety and Equipment Management	2
NF 11	Food Service Management Supervision	3
NF 15	Nutrition I: The Science of Nutrition	3
NF 19	Nutrition II: Modified Diets	3
NF 470	Dietetic Service Supervisor (take twice)	1-1
NF 470L	Dietetic Service Supervisor: Supervised Clinical Laboratory (take twice)	1-1
	Total units for the certificate	**21**

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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, and using digital media and other appropriate modes of communication or expression.
2. Demonstrate knowledge and technical competency in applied drafting practice in their chosen discipline.
3. Demonstrate mastery of the application of modern CAD software tools in the production of technical documents.
4. Produce technical documents that comply with current industry accepted drafting standards and practices.
5. Address professional and ethical responsibilities including a respect for diversity.
6. Engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.
7. Work effectively in teams.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S125/04774/0953.10]		
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 50	Architectural Design I	3
DRAFT 51	Architectural Design II	3
DRAFT 53	Architectural Applications of CAD	4
DRAFT 452	Light Commercial Construction Design	3
EGTECH 10	Introduction to Engineering Design	4
ID 12	History of Western Architecture and Interiors II	3
	Total units for the major	**27**

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

continued next page

Requirements for Drafting Technician: Architectural Certificate:
[L125/20714/0953.10]

Same as the major requirements for the A.S. Degree and general education requirements, ***plus:***		34
COOPED 96ABC	Cooperative Education: Career Field Studies (or COOPED 497ABCD, General Work Experience) (any combination to equal 3 units)	3
	Total units for the certificate	**38**

Drafting Technician: Mechanical

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

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, and using digital media and other appropriate modes of communication or expression.
2. Demonstrate knowledge and technical competency in applied drafting practice in their chosen discipline.
3. Demonstrate mastery of the application of modern CAD software tools in the production of technical documents.
4. Produce technical documents that comply with current industry accepted drafting standards and practices.
5. Address professional and ethical responsibilities including a respect for diversity.
6. Engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.
7. Work effectively in teams.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S135/07382/0953.40]		
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 41	Computer-Aided Drafting and Design: Mechanical	4
DRAFT 43	Three-Dimensional Computer Modeling and Solids Modeling	3
DRAFT 78	Advanced Design Applications	4
EGTECH 10	Introduction to Engineering Design	4
EGTECH 16	Computer Integrated Manufacturing – CNC Material Removal	3
	Total units for the major	**25**

Required General Education courses:

PHYS 5	The Ideas of Physics	3
PHYS 6	The Ideas of Physics Laboratory	1
(or any advanced course in physics with a laboratory)		

Requirements for Drafting Technician: Mechanical Certificate:
[L135/20715/0953.40]

Same as the major requirements for the A.S. Degree and general education requirements, ***plus:***		29
COOPED 96ABC	Cooperative Education: Career Field Studies (or COOPED 497ABCD, General Work Experience) (any combination to equal 3 units)	3
	Total units for the certificate	**32**

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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Distinguish between scientific arguments and those generated by other ways of knowing.
2. Demonstrate the ability to follow current events in the discipline, as reported in the lay media.
3. Apply key ideas in astronomy to relevant personal and societal issues.
4. Effectively communicate unifying concepts.
5. Use laboratory equipment and procedures to experience previously unfamiliar aspects of the physical world.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S140/07392/1930.00]		
ASTRON 35	Planets and the Solar System with Lab (or ASTRON 26, Stars and Galaxies, 3)	4
CHEM 9	Health Science Chemistry	5
ESC 5	Oceanography	3
ESC 5L	Oceanography Laboratory	1
GEOL 1	Physical Geology	4
GEOL 2	Historical Geology	4
Plus one course from the following:		
BIOL 1	General Biology	4
BIOL 3	California Natural History	4
BIOL 62	Biology of Organisms	5
	Total units for the major	**24-26**

Required General Education courses:

ART 14	Introduction to Drawing	3
ENGL 1A	Composition	3
ESC 1	Earth Science	3
MATH 31	Plane Trigonometry (or higher-level math)	4

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Identify the three macroeconomic goals and determine economic policies to achieve them.
2. Apply marginal benefit marginal opportunity cost analysis to economic decisions made by individuals, households, businesses, and/or governments.
3. Explain how deviations from the optimal output level might occur including an analysis of the impact of taxes, externalities, and price controls by correctly applying these issues to the demand and supply model.
4. Determine the type of industrial organization/market structure by analyzing the characteristics of an industry to determine its degree of competition.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Art Degree:		Units
[A145/04815/2204.00]		
ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3

Plus four units from the following:

BUS 61*	Introduction to Global Business	3
ECON 8*	History of Economic Ideas	3
ECON 90A*	Economics Honors Seminar (maximum of 4 times)	1-1-1-1

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*, 410
Communication Studies 72
Computer Information Systems 1
Computer Science 1
Economics 1, 8*, 90A*
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

Total units for the major **25**

* course may be counted only once.

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Communicate effectively within a classroom environment as a learning facilitator.
2. Demonstrate teaching and learning strategies sensitive to the needs of diverse K-12 learners.
3. Demonstrate their preparation and qualifications for employment in the education field.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S013/16879/0802.00]		
CDE 2	Child Growth and Development	3
COMSTD 2	Fundamentals of Effective Speaking (or COMSTD 4, Fundamentals of Interpersonal Communication)	3
ED 10	Introduction to Education and Teaching II	3
ED 400	Introduction to Education and Teaching I	3
ENGL 1A	Composition	3
MATH 425	Intermediate Algebra (or higher level math course)	4
	Total units for the major	**19**

Required General Education courses:

PHSCI 10	Survey of Chemistry and Physics (or BIOL 1, General Biology)	4

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:
(Non-transcripted)

[L013/99999/0802.00]		
CDE 2	Child Growth and Development	3
ED 10	Introduction to Education and Teaching II	3
ED 400	Introduction to Education and Teaching I	3
ENGL 450	Fundamentals of Composition	3
	Total units for the certificate	**12**

Requirements for the Education Paraprofessional Level II Certificate:
[L014/20699/0802.00]
Same as the major requirements for the A.S. Degree and general education requirement above

Total units for the certificate **23**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Examine and study the various engineering fields.
2. Understand graphics as a fundamental means of thought process in drawing and design in engineering.
3. Write a program.
4. Increase problem solving skills in engineering.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S165/04768/0901.00]		Units
ENGIN 11	Introduction to Engineering	2
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
PHYS 45	Physics for Scientists and Engineers I	5
PHYS 46	Physics for Scientists and Engineers II	5
PHYS 47	Physics for Scientists and Engineers III	5
Plus at least three courses from the following:		
ENGIN 26	Engineering Graphics and CAD	3
ENGIN 30	Engineering Application of Digital Computation	3
ENGIN 50	Engineering Statics	3
ENGIN 52	Engineering Dynamics	3
ENGIN 60	Materials of Engineering	3
ENGIN 71	Circuit Analysis	4
	Total units for the major	**34-35**
Required General Education course:		
CHEM 24A	General Chemistry I	5
Strongly recommended:		
CHEM 24B	General Chemistry II	5
DRAFT 43	Three-Dimensional Computer Modeling and Solids Modeling	3
MATH 75	Calculus III	5
MATH 81	Linear Algebra	4
MATH 85	Differential Equations	4

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Understand the relationship between purpose and audience for a given subject, whether writing a paper or analyzing a reading.
2. Apply the elements of the writing process (inventing, drafting, revising, editing, proofreading) to any given writing assignment both in the academic and professional spheres.
3. Respond critically to reading assignments.
4. Develop ideas through reflection and synthesis.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree: [A170/04802/1501.00]		Units
ENGL 1B	Advanced Composition and Critical Thinking	3
ENGL 1C	Introduction to Literature	3
ENGL 80A	Survey of British Literature	3
ENGL 80B	Survey of British Literature	3
Plus 12 units from the following or from approved special topics: ENGL 7A, 7B, 7D, 7E, 32, 33, 35, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 79, 81		12
	Total units for the major	**24**
Required General Education course:		
ENGL 1A	Composition	3

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Interpret contemporary designs manufactured in today's apparel industry with their classic style counterparts of past centuries.
2. Recognize global economic and cultural impacts on fashion design, and synthesize those influences into fashion design concepts and organizational decision-making.
3. Develop the tools, contacts and skills necessary to compete for employment in the fashion design field.
4. Apply knowledge of design trends, manufacturing methods, market research and forecasting, and quality control and distribution to help guide organizational decision-making.
5. Identify and select the technical skills and technology necessary for fashion design, production and retailing, and effectively communicate that knowledge to clients and other professionals.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S180/04795/1303.10]		Units
BUSOT 63	Microsoft Office Excel – Comprehensive	3
FASHD 20	History of Fashion	3
FASHD 40	Beginning Clothing Construction	2
FASHD 45	Design Fundamentals for Fashion and Interiors	3
FASHD 61	Pattern Drafting I	3
FASHD 65	Fashion Illustration	2
FASHD 428	Computer-Aided Design	2
FASHD 442	Industrial Sewing	2
FASHD 470	Apparel Production	3
FASHD 471	Advanced Patternmaking	3
FASHD 472	Computer-Aided Patternmaking	2
FASHD 480	Design Collection	2
FASHD 482	Industry Internship: Fashion Design	1
FASHM 10	Introduction to the Fashion Industry	3
FASHM 60	Textiles	3
	Total units for the major	**37**

Requirements for the Fashion Design Certificate
[L180/20729/1303.10]
Same as the major requirements for the A.S. Degree.

	Total units for the certificate	**37**

Recommended Courses for both Degree and Certificate:
BUSMGT 45; FASHD 42, 72; 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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Recognize global economic and cultural impacts on fashion design, and synthesize those influences into fashion design concepts and organizational decision-making.
2. Identify and select the technical skills and technology necessary for fashion design, production and retailing, and effectively communicate that knowledge to clients and other professionals.
3. Apply knowledge of design trends, manufacturing methods, market research and forecasting, and quality control and distribution to help guide organizational decision-making.
4. Develop the tools, contacts and skills necessary to compete for employment in the fashion design field.
5. Interpret contemporary designs manufactured in today's apparel industry with their classic style counterparts of past centuries.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Requirements for the Associate in Science Degree [S181/07385/1303.10]		Units
FASHD 16	Principles of Costume Design and Production	3
FASHD 20	History of Fashion	3
FASHD 40	Beginning Clothing Construction	2
FASHD 45	Design Fundamentals for Fashion and Interiors	3
FASHD 61	Pattern Drafting I	3
FASHD 65	Fashion Illustration	2
FASHD 428	Computer-Aided Design	2
FASHD 442	Industrial Sewing	2
FASHM 60	Textiles	3
THEATRE 1	Introduction to Theatre	3
THEATRE 32	Theatre Design – Lighting	3
THEATRE 40	Stage Costuming (take twice)	3-3
THEATRE 42	Theatrical Makeup	3
	Total units for the major	**38**

Requirements for the Costume Design Certificate:
[L181/20727/1303.10]
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: [L184/15526/1303.30]		Units
FASHD 40	Beginning Clothing Construction	2
FASHD 42	Advanced Clothing Construction	2
FASHD 61	Pattern Drafting I	3
FASHD 72	Fashion Draping	2
FASHD 442	Industrial Sewing	2
FASHD 445	Fitting and Alterations of Patterns and Apparel	2
FASHD 471	Advanced Patternmaking	3
FASHD 480	Design Collection	2
FASHD 482	Industry Internship: Fashion Design	1
FASHM 10	Introduction to the Fashion Industry	3
FASHM 60	Textiles	3
	Total units for the certificate	**25**

Recommended Courses: BUSMGT 45, FASHD 45.

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 *(Non-transcripted)*: [L182/99999/1303.30]		Units
FASHD 40	Beginning Clothing Construction	2
FASHD 42	Advanced Clothing Construction	2
FASHD 442	Industrial Sewing	2
	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: [L187/15525/1303.10]		Units
FASHD 20	History of Fashion	3
FASHD 40	Beginning Clothing Construction	2
FASHD 61	Pattern Drafting I	3
FASHD 72	Fashion Draping	2
FASHD 445	Fitting and Alterations of Patterns and Apparel	2
FASHD 470	Apparel Production	3
FASHD 471	Advanced Patternmaking	3
FASHD 472	Computer-Aided Pattern Making	2
FASHD 482	Industry Internship: Fashion Design	1
FASHM 10	Introduction to the Fashion Industry	3
FASHM 60	Textiles	3
	Total units for the certificate	**27**

Recommended Courses:
BUSMGT 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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Develop the tools, contacts and skills necessary to compete for employment in the fashion design field.
2. Recognize global economic and cultural impacts on fashion design and production, and synthesize those influences into fashion design concepts and organizational decision-making.
3. Apply knowledge of design trends, manufacturing methods, market research and forecasting, and quality control and distribution to help guide organizational decision-making.
4. Identify and select the technical skills and technology necessary for fashion merchandising and effectively communicate that knowledge to clients and other professionals.
5. Communicate and justify, through written and oral presentations and portfolio development, the details, inspiration, problems, solutions, and the vision of their designs.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S185/04822/1303.20]		Units
BUSMGT 44	Introduction to Human Relations	3
BUSMKT 13	Professional Selling	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
CIS 1	Introduction to Computer Information Systems	3
FASHD 40	Beginning Clothing Construction	2
FASHM 10	Introduction to the Fashion Industry	3
FASHM 11	Retail Merchandising and Management (also available as BUSMGT 11)	3
FASHM 12	Visual Merchandising	3
FASHM 60	Textiles	3
FASHM 482	Industry Internships: Fashion Merchandising	1
Plus two courses from the following or approved special topics:		
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSMGT 45	Small Business Ownership and Management	3
FASHD 45	Design Fundamentals for Fashion and Interiors	3
FASHD 428	Computer-Aided Design	2
FASHM 15	Image and Fashion Selection	3
	Total units for the major	**32-33**

Requirements for the Fashion Merchandising Certificate:
[L185/20730/1303.20]
Same as the major requirements for the A.S. Degree.

	Total units for the certificate	**32-33**

Fine Arts

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

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Apply critical thinking skills in the creation, analysis, and interpretation of the visual and performing arts.
2. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of the visual and performing arts.
3. Communicate in speech and in writing about the history, theories, disciplines, and practices of the visual and performing arts.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
FINART 50	Introduction to Fine Arts	3

Plus completion of one of the following emphases:

Music Emphasis
[A192/10363/1001.00]

MUSIC 2A	Music History and Literature	3
MUSIC 2B	Music History and Literature	3
MUSIC 3A	Musicianship	4

Plus nine additional units selected from the following or approved special topics: **9**
MUSIC-1, 3B, 4, 11, 12, 14, 21, 26, 30, 32, 33, 40, 41, 51A, 51B, 52, 53, 60, 62A, 62B, 62C, 67, 68, 70A, 70B

Total units for the major **22**

Theatre Arts Emphasis
[A194/16922/1001.00]

THEATRE 1	Introduction to Theatre	3
THEATRE 4	Development of the Theatre I	3
THEATRE 5	Development of the Theatre II	3

Plus nine additional units selected from the following or from approved special topics:
THEATRE 2 (or DANCE 2), 10, 12, 14, 18, 20, 21, 30, 32, 40, 42, 50, 51, 56, 60, 64, 9

Total units for the major **21**

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Enter careers in fire technology within California communities.
2. Differentiate between fire detection and fire suppression systems.
3. Analyze the elements of firefighter safety and survival; differentiate fire prevention, firefighting and the types of fire apparatus.
4. Calculate flow requirements for fire apparatus, and apply mathematic formulae to hydraulics problems.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S141/15674/2133.00]		
FIRETEC 1	Fire Protection and Organization	3
FIRETEC 2	Fire Behavior and Combustion	3
FIRETEC 3	Fire Protection Systems	3
FIRETEC 4	Building Construction for Fire Protection	3
FIRETEC 5	Fire Prevention	3
FIRETEC 6	Fire Apparatus and Equipment	3

Plus two courses from the following:

FIRETEC 7	Strategies and Tactics	3
FIRETEC 8	Fire Ground Hydraulics	3
FIRETEC 402	Basic Incident Command Systems, ICS-200	1
FIRETEC 403	Intermediate Incident Command Systems, ICS-300	1.5
FIRETEC 405	Hazardous Materials First Responder Operations	1

Total units for the major **20-24**

Requirements for the Fire Technology: Professional Firefighter Certificate:
[L141/20739/2133.00]
Same as the major requirements for the A.S. Degree.

Total units for the certificate **20-24**

Foreign Languages

(See Sign Language and Spanish)

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Identify places/locations/countries on a blank regional or world map.
2. Identify geographic landforms in the field.
3. Identify major continents, rivers, islands, and other features on a world map
4. Recognize various geographic features on a map of North America including major biomes, vegatative regions, rivers, lakes, and islands.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S205/07401/2206.00]		
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 Associate in Science for Transfer

The Geology Associate in Science for Transfer is unique among the sciences; Geology is the study of the earth, its environments, and its history. It is an interdisciplinary science that combines geological observations and concepts with those of biology, chemistry, physics and mathematics. Its goals are to study rocks, minerals, fossils, and energy and water resources, and to understand geologic principles and processes that shape the earth and its environments.

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 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.

The program is suited to the needs of students who will complete their education at Chaffey College with an Associate in Science degree, as well as those students who will complete their Chaffey Associate in Science degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Geology guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the fields of civil engineering, drafting, engineering management, geography education, petrology, physical geology, environmental geology, invertebrate paleontology, oceanography, geophysics, hydrology and seismology. Geology majors continue to find employment searching for new oil and gas reserves and mineral deposits but they also work with federal, state, and local agencies to develop ecologically sound environmental policies. Many geologists are involved in estimating the extent of land, water and mineral resources as well as determining potential hazards from earthquakes, landslides, floods, and volcanoes.

To obtain the Geology Associate in Science for Transfer (AS-T) degree, students must:

- Complete all the major requirements listed below with grades of C or better.
- Complete a minimum of 60 CSU-transferable units listed with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Effectively communicate unifying concepts in the discipline, for example: plate tectonics is the driving force behind most mountain building, volcanoes and earthquakes.
2. Apply key ideas in the discipline to relevant personal and societal issues.
3. Use laboratory equipment and procedures to experience previously unfamiliar aspects of the physical world.

Major requirements for the Associate in Science for Transfer Degree		Units
[S221/30941/1914.00]		
Required (26 units):		
GEOL1	Physical Geology	4
GEOL2	Historical Geology	4
CHEM24A	General Chemistry I	5
CHEM24B	General Chemistry II	5
MATH65A	Calculus I	4
MATH65B	Calculus II	4
	Units for the major	**26**
	***plus* CSU-GE or IGETC-CSU Units**	**34**
	Total Units Required for Degree	**60**

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 businesses and agencies serving older adults, including persons with dementia.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Describe the importance of planning for later years.
2. Explain how cultural, ethnic, racial, gender and social class diversity, as well as disability and dementia, affect aging.
3. Explain how aging is changing, with recent cohorts such as the Baby Boomers "aging" less or later, and healthier.
4. Evaluate policy debates (e.g. public programs and the costs associated with an aging population).
5. Identify new professions and careers for an aging society, in addition to "direct care" services.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S230/04798/1309.00]		
GERO 11	Introduction to Gerontology	3
GERO 18	Sociology of Aging (also available as SOC 18)	3
GERO 23	Aging and Older Adulthood	3
GERO 404	Health and Wellness for Older Adults	3
GERO 405	Resources and Services for Older Adults	2
GERO 406	Gerontology Career Practicum	1
Plus three courses from the following:		
ACCTGFS 440	Introduction to Financial Planning	3
BUSMGT 480	Principles of Supervision	3
BUSMKT 40	Marketing Principles	3
GERO 22	Dying and Death	3
GERO 422	Dementia Care	3
GERO 462	Activity Coordinator Training	4
GERO 463	Social Work Designee Training	3
	Total units for the major	**24-25**

Requirements for the Gerontology Certificate:
Same as the major requirements for the A.S. Degree.
[L230/20736/1309.00]

	Total units for the certificate	**24-25**

Community Caregiver

The Community Caregiver certificate prepares the student for employment in a variety of settings, including residential care facilities, adult day care, and home care. Community caregivers provide direct care to persons with dementia or other individuals who need non-medical personal care.

Requirements for the Community Caregiver Certificate : ***(Non-transcripted)***		Units
[L232/99999/1309.00]		
GERO 405	Resources and Services for Older Adults	2
GERO 422A	Dementia Care: Understanding Dementing Illnesses (or 422B Dementia Care: Understanding Difficult Behaviors or 422C Dementia Care: Planning Meaningful Activities)	1
GERO 462	Activity Coordinator Training (or GERO 463, Social Work Designee Training, 3)	4
NURAST 400*	Nursing Assistant	3.5
NURAST 400L*	Nursing Assistant Laboratory	2
NURAST 405*	Nursing Assistant Skills Laboratory	0.5
NURAST 420**	Home Health Aide	1.5
NURAST 420L**	Home Health Aide Laboratory	1
NURAST 450*	Professional Development for the Nursing Assistant	1

*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 course Contact Gerontology at 909/652-6675/6672 for dates and locales of orientations, and for additional 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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the connections between events and how events influence the course of history.
2. Appraise the factors that shape history.
3. Analyze competing historical interpretations.
4. Organize historical events according to chronology.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[A235/04816/2205.00]		
HIST 1	World History: Pre-Civilization to 1500	3
HIST 2	World History: 1500 to Present	3
HIST 17	History of the United States	3
HIST 18	History of the United States	3
Plus six units from the following or from approved special topics:		6
Art 3, 5		
English 1C		
History 4, 7, 16, 20, 21, 25, 40, 50, 51, 70, 71		
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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate the ability to work effectively as a member of a team.
2. Manage the professional preparation, presentation and service of quality food.
3. Communicate accurately and effectively, both verbally and in writing.
4. Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems in hospitality operations.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units

[S255/04799/1307.10]

ACCTGFS 465	Financial Accounting for the Non-Accounting Major	3
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 18	Sanitation, Safety and Equipment Management	2
HOTFS 20	Purchasing, Cost Controls, and Menu Planning	2
HOTFS 424	Dining Systems and Restaurant Operations	3
HOTFS 428	Human Resource Management (or NF 11, Food Service Management Supervision)	3
HOTFS 430	Hospitality Marketing Management	2
HOTFS 432	Hospitality and Healthcare Law	3
HOTFS 434	Catering and Banquet Organization	3
	Total units for the major	**30**

Strongly Recommended:

HOTFS 436A	Culinary Arts I	2
HOTFS 436B	Culinary Arts II	2
HOTFS 436C	Culinary Arts III	2
NF 15	Nutrition I: The Science of Nutrition (or NF 5, Nutrition for Life, or NF 25, Culture and Nutrition)	3

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

[T255/20733/1307.10]

Same as the major requirements for the A.S. Degree, ***plus:***		30
BUS 28A	Business Law I	3
BUSOT 60A	Microsoft Office Word – Specialist (or CIS 1, Introduction to Computer Information Systems)	3
HOTFS 496A-D	Work Experience	1-4
	Total units for the certificate	**37-40**

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

[L246/15536/1307.10]

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.

HOTFS 10	Introduction to Hospitality Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 18	Sanitation, Safety and Equipment Management	2
HOTFS 424	Dining Systems and Restaurant Operations	3
HOTFS 434	Catering and Banquet Organization	3
HOTFS 436A	Culinary Arts I	2
HOTFS 436B	Culinary Arts II	2
HOTFS 436C	Culinary Arts III	2
HOTFS 496B-D	Work Experience	2-4
	Total units for the certificate	**22-24**

Requirements for the Hotel and Food Service Management: Food Service/Waitstaff Personnel Certificate *(Non-transcripted)*:

[L247/99999/1307.10]

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.

HOTFS 10	Introduction to Hospitality Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 496A-D	Work Experience	1-4

Plus one of the following:

HOTFS 424	Dining Systems and Restaurant Operations	3
HOTFS 434	Catering and Banquet Organization	3
	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, bed and breakfast operations, and owner-operated businesses.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate the ability to work effectively as a member of a team.
2. Manage the professional preparation, presentation and service of quality food.
3. Communicate accurately and effectively, both verbally and in writing.
4. Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems in hospitality operations.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S260/04801/1307.20]		Units
ACCTGFS 465	Financial Accounting for the Non-Accounting Major	3
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 16	Principles of Food Preparation	2
HOTFS 16L	Principles of Food Preparation Laboratory	1
HOTFS 18	Sanitation, Safety, and Equipment Management	2
HOTFS 20	Purchasing, Cost Controls, and Menu Planning	2
HOTFS 422	Hotel Operations	3
HOTFS 424	Dining Systems and Restaurant Operations	3
HOTFS 428	Human Resource Management (or NF 11, Food Service Management Supervision)	3
HOTFS 430	Hospitality Marketing Management	2
HOTFS 432	Hospitality and Healthcare Law	3
HOTFS 434	Catering and Banquet Organization	3
NF 15	Nutrition I: The Science of Nutrition (or NF 5, Nutrition for Life, or NF 25, Culture and Nutrition)	3
	Total units for the major	**33**

Requirements for the Hotel and Food Service Management: Hotel Management Certificate:
[L260/20735/1307.20]
Same as the major requirements for the A.S. Degree, ***plus:***

BUSOT 60A	Microsoft Office Word – Specialist (or CIS 1, Introduction to Computer Information Systems)	3
HOTFS 496A-D	Work Experience	1-4
	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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Identify and evaluate types of sources of information in the literature of the arts and humanities.
2. Identify and evaluate major historic texts, works of art, and architecture.
3. Examine and evaluate major historical events from several ethical perspectives.
4. Demonstrate the connections between events and how events influence the course of history.
5. Analyze competing historical interpretations.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree: [A265/04820/4903.00]		Units
HUMAN 5	Arts and Ideas: Antiquity to Renaissance	3
HUMAN 6	Arts and Ideas: Renaissance to Modern	3
Plus six units from the following:		6
History 1, 2, 4, 5, 6, 9, 10, 17, 18		
Plus six units from the following:		6
English 32, 33, 70A, 70B, 75A, 75B, 80A, 80B, 81		
Humanities 20		
Plus three units from the following:		3
Art 3, 5		
Broadcasting 3		
Cinema 25, 26		
Fine Arts 50		
Music 2A, 2B, 4		
Photography 1		
Theatre 1, 4, 5		
Plus three units from the following:		3
Economics 1, 8		
Philosophy 70, 72, 73, 76, 80, 81, 82		
	Total units for the major	**24**

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

Industrial Electrical Technology

The Industrial Electrical Technology programs provide a broad working base from which to handle the many facets of industrial electricity as it relates to light and heavy industry, construction, and utility companies that provide electrical power. The programs meet the needs of those entering the trade for the first time, and allow those already in the trade to improve their understanding of the craft.

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Calculate and apply electrical quantities using different formulas of Ohm's Law.
2. Define magnetic induction and use measuring instruments to check resistive and inductive circuits.
3. Interpret and read basic ladder diagrams pertaining to electrical and electromechanical systems.
4. Understand basic computer terms and be familiar with ladder diagrams and the operation of a programmable logic controller (PLC).
5. Analyze the function of five basic components of a hydraulic system.
6. Analyze the operation of a photo-electric sensor and give an application.
7. Design PLC/electrical/hydraulic functional systems.
8. Explain six pneumatic safety rules.
9. Design various industrial-type functions of electro-pneumatic circuits and operate the same.
10. Demonstrate electrical sensors for hydraulic and pneumatic functional systems.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S152/15857/0935.00]		
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 411	Programmable Logic Controllers	3
IETELMT 430	Hydraulic Fundamentals	2
IETELMT 432	Electrical Control of Hydraulic Systems	2
IETELMT 434	Hydraulic Applications with Programmable Logic Controllers	2
IETELMT 436	Pneumatics Fundamentals	2
IETELMT 438	Electrical Control of Pneumatics Systems	2
IETELMT 440	Sensors for Hydraulics and Pneumatics Training Systems	1.5
	Total units for the major	**25.5**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Requirements for the Electromechanical Technology Level I Certificate: ***(Non-transcripted)***

[L153/99999/0935.00]		
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
IETELMT 430	Hydraulic Fundamentals	2
IETELMT 432	Electrical Control of Hydraulic Systems	2
	Total units for the certificate	**15**

Requirements for the Electromechanical Technology Level II Certificate:

[L154/15522/0935.00]		
Same requirements as for Level One Certificate, ***plus:***		15
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:

[L155/20703/0935.00]

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

Total units for the certificate:	**25.5**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Industrial Electrical Technology

The Industrial Electrical Technology program curriculum covers electricity, magnetics, 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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Calculate and apply electrical quantities using different formulas of Ohm's Law.
2. Define magnetic induction and use measuring instruments to check resistive and inductive circuits.
3. Calculate values of voltage, current, apparent power, true power, reactive power, impedance and power factor.
4. Use applications of motor controls pertaining to industry.
5. Interpret the National Electrical Code (NEC) and use its application in the field.
6. Interpret and read basic ladder diagrams pertaining to electrical and electromechanical systems.
7. Understand basic static devices and other solid state components used in the industry.
8. Understand basic computer terms and be familiar with ladder diagrams and the operation of a programmable logic controller (PLC).
9. Program, verify, and communicate with a PLC, and troubleshoot faults related to PLCs.
10. Demonstrate proficiency in troubleshooting skills.
11. Connect and operate a general purpose AC drive.
12. Describe OSHA safety work practices for employers in their respective work place.
13. Analyze the characteristics and application of twisted pair cables.
14. Describe the five elements of a typical fiber optic system and briefly explain the function of each element.
15. Demonstrate and connect DC and AC theory.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[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

continued next page

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 482	Internship in Industrial Electricity	1

Requirements for the Industrial Electrical Technology Level I Certificate:
(Non-transcripted)
[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 482	Internship in Industrial Electricity	1

Requirements for the Industrial Electrical Technology Level II Certificate:
[L151/15317/0934.40]

Same requirements as for Level One Certificate, ***plus:***		16
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 482	Internship in Industrial Electricity	1

Requirements for the Industrial Electrical Technology Level III Certificate:
[T154/20700/0934.40]
Same as the major requirements for the A.S. Degree.

	Total units for the certificate	**35**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Requirements for the Fiber Optic Cabling Technician Certificate: Units
(Non-transcripted)
[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: Units
(Non-transcripted)
[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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Calculate and apply electrical quantities using different formulas of Ohm's Law.
2. Define magnetic induction and use measuring instruments to check resistive and inductive circuits.
3. Interpret and read basic ladder diagrams pertaining to electrical and electro-mechanical systems.
4. Analyze flow process characteristics.
5. Analyze the construction and operation of an electronic loop.
6. Understand level process characteristics.
7. Evaluate a best method to troubleshoot level measurement and level control processes.
8. Evaluate how temperature transmitter time response characteristics work.
9. Evaluate a microprocessor-based controller.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units
[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
IETIT 441	Flow Process Fundamentals	2
IETIT 442	Flow Measurement and Control	2
IETIT 443	Level Measurement Fundamentals	2
IETIT 444	Level Measurement and Control	2
IETIT 445	Temperature Process Fundamentals	2
IETIT 446	Temperature Process Controller	2
	Total units for the major	**23**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Requirements for the Instrumentation Technology Level I Certificate: Units
(Non-transcripted)
[L158/99999/0943.00]

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
IETIT 441	Flow Process Fundamentals	2
IETIT 442	Flow Measurement and Control	2
	Total units for the certificate	**15**

Requirements for the Instrumentation Technology Level II Certificate: Units
[L159/20706/0943.00]
Same as the major requirements for the A.S. Degree.

	Total units for the certificate	**23**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

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.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate an understanding of business practices, work ethics, professionalism and consumer marketing principles related to the field's products and services.
2. Demonstrate knowledge of historical styles and associated design principles of architecture, interiors and decorative arts of Western and non-Western cultures and their impact on current trends and issues.
3. Communicate and justify, through written and oral presentations and portfolio development, the details, inspiration, problems, solutions, and the vision of their designs.
4. Apply knowledge of design theory to manipulate and organize interiors and solve interior design problems.
5. Develop functional and creative solutions for clients' design needs for residential and commercial projects.
6. Demonstrate skills that foster capacities of analysis, critical reflection, problem solving, communication, career development, and global and community awareness.
7. Develop creativity through an understanding and application of major art principles and elements (such as line, shape, color, balance, etc.).
8. Generate design drawings (by hand and computer) and color boards (showing styles, materials) in a professional manner.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units

[S270/04794/1302.00]

FASHD 45	Design Fundamentals for Fashion and Interiors	3
FASHM 60	Textiles	3
ID 10	Introduction to Interior Design	3
ID 11	History of Western Architecture and Interiors I	3
ID 12	History of Western Architecture and Interiors II	3
ID 16	Quick Sketching for Interior Designers	2.5
ID 17	Introduction to Lighting	3
ID 21	Space Planning	3
ID 22	Interior Design Materials	3
ID 25	Interior Design Management	2
ID 30	Advanced Design Studio	3.5
ID 427	CAD for Set and Interior Design	3
ID 482	Industry Internship: Interior Design	1
	Total units for the major	**36**

Recommended:

ART 3	Art History of Western World: Ancient to Medieval	3
BUSMKT 13	Professional Selling	3
COMSTD 2	Fundamentals of Effective Speaking	3
CONSUM 11	Housing and Environment	3
DRAFT 410	Building Trades Blueprint Reading	2
FASHM 12	Visual Merchandising	3

Requirements for the Interior Design Certificate:

[T270/20726/1302.00]

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

	Total units for the certificate	**36**

Intersegmental General Education Transfer Curriculum (IGETC): UC or CSU

The IGETC Certificate of Achievement is designed for students intending to transfer to either the California State University or the University of California. Completion of courses for this certificate allows students to transfer without the need, after transfer, to take additional lower-division general education courses to satisfy university general education requirements. Depending on the major/field of interest, students 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 they plan to transfer.

- IGETC-CSU certification requires successful completion of a course in Area 1, Group C – Oral Communication.
- Verified competency in a Language Other than English (LOTE) is required only for IGETC-UC certification. Upon successful completion of the required courses/competencies, the certificate will be awarded for IGETC-CSU and/or IGETC-UC.

All courses must be completed with grades of "C" or better (C- grades are not acceptable), be a minimum of 3 semester units, and be on the IGETC list during the year in which the student takes the course. (i.e. students entering in Fall 2012 must follow the 2012-2013 or later IGETC requirements.)

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate effective communication and comprehension skills.
2. Demonstrate critical thinking skills in problem solving across the disciplines and in daily life.
3. Demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives.
4. Assess their knowledge, skills and abilities; set personal, educational and career goals; work independently and in group settings; demonstrate computer literacy; and cultivate self-reliance, financial literacy and physical, mental and social health.

Requirements for the IGETC: CSU or CU Certificate:

[T002/30502/4901.10]

AREA 1 ENGLISH COMMUNICATION **6-9**

Group A: English Composition *(Required CSU/UC)*
English 1A

Group B: Critical Thinking-English Composition *(Required CSU/UC)*
English 1B

Group C: Oral Communication *(Required CSU only - 1 course)*
Communication Studies 2, 6, 8

AREA 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING *(Required CSU/UC - 1 course)* **4-5**
Mathematics 25#*, 60, 61*, 65A, 65B, 75, 81, 85
Social Science 10#*
Statistics 10

AREA 3 ARTS AND HUMANITIES **9-12**
(Required CSU/UC - 3 courses minimum, with at least one course from Arts and one from Humanities)

ARTS:
Art 1, 3, 5, 6, 7, 9, 11
Cinema 25, 26
Dance 1
Fine Arts 50
Music 2A, 2B, 3A, 3B, 4, 21•, 22X, 26•
Theatre Arts 1, 4, 5

continued next page

HUMANITIES:
American Sign Language 3, 4
Arabic 3, 4
English 1C, 32, 33, 68, 70A, 70B, 71, 74#, 75A, 75B, 76, 77, 79, 80A, 80B, 81
History 1, 2, 4#, 5, 6, 7, 9, 10, 12, 16#, 20, 25, 40^{X}, 50, 51, 70, 71
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 3, 4, 8, 13, 14

AREA 4 SOCIAL AND BEHAVIORAL SCIENCES **9**
(Required CSU/UC - 3 courses minimum, from at least two different disciplines)
American Sign Language 18
Anthropology 2, 3
Child Development and Education 2*, 4
Communication Studies 12, 74
Economics 1*, 2, 4, 8
Geography 1$^{\bullet}$, 3, 10, 11^{X},
Gerontology 18*
History 4#, 5, 6, 7, 9, 10, 12, 16#, 17, 18, 20, 40^{X}, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 25
Psychology 1, 20*, 25*, 65
Social Science 24
Sociology 10, 14, 15, 16$^{\bullet}$, 18*, 25, 26, 70

AREA 5 PHYSICAL AND BIOLOGICAL SCIENCES **7-10**
(Required CSU/UC - 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 26*, 35
Chemistry 8$^{\bullet}$, 9*, 10*, 12$^{\bullet}$, 24A*, 24B*, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5$^{\bullet}$, 5 & 5L$^{\bullet}$
Geography 4, 4 & 5, 6
Geology 1, 2, 6$^{\infty}$, 30
Physical Science 10
Physics 5*, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44*$^{\bullet}$, 45*, 46*, 47*

BIOLOGICAL SCIENCES:
Anthropology 1, 1 & 1L
Biology 1*, 2, 10*, 11, 12, 20, 22, 23, 23 & 23L, 61, 62, 63

LANGUAGE OTHER THAN ENGLISH *(Required UC only)* **0-4**
Students transferring to the UC are required to demonstrate competency (proficiency) in a language other than English equal to two years of high school study. Competence may be demonstrated through one of the following mechanisms:
1. Satisfactory completion of two years of high school coursework (U.S. high school or high school where the language of instruction is English) in a language other than English, with a grade of "C-" or better in each course. The two years must be in the same language.
2. Satisfactory completion of a course (or courses) at a college or university with a grade of "C" (2.0) or better in each course.
3. Satisfactory completion, with "C" (2.0) grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English. Appropriate documentation must be presented to substantiate the required coursework was completed.
4. Satisfactory score on the SATII: Subject Test in languages other than English.
5. Satisfactory score, 3 or higher, on the College Board Advanced Placement examinations in languages other than English.
6. Satisfactory score, 5 or higher, on the International Baccalaureate Higher Level Examinations in language other than English.
7. Satisfactory completion of an achievement test administered by a community college, university, or other college in a language other than English.
8. If an achievement test is not available, a faculty member associated with a U.S. regionally accredited institution of higher education can verify a student's competency.
9. Language other than English "O" Level exam with a grade of "A", "B", or "C".
10. Language other than English International "A" Level exam with a score of 5, 6, or 7.
11. A Defense Language Institute language other than English course which is indicated as passed with a "C" or higher on the official transcript.

Chaffey courses that meet this requirement are:

ASL 2	Elementary American Sign Language	4
ARABIC 2	Elementary Modern Standard Arabic	4
CHIN 2	Elementary Mandarin Chinese	4
FR 2	Elementary French	4
SPAN 2	Elementary Spanish	4
	(or SPAN 2SS, Elementary Spanish for Spanish Speakers)	

Total units for the certificate **35-49**

= Course must be completed Fall 2003 or later.
° = Course must be completed Fall 2005 or later.
X = Course must be completed Spring 2006 or later.
• = Course must be completed Spring 2007 or later.
∞ = Course must be completed Fall 2011 or later.
* = Transfer credit may be limited by either UC or CSU, or both.

COURSES MAY COUNT IN ONLY ONE AREA

REQUIREMENT IN U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS
Requires 2 courses; Political Science 1, and either History 17 or 18.

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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Understand the legal and ethical concerns of journalism.
2. Demonstrate objectivity, accuracy, completeness, clarity, balance, and fairness in journalism.
3. Apply the elements of the writing process (inventing, research, drafting, revising, editing, proofreading) to any given writing assignment both in the academic and professional spheres.
4. Convey a message using words, pictures, and graphics.

Requirements for the Journalism Certificate: Units
[L336/04763/0602.00]

CIS 1	Introduction to Computer Information Systems	3
COMSTD 12	Mass Communication and Society	3
ENGL 1A	Composition	3
JOUR 10	Newswriting	3
JOUR 11	Advanced Newswriting and Editing	3
JOUR 61ABC	Newspaper Production	3
	(any combination to equal 3 units)	
PHOTO 10	Beginning Photography	4
	(or PHOTO 7, Introduction to Digital Photography)	

Plus a minimum of three units from the following:

ART 63	Introduction to Graphic Design	4
BRDCAST 3	Survey of Broadcasting and Electronic Media	3
ENGL 7A	Creative Writing: Short Fiction	3
ENGL 7E	Creative Writing: Nonfiction	3
ENGL 35	Literary Magazine Production	4
PHOTO 20	Photography for Publications	4
PHOTO 21	Public Relations and Communications Photography	2

Total units for the certificate **25**

Management, Marketing, and Merchandising

(See Business Management)

Mathematics Associate in Science for Transfer

The Mathematics Associate of Science for Transfer degree 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, majoring in Mathematics, Physics, Engineering, or Computer Science.

The program is suited to the needs of students who will complete their education at Chaffey College with an A.A. degree, as well as those students who will complete their Chaffey A.A. degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Mathematics guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the field of mathematics, engineering, statistics, actuarial science, business and management, law enforcement, government, and education.

To obtain the Mathematics Associate of Science for Transfer degree, students must:
- Complete the following major requirements with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE) or the Intersegmental General Education Transfer Curriculum (IGETC-CSU) pattern general education requirements.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:
1. Acquire skills that are prerequisite for subsequent studies in mathematics.
2. Develop the ability to reason mathematically.
3. Apply mathematical models.
4. Develop greater confidence in their mathematical abilities.
5. Gain an appreciation for the usefulness of mathematics.

Major requirements for the Associate in Science Degree:		Units
[S291/30717/1701.00]		
Core		
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
A minimum of 7 Units from List A and List B, with at Least 4 Units from List A		
List A		
MATH 85	Differential Equations	4
MATH 81	Linear Algebra	4
List B		
PHYS 45	Physics for Scientists and Engineers I	5
CS 21	Fundamentals of C++ Programming	3
ENGIN 30	Engineering Application of digital Computation	3
CISPROG 1	Introduction to Computer Programming	3
STAT 10	Elementary Statistics	4
	Units for the major	**20-22**
	***plus* CSU General Education or IGETC Pattern**	**38-43**
	***plus* transfer-level course electives (as needed)**	**0-2**
	Total units Required for Degree	**60-65**

Modern Languages

(See Sign Language and Spanish)

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:
1. Know and apply technical skills, concepts and technologies in the creation of musical projects.
2. Engage creativity and develop original thinking in the study of music.
3. Communicate in speech and writing about the history, theories, disciplines and practices (including business practices) of music.
4. Recognize diverse individuals, social forces, and musical styles of the world's cultures through the study of music.
5. Apply critical thinking in the creation, analysis, and interpretation of music.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[A300/04778/1004.00]		
MUSIC 2A	Music History and Literature	3
MUSIC 2B	Music History and Literature	3
MUSIC 3A	Musicianship	4
MUSIC 3B	Musicianship	4
MUSIC 51A*	Beginning Class Piano	1
MUSIC 51B*	Beginning Class Piano	1
MUSIC 52	Intermediate Piano (take twice)	1-1
MUSIC 70A	Harmony and Intermediate Musicianship	3
MUSIC 70B	Harmony and Intermediate Musicianship	3

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

Plus six units from the following: (courses may be repeated)		
MUSIC 32	Concert Choir	2
MUSIC 33	Concert Ensemble Singers	1.5
MUSIC 60	Jazz Band	1.5
MUSIC 62A	Beginning Community Concert Band	1.5
MUSIC 62B	Intermediate Community Concert Band	1.5
MUSIC 62C	Advanced Community Concert Band	1.5
MUSIC 67	Latin Jazz Band	1.5
MUSIC 68	Mariachi Band	1.5
	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, 62A, 62B, 62C, 67, or 68). 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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Know and apply technical skills, concepts and technologies in the creation of musical projects.
2. Engage creativity and develop original thinking in the study of music.
3. Communicate in speech and writing about the history, theories, disciplines and practices (including business practices) of music.
4. Recognize diverse individuals, social forces, and musical styles of the world's cultures through the study of music.
5. Apply critical thinking in the creation, analysis, and interpretation of music.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S305/04779/1005.00]		Units
MUSIC 3B	Musicianship	4
MUSIC 12	Electronic Music (may be repeated)	3
MUSIC 14	Introduction to the Music Business	2
MUSIC 51A*	Beginning Class Piano	1
MUSIC 51B*	Beginning Class Piano	1
MUSIC 70A	Harmony and Intermediate Musicianship	3

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

Plus five units from the following:		
MUSIC 2A	Music History and Literature	3
MUSIC 2B	Music History and Literature	3
MUSIC 4	Music Appreciation	3
MUSIC 11	Record Production	1.5
MUSIC 12	Electronic Music (may be repeated)	3
MUSIC 21	History of Jazz	3
MUSIC 22	History and Survey of Rock Music	3

Plus two units from the following (courses may be repeated):		
MUSIC 30	Elementary Class Voice	1
MUSIC 40	Beginning Guitar	1
MUSIC 41	Intermediate Guitar	1
MUSIC 52	Intermediate Piano	1-1
MUSIC 53	Studio Piano	1

Plus 5.5 units from the following (courses may be repeated):		
MUSIC 32	Concert Choir	2
MUSIC 33	Concert Ensemble Singers	1.5
MUSIC 60	Jazz Band	1.5
MUSIC 62A	Beginning Community Concert Band	1.5
MUSIC 62B	Intermediate Community Concert Band	1.5
MUSIC 62C	Advanced Community Concert Band	1.5
MUSIC 67	Latin Jazz Band	1.5
MUSIC 68	Mariachi Band	1.5
	Total units for the major	**26.5**

Required General Education course:		
MUSIC 3A	Musicianship	4

Nursing

Chaffey College offers a career ladder path in Nursing where students can start with the Nursing Assistant program, 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 important members 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 (CPR) certification as an American Heart Association Healthcare Provider. The CPR card must be updated annually. Details about 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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the knowledge and skills needed to pass the California state nursing assistant certification examination.
2. List and discuss various career opportunities available to them through professional development.

Requirements for the Chaffey College NA Certificate *(Non-transcripted)*: [E234/99999/1230.30]		Units
NURAST 400	Nursing Assistant	3.5
NURAST 400L	Nursing Assistant Laboratory	2
NURAST 405	Nursing Assistant Skills Laboratory	0.5
NURAST 450	Professional Development for the Nursing Assistant	1
	Total units for the Chaffey College certificate:	**7**

Notes:

1. All courses must be completed with a minimum grade of "C".
2. The college does not provide transportation to clinical facilities.

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 home 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.

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 (CPR) certification as an American Heart Association Healthcare Provider. The CPR card must be updated annually. Details about 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).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the knowledge and skills needed to pass the California state nursing assistant certification examination.
2. List and discuss various career opportunities available to them through professional development.

Requirements for the Chaffey College NA/HHA Certificate :		Units
(Non-transcripted)		
[E235/99999/1230.80]		
NURAST 400*	Nursing Assistant	3.5
NURAST 400L*	Nursing Assistant Laboratory	2
NURAST 405*	Nursing Assistant Skills Laboratory	0.5
NURAST 420	Home Health Aide	1.5
NURAST 420L	Home Health Aide Laboratory	1
NURAST 450*	Professional Development for the Nursing Assistant	1
	Total units for the Chaffey College certificate:	**2.5-9.5**

*Students must take these four NURAST classes and pass the California State Certified Nursing Assistant certification test or provide proof of a current California State Certified Nursing Assistant Certificate.

Strongly Recommended:

BIOL 30	Beginning Medical Terminology	3
ENGL 450	Fundamentals of Composition	3

Notes:

1. All courses must be completed with a minimum grade of "C".
2. The college does not provide transportation to clinical facilities.

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 (CPR) certification as an American Heart Association Healthcare Provider. The CPR card must be updated annually. Details about times and locations of classes provided at mandatory information meetings.
4. Submission of health form and appropriate CPR card at the mandatory orientation meeting, the time and date of which is provided 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.
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).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Demonstrate the knowledge and skills necessary to assist the licensed nurse in providing safe and effective nursing care.
2. Identify actual and potential patient care problems and effectively collaborate with other members of the health care team in addressing the problems.

Requirements for the Chaffey College NA/ACT Certificate:		Units
(Non-transcripted)		
[E236/99999/1230.30]		
NURACT 420	Nursing Acute Care Technician	4
NURACT 420L	Nursing Acute Care Technician Laboratory	2
NURACT 450	Professional Development for the Nursing Acute Care Technician	1
NURAST 400*	Nursing Assistant	3.5
NURAST 400L*	Nursing Assistant Laboratory	2
NURAST 405*	Nursing Assistant Skills Laboratory	0.5
NURAST 450*	Professional Development for the Nursing Assistant	1
	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 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 caregiver in acute and extended care facilities. LVN's are also 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 Technician Examiners (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 in the State of California as a Licensed Vocational Nurse.

The VN program is three semesters in length and begins each fall and spring semester. 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 (BVNPT) before a license can be granted. Contact the BVNPT 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 an associates degree or higher.
3. Provide official transcripts from other colleges attended. International transcripts (high school and college) require AERC, IERF, or other approved agency evaluation.
4. Physical and emotional health as evidenced by a satisfactory health examination, proof of immunizations, and by passing both a criminal background check and a drug screening test.
5. Completion of Nursing: Vocational 401 with a minimum grade of C.
6. Completion of Mathematics 401 or equivalent with a minimum grade of C.
7. Completion of Biology 424 (or Biology 20 and 22) or equivalent with a minimum grade of C. Biology course(s) may not be over 5 years old at the time of application to the VN Program.
8. Current cardiopulmonary resuscitation (CPR) certification as an American Heart Association Healthcare Provider.
9. Current status as a California Certified Nursing Assistant, or completion of Nursing Assistant 400, 400L, 405, and 450 with minimum grades of C or P.

The application process for the VN program is as follows:

1. View the informational video available on the VN website at www.chaffey.edu/healthsciences/nursing/nursingvn/.
2. Make an appointment with a counselor in the Counseling Center.
3. Verify high school graduation or equivalent or higher as indicated above.
4. Demonstrate eligibility for English 450 via the Chaffey assessment process, or completion of English 550 or equivalent with a minimum grade of C.
5. Provide official copies of all previous college transcripts (must be on file).
6. Complete the VN application and submit. Applications for the VN program beginning in the Spring semester will be available the October prior and must be completed and submitted by the last business day in October. Applications for the VN program beginning in the Fall semester will be available the March prior and must be completed and submitted by the last business day in March.
7. Attend a mandatory orientation session, if selected.

Notes:

1. The selection process is based on completion of prerequisite courses 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 students transferring to the VN program from another program, transferred VN courses may not be over five years old. (Subject competency may be demonstrated by an examination.)
4. The college does not provide transportation to clinical facilities.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Identify vita questions, problems or issues and communicate effectively with other members of the health care team.
2. Demonstrate the knowledge and skills necessary to provide safe and effective nursing care.
3. Pass the NCLEX State Board Examination.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: Units
[S315/04789/1230.20]

NURVN 403	Fundamentals of Nursing	3
NURVN 403L	Fundamentals of Nursing Laboratory	2
NURVN 405	Beginning Medical-Surgical Nursing	4
NURVN 405L	Beginning Medical-Surgical Nursing Laboratory	3
NURVN 407A	Beginning Nursing Skills/Clinical Simulation Laboratory	1
NURVN 407B	Intermediate Nursing Skills/Clinical Simulation Laboratory	1
NURVN 407C	Advanced Nursing Skills/Clinical Simulation Laboratory	1
NURVN-409	Intermediate Medical-Surgical Nursing	4
NURVN-409L	Intermediate Medical-Surgical Nursing Laboratory	3
NURVN 411	Advanced Medical-Surgical Nursing	7
NURVN 411L	Advanced Medical-Surgical Nursing Laboratory	3
NURVN 413	Leadership for the Vocational Nurse	3
NURVN 413L	Leadership for the Vocational Nurse Laboratory	2
NURVN 415A	Growth/Development Psychology Adult-Geriatric	1
NURVN 415B	Growth and Development of the Child	1
NURVN 417A	Critical Thinking and the Nursing Process I	1
NURVN 417B	Critical Thinking and the Nursing Process II	1
NURVN 421	Maternal and Child Health Nursing	4
NURVN 421L	Maternal and Child Health Nursing Laboratory	2
	Total units for the major:	**47**

Required prerequisite courses:

BIOL 424 *	Anatomy and Physiology (or BIOL 20 *, Human Anatomy, 4 *and* BIOL 22 *, Human Physiology, 4)	3
MATH 401	Mathematics for Health Science	1
NURAST 400**	Nursing Assistant	3.5
NURAST 400L**	Nursing Assistant Laboratory	2
NURAST 405**	Nursing Assistant Skills Laboratory	0.5
NURAST 450**	Professional Development for the Nursing Assistant	1
NURVN 401*	Foundations of Vocational Nursing Practice	2

* Must be taken within the previous 5 years.

**Students must take the four NURAST classes above or provide proof of a current California State Nursing Assistant Certificate.

Requirements for the Nursing: Vocational (VN) Certificate:
[T315/20722/1230.20]
Same as the major requirements for the A.S. Degree
and required prerequisite courses above.

Total units for the certificate: 53-65

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 (3343 Peachtree Road N.E., Suite 500, Atlanta Georgia 30326; phone: 404/975-5000; fax: 404/975-5020, 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 allows for the denial of registered nursing licensure on the basis of any prior convictions substantially related to nursing practice. See the California Board of Registered Nursing website at http://www.rn.ca.gov/lic/pdf/exam_app_2004.pdf for further information.

The curriculum is based upon the humanistic philosophy of Abraham Maslow, as well as major concepts of Erik Erikson's Developmental Theory, the Nursing Process and Therapeutic Communication. Nursing assists the individual and family in preventing or coping with threats to the individual's basic needs throughout the life cycle. Faculty believe 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 Friday of every month. To access the ADN website, go to www.chaffey.edu, click on Academic Programs – School of Health Sciences - 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 from the Counseling Department, ADN office, or download it from the website. 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 September 1-30 (for program start the following Spring) or March 1-31 (for program start the following Fall). Should there be more qualified applicants than spaces available, general education 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 exam, or have an Associates 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. Prerequisite GPA must be 2.8 or higher. Cumulative GPA must be 3.0 or higher.

Notes:

1. Prior to enrollment in the Nursing: A.D.N. program classes, students must evidence physical and emotional health as determined by a satisfactory health examination, and by passing both a criminal background check and a drug screening test. A pre-enrollment assessment of English, reading, math, and science must also be passed. Details about these requirements will be provided once students are accepted into the program.
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.
6. Current cardiopulmonary resuscitation card (CPR) is required prior to entering any clinical nursing class. This must be the "Health Care Provider" from the American Heart Association.
7. Medication calculation proficiency must be demonstrated by written examination prior to registration in each semester.

Required General Education and additional courses:

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 (or COMSTD 2, Fundamentals of Effective Speaking, or COMSTD 4, Fundamentals of Interpersonal Communication, or COMSTD 6, Fundamentals of Small Group Communication)	3
ENGL 1A*	Composition	3
MATH 401*	Mathematics for Health Science	1
PSYCH 25	Developmental Psychology: Lifespan Development	3
SOC 10	Introduction to Sociology (or COMSTD 74, Intercultural Communication, or ANTHRO 3, Introduction to Social and Cultural Anthropology)	3
Humanities General Education		4

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate the components of delivery of care: coordination, delegation and prioritization to meet the needs of clients and their families.
2. Communicate with clients, family members, and healthcare team to cope with and resolve problems.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S310/04788/1230.10]		Units
NURADN 6**	Clinical Nursing Skills	1.5
NURADN 12**	Nursing Process I	3
NURADN 12L**	Nursing Process I Laboratory	3.5
NURADN 13**	Mental Health and Psychiatric Nursing	2
NURADN 13L**	Mental Health and Psychiatric Nursing Laboratory	1
NURADN 25**	Nursing Process II	3
NURADN 25L**	Nursing Process II Laboratory	3
NURADN 26**	Maternal-Newborn Nursing	2
NURADN 26L**	Maternal-Newborn Nursing Laboratory	1.5
NURADN 34**	Nursing Process III	4
NURADN 34L**	Nursing Process III Laboratory	3
NURADN 38**	Family and Child Nursing	2
NURADN 38L**	Family and Child Nursing Laboratory	1.5
NURADN 44**	Nursing Process IV	4.5
NURADN 44L**	Nursing Process IV Laboratory	5
NURADN 50**	Professional Issues in Nursing	1
	Total units for the major:	**41.5**

* Prerequisite Courses

** Must be admitted to the ADN program before taking course. Courses are taken in numerical sequence.

ADN Advanced Placement

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

VN to RN: Degree Option

Acceptance into this program is based on the following criteria:

1. Graduation from a Vocational Nursing Program 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."

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the VN to RN Associate in Science Degree option: [S312/07384/1230.10]		Units
NURADN 3	Transition in Nursing	1.5
NURADN 3L	Transition in Nursing Laboratory	0.5
NURADN 13	Mental Health and Psychiatric Nursing	2
NURADN 13L	Mental Health and Psychiatric Nursing Laboratory	1
NURADN 34	Nursing Process III	4
NURADN 34L	Nursing Process III Laboratory	3
NURADN 44	Nursing Process IV	4.5
NURADN 44L	Nursing Process IV Laboratory	5
NURADN 50	Professional Issues in Nursing	1
	Total units for the major:	**22.5**

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:		Units
BIOL 22	Human Physiology	4
BIOL 23	General Microbiology	3
NURADN 3	Transition in Nursing	1.5
NURADN 3L	Transition in Nursing Laboratory	0.5
NURADN 13	Mental Health and Psychiatric Nursing	2
NURADN 13L	Mental Health and Psychiatric Nursing Laboratory	1
NURADN 34	Nursing Process III	4
NURADN 34L	Nursing Process III Laboratory	3
NURADN 44	Nursing Process IV	4.5
NURADN 44L	Nursing Process IV Laboratory	5
NURADN 50	Professional Issues in Nursing	1
	Total units:	**29.5**

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:		Units
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 (or COMSTD 2, Fundamentals of Effective Speaking, or COMSTD 4, Fundamentals of Interpersonal Communication, or COMSTD 6, Fundamentals of Small Group Communication)	3
ENGL 1A	Composition	3
PSYCH 25	Developmental Psychology: Lifespan Development	3
SOC 10	Introduction to Sociology	3
Humanities General Education		4
	Total units:	**29**

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 daycare/camps.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Design a meal plan based on the food guide pyramid including divisions, recommended serving and serving sizes.
2. Explain the processes of food buying, menu planning, nutritional analysis, and other food financial related areas.
3. Identify and describe the effect of nutrition on health and body mass.
4. Operate effectively as part of the health care team.
5. Utilize behavior modification techniques to improve their nutritional wellness.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S241/07399/1306.00]		Units
BIOL 14	Health Science	3
BIOL 424	Anatomy and Physiology	3
GERO 404	Health and Wellness for Older Adults	3
NF 5	Nutrition for Life (or NF 15, Nutrition I: The Science of Nutrition)	3
NF 22	Nutrition and the Active Person	3
NF 27	Healthy Cooking	2
PELEC 17	First Aid and Emergency Response to Community Disasters	3
	Total units for the major	**20**

Required General Education course:

COMSTD 8	Fundamentals of Speech Communication	3

Requirements for the Nutrition and Food Certificate:
[L241/20732/1306.00]
Same as the major requirements for the A.S. Degree and general education requirement above

Total units for the certificate **23**

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 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 Pharmacy Technician 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 current cardiopulmonary resuscitation (CPR) certification as an American Heart Association Healthcare Provider. The CPR card must be updated annually. Details about times and locations of CPR classes is provided at information meetings.
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 at 909/652-6675.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Explain the importance of the pharmacy's compliance with federal, state, and local laws; regulations and professional standards as it applies to the pharmacy training program in the specified state the program operates.
2. Identify the use and side effects of prescriptions medications, OTC products, and alternative therapies commonly used to treat diseases affecting the body systems including, but not limited to cardiovascular, gastrointestinal, endocrine, musculoskeletal, respiratory, renal, nervous, integumentary, and immune systems.
3. Demonstrate appropriate techniques and use of equipment and devices in compounding sterile products, and will be able to explain the uses of laminar air flow hoods.
4. Use the metric, household, apothecary, and avoirdupois systems, converting within those systems to calculate dosages and volumes specified by the prescription/medication order.
5. Accurately prepare medications for distribution in accordance with state laws and regulations including, but not limited to, creating a patient profile (manual or electronic), follow an electronic procedure to generate prescription labels, filling and labeling prescriptions and patient cassettes, and accurately count or measure finished dosage forms as specified by the prescription/medication order.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S322/15524/1221.00]		
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	Pharmaceutical Calculations	2
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	**23**

Plus a minimum keyboarding speed of 30 wam, verified by the Business and Office Technologies Proficiency Certificate or completion of BUSOT 40A.

Requirements for the Pharmacy Technician Certificate:
[T322/20719/1221.00]
Same as the major requirements for the A.S. Degree

Total units for the certificate **23**

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.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Understand and evaluate a variety of philosophical texts.
2. Identify the major themes in historical philosophy and place theories and perspectives within their historical context.
3. Articulate and critique major philosophical theories and perspectives.
4. Utilize the tools of logic in critiquing and developing philosophical positions.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[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 75	Introduction to Symbolic Logic	3
PHIL 80	Introduction to Religion	3
PHIL 81	Introduction to Eastern Philosophy	3
PHIL 82	Introduction to Monotheistic Religions: Judaism/Christianity/Islam	3

continued next page

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.

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Understand and evaluate a variety of philosophical texts.
2. Identify the major themes in historical philosophy and place theories and perspectives within their historical context.
3. Articulate and critique major philosophical theories and perspectives.
4. Utilize the tools of logic in critiquing and developing philosophical positions.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[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, 11
English 68, 70A, 70B, 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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Demonstrate analytical knowledge of both historical and contemporary photographic issues through written and oral presentations.
2. Recognize and respect diverse individuals, social forces and ideologies of the world's cultures through the study of visual images.
3. Analyze the influence of photographic imagery on both historical and contemporary cultural and aesthetic trends.
4. Demonstrate knowledge of appropriate photographic equipment and software.
5. Articulate and express themselves and their ideas/concepts through the use of the appropriate photographic technologies.
6. Apply the critical thinking skills required to remain competitive in the job market and to transfer.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[A340/04783/1012.00]		
PHOTO 1	History of Photography	3
PHOTO 10	Beginning Photography (or PHOTO 7, Introduction to Digital Photography)	4
PHOTO 11	Intermediate Photography (or PHOTO 9, Digital Imaging)	4
PHOTO 12	Studio Lighting	4
PHOTO 13	Fine Art Photography	4
PHOTO 20	Photography for Publications	4
PHOTO 50	Introduction to Color Photography	4

Total units for the major **27**

Required General Education courses:

ART 1	Contemporary Art: 1945-Present (or ART 5, Art History of Western World: Renaissance to Modern)	3
ART 10	Fundamentals of Design in Two Dimensions (or ART 63, Introduction to Graphic Design)	4

Requirements for the Still Photography Certificate:

[T340/20716/1012.00]		
BUSMGT 45	Small Business Ownership and Management	3
PHOTO 1	History of Photography	3
PHOTO 10	Beginning Photography (or PHOTO 7, Introduction to Digital Photography)	4
PHOTO 11	Intermediate Photography (or PHOTO 9, Digital Imaging)	4
PHOTO 12	Studio Lighting	4
PHOTO 13	Fine Art Photography	4
PHOTO 20	Photography for Publications	4
PHOTO 21	Public Relations and Communications Photography	2
PHOTO 50	Introduction to Color Photography	4
PHOTO 422	Wedding Photography	2

Plus one course from the following:

ART 10	Fundamentals of Design in Two Dimensions	4
ART 63	Introduction to Graphic Design	4

Total units for the certificate **38**

Recommended:

ART 5	Art History of Western World: Renaissance to Modern	3
ART 8	Contemporary Media, Art and Visual Language	3
ART 480	Portfolio and Presentation	3
COMSTD 8	Fundamentals of Speech Communication	4
JOUR 10	Newswriting	3

Physical Education

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

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Utilize various social and communication skills in a variety of competitive and noncompetitive environments.
2. Recognize various career opportunities in the field of human movement.
3. Identify risk factors of communicable and hypokinetic diseases and make sound nutritional choices in order to fuel the body with the necessary nutrients.
4. Define the many health related and skill related fitness components in an exercise program that will be geared toward specific fitness goals.
5. Employ different self-management skills such as goal setting, self-planning, self-monitoring, and or self-assessment to increase overall health.
6. Demonstrate knowledge of rules, strategies, techniques, and etiquette of various activities to promote lifelong fitness.
7. Implement appropriate aerobic and anaerobic exercises and the metabolic needs for particular activities.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree: Units

[S345/04767/0835.00]

BIOL 14	Health Science	3
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4
NF 5	Nutrition for Life	3
	(or NF 15, Nutrition I: The Science of Nutrition)	
PELEC 15	Diet and Fitness	3
PELEC 16	First Aid (or PELEC 17, First Aid	3
	and Emergency Response to Community Disasters)	
PELEC 18	Introduction to Kinesiology	3

Plus three units from the following:

PEACT 1, 2, 5, 9, 12, 14, 16, 17, 20, 22, 23, 24, 25, 26, 27, 28, 31, 35, 50
PETEAM 1A, 1B, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 27

Plus six units from the following: 6

PELEC 2, 11, 12, 13, 14

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: Units

[L374/15531/0835.60]

PELEC 2	Introduction to Athletic Training	3
PELEC 12	Principles and Practices of Officiating Team Sports	3
PELEC 13	Professional Activities: Coaching Team Sports	3
PELEC 15	Diet and Fitness	3
PELEC 16	First Aid	3
	(or PELEC 17, First Aid and Emergency Response to Community Disasters)	
PELEC 18	Introduction to Kinesiology	3

Total units for the certificate **18**

Physical Science

Physical Science is the study of the natural sciences encompassing non-living systems although aspects of living systems are also studied. Scientific issues are presented and discussed in the physical science courses enabling a deeper understanding of societal issues that require thoughtful decisions and interaction. Physical Science courses enrich the general education program and fundamentally support further education to prepare for scientific, technological, and engineering careers. The selection of courses will assist in the selection of an upper-division science major. For non-transfer students, this area of emphasis will assist in the preparation for employment at the level of technician.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate effective communication and comprehension skills.
2. Demonstrate critical thinking skills in problem solving across the disciplines and in daily life.
3. Demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives.
4. Assess their knowledge, skills and abilities; set personal, educational and career goals; work independently and in group settings; demonstrate computer literacy; and cultivate self-reliance, financial literacy and physical, mental and social health.

Requirements for the Associates in Science Degree: Units

[S351/18435/1901.00] = Transfer
[S352/18777/1901.00] = Non-transfer

A. General Education **23-39**

Choose either Chaffey College's General Education, California State University General Education (CSU-GE), or Intersegmental General Education Transfer Curriculum (IGETC) for the general education pattern related to your goal. Students who intend to transfer should complete the CSU-GE or IGETC pattern. Consult with a counselor to determine which general education pattern is the best choice for the college/university you plan to attend.

B. Area of Emphasis **18**

Eighteen units selected from at least three of the listed subject areas. No more than eight units from any single subject area may be counted toward the major. A minimum of two courses with an associated laboratory in addition to the laboratory required for the general education requirements in the Natural Science category. A minimum of Trigonometry (MATH 31) is required.

continued next page

Astronomy 26, 35
Chemistry Chemistry 24A, 24B, 70, 75A, 75B
Computer Science 1, 21
Earth Science 1, 1L, 5, 5L
Engineering 11, 26, 30, 50, 60, 71
Geography 4, 5, 7, 8
Geology 1, 2, 6, 30, 70, 75A, 75B
Mathematics 31, 61, 65A, 65B, 75, 81, 85
Physics 20A or 30A, 20B or 30B, 44, 45, 46, 47
Statistics 10

C. Electives **3-19**
Elective units may be necessary to reach the total of 60 overall units required for the Associate Degree. If you are planning to transfer, elective units must be transferable to CSU and/or UC.

Total units for the degree **60**

Note: Courses included in the area of emphasis 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.

Student Learning Outcomes:
Upon the successful completion of these programs, students should be able to:
1. Apply critical thinking and hypothesis-driven methods of scientific inquiry to principles of physics.
2. Students in physics learn the physics concepts, the symbolism and language used in physics, and apply the mathematical skills needed to learn and practice problem solving for success in subsequent courses, transfer and future employment.
3. Students in physics learn experimental techniques as applied to the laboratory environment to obtain accurate and precise data, to evaluate and validate scientific data, to correctly use scientific instruments, and to use proper laboratory etiquette to be successful in subsequent courses, research, transfer and future employment.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree: [S355/04807/1902.00]		Units
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
MATH 85	Differential Equations	4
PHYS 45	Physics for Scientists and Engineers I	5
PHYS 46	Physics for Scientists and Engineers II	5
PHYS 47	Physics for Scientists and Engineers III	5
	Total units for the major	**42**
Required General Education course:		
PHYS 44	Introduction to Motion	4

Political Science
Associate in Arts for Transfer

Political Science, the study of politics and government, examines ways and means by which societies identify and solve problems. The exercise of power in decision-making processes and its effect on societal resources is explored and weighed. Political values and beliefs are determined and evaluated for further depth of understanding. Political science courses enrich the general education program.

The Political Science Associate in Arts for Transfer (AA-T) is suited to the needs of students who will complete their education at Chaffey College with an Associate in Arts degree, as well as those students who will complete their Chaffey Associate in Arts degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Political Science guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the field of law, government service, city management, public administration, foreign service, journalism, business and teaching.

To obtain the Political Science Associate in Arts for Transfer degree, students must:
- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Distinguish between individual and citizen, and identify the impacts a citizen has on public policy.
2. Critically analyze a pro/con argument.
3. Identify the competing motivations behind the political behaviors of individuals and groups, and the constraints to those behaviors.
4. Identify the fundamental principles of a republican government, and compare and contrast with other forms of government (e.g. dictatorships, monarchies, theocracies.)
5. Identify social, political, and economic forces necessary to achieve a constitutional order.

Major requirements for the Associate in Arts for Transfer Degree [A361/30979/2207.00]		Units
Required (3 units)		
PS 1	American Politics	3
List A - Any three courses (9-10 units)		
PS 2	Introduction to Political Science	3
PS 4	Political Theory	3
PS 7	International Relations	3
PS 10	Comparative Politics	3
PSYCH 80	Research Methods in Psychology (or STAT-10, Elementary Statistics, or SOC-80, Introduction to Research Methods in Sociology)	4
List B – Any two courses (6 units)		6
PS 3	California Politics and Culture	3
PS 21	Urban Politics	3
PS 25	Latino Politics	3
PS 32	Law and Society	3
	Units for the Major	**18-19**
	***plus* CSU General Education or IGETC Pattern**	**38-41**
	***plus* transfer-level course electives (as needed)**	**0-4**
	Total Units	**60**

Psychology Associate in Arts for Transfer

The Associate in Arts in Psychology for Transfer (AA-T) is for 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. Goals for the Psychology major include student preparation for:

1. Transfer to complete a baccalaureate degree.
2. Advanced studies within the field of Psychology.
3. Careers both within and outside the field of Psychology.
4. Thinking scientifically about the mind and behavior, including their own.

The program is suited to the needs of students who will complete their education at Chaffey College with an Associate in Arts degree, as well as those students who will complete their Chaffey Associate in Arts degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Psychology guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the fields of psychology, social service, education, social science research, biopsychology, clinical psychology, educational psychology, industrial psychology, organizational psychology, social psychology, school psychology, experimental psychology and counseling psychology.

To obtain the Psychology Associate in Arts for Transfer degree, students must:
- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:
1. Demonstrate familiarity with major concepts, theoretical perspectives, empirical findings, and historical trends.
2. Understand and apply basic research methods including research design, data analysis and interpretation.
3. Show insight into one's own and others' behavior and mental processes and apply effective strategies for self-management and self-improvement.
4. Recognize, understand and respect the complexity of socio-cultural and international diversity.
5. Respect and use critical and creative thinking, skeptical inquiry and the scientific approach.

Major requirements for the Associate in Arts for Transfer Degree Units
[A366/31115/2001.00]

Required (14 units)

PSYCH 1	Introduction to Psychology	3
PSYCH 41	Biological Psychology	3
PSYCH 80	Research Methods in Psychology	4
SCSCI 10	Statistics for Social Science	4

List A – Any one course (3 units)

PSYCH 20	Developmental Psychology: Childhood and Adolescence	3
PSYCH 25	Developmental Psychology: Lifespan Development	3
PSYCH 65	Social Psychology	3

List B – Any one course (3 Units)

PSYCH 5	Personal and Social Awareness	3
PSYCH 55	Abnormal Psychology	3

Units for the Major	**20**
***plus* CSU General Education or IGETC Pattern**	**38-40**
***plus* transfer-level course electives (as needed)**	**0-2**
Total Units	**60**

Radiologic Technology

The Radiologic Technology program leads to an Associate in Science degree and certification. 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 and the Loma Linda University Radiologic Technology programs for the bachelor's degree.

The special application form for admission to the RT program is available 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 is available at the RT website or from the Counseling Department. Go to www.chaffey.edu/radtec and click on the application form checklist and Information Packet for the Prospective Radiologic Technology Student. Application criteria is subject to change.

Applicants to the Radiologic Technology program must meet the following criteria:
1. Eligibility for admission to Chaffey College.
2. Verification of U.S. high school graduation or equivalency. 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 425 or higher level math, or STAT 10, or SCSCI 10, or as required for graduation.*
   b. CHEM 9; 10; or 24A; 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 included for full point calculation.
3. A minimum cumulative GPA of 2.0 is required to apply to the Radiologic Technology program. In addition, all general education and required prerequisite courses must be completed with a minimum grade of C or higher, or be in progress at the time of application.
4. Applicants will be notified by the end of May if they are accepted into the program.
5. Prior to admission to the RT program, evidence of satisfactory physical and emotional health is required as determined by a health examination. A background clearance and drug screening are also required. Applicants with a record of any felony are subject to review by the ARRT before an examination or license will be granted. Contact the ARRT at www.arrt.org, and submit a pre-application to determine eligibility for ARRT licensing. Applicants must obtain and submit a satisfactory background check certificate from www.mybackgroundcheck.com using a shared password. Refer to the RT website at www.chaffey.edu/radtec for details.
6. In order to continue in the RT program, students must earn a minimum grade of C (78%) in all Radiologic Technology courses.

continued next page

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Properly identify the patient, interpret examine requests, and determine the proper procedure to successfully complete the exam.
2. Demonstrate ethics, professionalism, effective communication and critical thinking (problem solving).

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S375/04792/1225.00]		
RADTEC 10	Anatomy and Radiographic Positioning I	3
RADTEC 10L	Laboratory for Anatomy and Radiographic Positioning I	1
RADTEC 16	Medical Procedures for Radiologic Technologists	3
RADTEC 16L	Laboratory for Medical Procedures for Radiologic Technologists	1
RADTEC 20	Radiologic Science and Protection	3
RADTEC 20L	Laboratory for Radiologic Science and Protection	1
RADTEC 25	Anatomy and Radiographic Positioning II	3
RADTEC 25L	Laboratory for Anatomy and Radiographic Positioning II	1
RADTEC 31	Radiographic Clinical Education I	2
RADTEC 34	Radiographic Imaging	3
RADTEC 34L	Laboratory for Radiographic Imaging	1
RADTEC 40	Radiographic Clinical Education II	8
RADTEC 50	Radiographic Clinical Education III	6
RADTEC 55	Radiographic Equipment and Clinical Application	2
RADTEC 61	Radiographic Clinical Education IV	8
RADTEC 66	Anatomy and Radiographic Positioning III	3
RADTEC 66L	Laboratory for Anatomy and Radiographic Positioning III	1
RADTEC 70	Radiographic Clinical Education V	11
RADTEC 76	Radiographic Pathology	4
RADTEC 81	Radiographic Clinical Education VI	5
RADTEC 85	Radiographic Review and Exam Preparation	2
RADTEC 470	Venipuncture for Imaging Professionals	1.5
RADTEC 470L	Venipuncture Laboratory for Imaging Professionals	0.5
	Total units for the major	**74**

*All applicants to the Radiologic Technology program are required to have successfully completed or be enrolled in Intermediate Algebra (MATH-425). Successful completion of English Composition (ENGL-1A) and MATH-425 are required to earn an Associate Degree in Radiologic Technology. All general education coursework for the associate degree must be in progress or have been completed at the time of the RT application submission.

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. Ranging 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 insure a high level of individual professionalism.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Conduct business research, analyze, and interpret the findings.
1. Apply the conceptual framework of real estate transactions in business situations.
2. Demonstrate an understanding of the legal and ethical environment of real estate and make appropriate decisions.
3. Demonstrate ethics, professionalism and lifelong learning.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Science Degree:		Units
[S381/14400/0511.00]		
RE 10	Real Estate Principles	3
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
Plus a minimum of 9 units from the following:		
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	4
ACCTGFS 453	U.S. and California Income Tax Preparation	4
ACCTGFS 454	Introduction to the Taxation of Corporations and Partnerships	4
BUS 28A	Business Law I	3
BUS 28B	Business Law II	3
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSMGT 40	Introduction to Management	3
BUSMKT 13	Professional Selling	3
BUSOT 455	Fundamentals of English for Business	3
CIS 1	Introduction to Computer Information Systems	3
CIS 68	Using the Internet	1.5
COMSTD 8	Fundamentals of Speech Communication	3
ECON 1	Introduction to Economics	3
RE 472	Advanced Real Estate Appraisal	3
RE 475	Real Estate Escrow I	3
	Total units for the major	**27**

Requirements for the Real Estate Certificate:
[L382/20684/0511.00]
Same as the major requirements for the A.S. Degree.

	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.

Requirements for the Real Estate Salesperson Certificate: ***(Non-transcripted)***		Units
[E383/99999/0511.00]		
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 are 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.

Sign Language Studies

Sign Language Studies prepares students for careers relating to the Deaf community and/or American Sign Language (ASL). Students will gain skills in communicating through ASL and translating English to ASL/ASL to English. Sign Language Studies may lead students to careers in Deaf Education, Interpreting, Sign Language Instruction, linguistic research, and many other areas. Additionally, students will have greater employment opportunities with their ability to communicate with deaf and hard-of-hearing population, especially in the legal, education, public safety, and health care fields.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Successfully engage in conversation strategies in ASL using advanced level receptive and expressive skills, including knowledge of linguistic structures and vocabulary.
2. Understand important cultural issues and behaviors related to American Deaf culture through personal interactions.
3. Be familiar with the history of American Deaf culture.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for the Associate in Arts Degree:		Units
[A403/30544/0850.00]		
ASL 2 *	Elementary American Sign Language	4
ASL 3	Intermediate American Sign Language	4
ASL 4	Intermediate American Sign Language	4
ASL 18	Introduction to Deaf Studies	3
Plus a minimum of six units from the following:		
ANTHRO 1	Introduction to Physical Anthropology	3
COMSTD 14	Oral Interpretation of Literature	3
COMSTD 74	Intercultural Communication	3
ED 10	Introduction to Education and Teaching II	3
PHIL 72	Seminar in Ethics (or PHIL 76, Critical Thinking)	3
PSYCH 65	Social Psychology	3
SOC 10	Introduction to Sociology	3
	Total units for the major	**21**

* Students with advanced placement into ASL 3 may substitute a course from the elective list for ASL 2.

Sociology Associate in Arts for Transfer

The Associate in Arts in Sociology for Transfer (AA-T) is a study of society, the social construction of reality and social interaction. Emphasis is placed on how social structure creates inequality based on group membership such as ethnicity, class and gender. The development and transformation of societies are explored, focusing on social forces such as social conflict, collective behavior, social movements, and organizational and institutional influences. Goals and outcomes for the Sociology major include student preparation for:

1. Transfer to complete a baccalaureate degree.
2. Advanced studies within the field of sociology.
3. Careers both within and outside the field of sociology.
4. Seamless transfer to a California State University pursuant the requirements of SB-1440.

The program is suited to the needs of students who will complete their education at Chaffey College with an Associate in Arts degree, as well as those students who will complete their Chaffey Associate in Arts degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Sociology guarantees the student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree, in preparation to pursue a career in the fields of sociology, social service, education, social science research, demographer/planner, political research, counseling, journalism and business.

To obtain the Sociology Associate in Arts for Transfer degree, students must:

- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Recognize the connections between social structure and the individual in society.
2. Identify how ideas about what is "real" and "true" are constructed in a social context and shaped by those who have power and influence.
3. Understand and demonstrate the impact of social action on the social structures of society.
4. Identify and explain the significance of social class, gender, age, and racial and ethnic inequality in the distribution of life chances, such as education, health, employment and career opportunities.
5. Identify the difference between research and opinion, evaluate different types of evidence and knowledge (ways of knowing), and explain how research reveals socially structured patterns.

Major requirements for the Associate in Arts for Transfer Degree		Units
[A401/31204/2208.00]		
Required (3 units)		
SOC 10	Introduction to Sociology	3
List A – Any two courses (7-8 units)		
SCSCI 10	Statistics for Social Science	4
SOC 70	Social Problems	3
SOC 80	Introduction to Research Methods in Sociology	4
List B – Any two courses (6-7 Units)		
Any List A courses not used above, and/or:		
PSYCH 65	Social Psychology	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
List C – Any one course (3 Units)		
ANTHRO 3	Introduction to Social and Cultural Anthropology	3
SOC 18	Sociology of Aging	3
	Units for the Major	**19-20**
	***plus* CSU General Education or IGETC Pattern**	**39-40**
	***plus* transfer-level course electives (as needed)**	**0-2**
	Total Units	**60**

Spanish

The Spanish program offers students a strong foundation in communicative skills and provides students with the opportunity to transfer to a variety of liberal arts, language arts, and linguistics bachelor degree programs. In addition, majoring in Spanish provides adults with the language skills necessary for various professions in healthcare, law enforcement, public safety, education, government, translation/interpretation, business, international relations, and hotel and food services. Spanish language study includes a strong cultural emphasis which also affords new perspectives on the world and on the language of one's heritage.

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Recognize and use grammatical structures in Spanish.
2. Identify specific music, art, literature, and/or cultural traditions of Spain and Latin America.
3. Successfully engage in conversational strategies in Spanish.
4. Identify important cultural and/or historical figures of the Hispanic world.
5. Be familiar with the geography of the countries and regions where the target Spanish is spoken.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on pages 32-33.

Major requirements for Associate in Arts Degree: Units
[A405/04786/1105.00]

Track A

SPAN 2	Elementary Spanish	4
SPAN 3	Intermediate Spanish	4
SPAN 4	Intermediate Spanish	4
SPAN 13	Survey of Mexican Literature (or SPAN 14, Latin American Literature in Translation)	3
SPAN 15	Elementary Spanish Conversation	2

Plus a minimum of eight units from the following:

A second modern language (American Sign Language, Arabic, or Chinese)
Art 9
Communication Studies 74
English 77
History 70 *or* 71
Political Science 25
Sociology 25 *or* 26
Spanish 8, 13*, 14*, 16

Total units for the major **25**

* Courses may count only once, either as core or as elective units.

Track B (Spanish Speakers Track)

SPAN 1SS	Elementary Spanish for Spanish Speakers	4
SPAN 2SS	Elementary Spanish for Spanish Speakers	4
SPAN 4	Intermediate Spanish	4
SPAN 8	Survey of Hispanic Literature: 1700 – Present (or SPAN 13, Survey of Mexican Literature, or SPAN 14, Latin American Literature in Translation)	3
SPAN 16	Spanish Composition	3

Plus a minimum of seven units from the following

A second modern language (American Sign Language, Arabic, Chinese, or French)
Art 9
Communication Studies 74
English 77
History 70 or 71
Political Science 25
Sociology 25 or 26
Spanish 8*, 13*, 14*, 16*

Total units for the major **25**

* Courses may count only once, either as core or as elective units.

Note: Students entering either Spanish track with advanced standing will need to take additional units from the elective courses list to meet the major's 25 unit requirement.

Theatre Arts Associate Degree for Transfer

The Associate in Arts in Theatre Arts for Transfer (AA-T) prepares students to transfer into the CSU system to complete a baccalaureate degree in Theatre Arts or a similar major. Various productions are offered to provide students with a broad range of practical training

The program is suited to the needs of students who will complete their education at Chaffey College with an Associate in Arts degree, as well as those students who will complete their Chaffey Associate in Arts degree and transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Theatre Arts guarantees student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree.

Goals and outcomes for the Theatre Arts major include:

1. Continued improvement and maintenance of a learner-centered environment for Theatre education that includes a dynamic and accessible performance program respectful of each student through varied delivery strategies.
2. Introduction of general education, transfer and vocational students to the history of theatre, classical stage acting techniques, musical theatre techniques, acting for the camera techniques, stylized acting, stage movement, directing for the stage and main stage production, as well as instruction that integrates the appreciation of theatre as an academic endeavor, comprehensive art and social form.
3. Provision of safe, current and effective facilities and equipment that are up to professional industry standards for varied technical theatre fields so that our students can create and enhance innovative projects/products.
4. Preparation of students for seamless transfer to a California State University to pursue a Theatre Arts baccalaureate degree pursuant the requirements of SB-1440.

To obtain the Theatre Arts Associate in Arts for Transfer degree, students must:

- Complete all the major requirements listed below with grades of C or better
- Complete a minimum of 60 CSU-transferable units with a grade point average (GPA) of 2.0 or better.
- Complete either the California State University General Education Breadth pattern (CSU GE), or the Intersegmental General Education Transfer Curriculum (IGETC).

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Develop a fundamental knowledge of the origins of theatre.
2. Recognize the aesthetics of design.
3. Critically analyze and appraise a theatrical performance and technical aspects of the production.

Major requirements for the Associate in Arts for Transfer Degree Units
[A410/31337/1007.00]

Required (9 units)

THEATRE 1	Introduction to the Theatre (or THEATRE 4, Theatre History: Ancient to 1700)	3
THEATRE 10	Beginning Acting	3
THEATRE 50	Main Stage Theatre Production Workshop	3

List A – Any three courses (9 units)

THEATRE 12	Intermediate Acting	3
THEATRE 30	Technical Theatre	3
THEATRE 32	Theatre Design – Lighting	3
THEATRE 40	Stage Costuming	3
THEATRE 42	Theatrical Makeup	3

Units for the Major	**18**
***plus* CSU General Education or IGETC-CSU Pattern**	**42**
***plus* transfer-level course electives (as needed)**	**0-9**
less units that may be double-counted	**9**
Total Units	**60**

Theatre - Performing Arts

The Performing Arts Associate in Arts degree prepares students to transfer to four-year institutions other than CSU's to complete a baccalaureate degree in performing or theatre arts. If transfer to a CSU in performing or theatre arts is a student's desired educational goal, the Associate in Arts for Transfer (AA-T) in Theatre Arts should be pursued rather than this degree. The focus of the Performing Arts degree is on performance, whereas the AA-T degree provides a broader coverage of the basic theory and principles of theatre arts.

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

Student Learning Outcomes:

Upon the successful completion of this program, students should be able to:

1. Differentiate between theatre as a theatrical art and social form throughout history through technical skills development in the classroom and critical thinking development through theatre historical and theoretical analysis.
2. Exhibit improved creativity, self-confidence, script analysis, character development, observation, body awareness, vocal awareness and memorization skills, as well as collaborative problem-solving and diversity awareness through technical skills, acquired style, and performance skills.
3. Develop and exhibit acting technical skills and styles within a wide spectrum of acting methods while applying knowledge of the mechanical principles of stage performance for an expressive, communicative purpose.

Major requirements for the Associate in Arts Degree:		Units
[A415A/04780/1007.00]		
THEATRE 1	Introduction to Theatre	3
THEATRE 2	Theatrical Dance (also available as DANCE 2)	3
THEATRE 4	Theatre History: Ancient to 1700	3
THEATRE 5	Theatre History: 1700-Present	3
THEATRE 10	Beginning Acting	3
THEATRE 20	Directing for the Stage I	3
THEATRE 30	Technical Theatre	3
THEATRE 50	Main Stage Production Workshop I	3

Plus one course from the following:

THEATRE 32	Theatre Design - Lighting	3
THEATRE 36	Stage Management	3
THEATRE 40	Stage Costuming	3
THEATRE 42	Theatrical Makeup	3

Plus two courses from the following:

THEATRE 12	Intermediate Acting	3
THEATRE 14	Stylized Acting	3
THEATRE 18	Seminar in Television Production: Acting Techniques	3
THEATRE 21	Directing for the Stage II	3
THEATRE 35	Musical Theatre Performance	3
THEATRE 56	Children's Theatre	4
THEATRE 60	Seminar: Acting	3

Total units for the major	**33-34**

University Studies

The Associate in University Studies is designed for students who wish a broad knowledge of liberal arts and sciences plus additional coursework in an 'Area of Emphasis'. This area of emphasis would be an ideal choice for students planning on transferring to the California State University ***(CSU)*** or University of California (UC) as the student can satisfy their general education requirements, plus focus on transferable course work that relates to majors at these institutions. Please consult with a counselor for specific information regarding your intended major at the specific college/university of your choice.

- Select either the California State University General Education (CSU-GE) or Intersegmental General Education Transfer Curriculum (IGETC) for the general education pattern related to your educational goal.
- Complete 18 units in one 'Area of Emphasis' from those outlined below. (Note: where appropriate, courses in the 'Area of Emphasis' may also be counted for a general education area)
- For ALL OPTIONS: complete necessary Chaffey College Graduation and Proficiency requirements.
- All classes listed below transfer to CSU and courses in **BOLD** print also transfer to UC. Please refer to www.assist.org for articulation agreements and transfer details.

Student Learning Outcomes:

Upon the successful completion of these programs, students should be able to:

1. Demonstrate effective communication and comprehension skills.
2. Demonstrate critical thinking skills in problem solving across the disciplines and in daily life.
3. Demonstrate knowledge of significant social, cultural, environmental and aesthetic perspectives.
4. Assess their knowledge, skills and abilities; set personal, educational and career goals; work independently and in group settings; demonstrate computer literacy; and cultivate self-reliance, financial literacy and physical, mental and social health.

Requirements for the Associate in Arts Degree:	**Units**
A. General Education CSU-GE or IGETC:	**33-39**

Units necessary to meet CSU-GE or IGETC Certification requirements only.

B. Areas of Emphasis: **18**

- A minimum of 18 units in one Area of Emphasis listed on the next page, with two or more courses in at least one discipline
- Courses selected may also be used to fulfill general education areas; refer to each transfer institution policy.
- All courses below transfer to California State University
- Courses in **BOLD** also transfer to University of California. Refer to ASSIST, the course descriptions in this catalog, or consult with a counselor to be sure of transfer status and credit limitations at the University of California.

C. Electives: **3-9**

Elective units may be necessary to total 60 overall units required for the Associate Degree. These units must be transferable to the CSU and/or UC for appropriate credit

Total units for the degree	**60**

continued next page

AREAS OF EMPHASIS

1. ARTS AND HUMANITIES:

[A301/18041/4903.10]

These courses emphasize the study of cultural, literary, humanistic activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. At least one course must be completed in Arts and one in Humanities. This requirement will be met through the completion of CSUGE or IGETC; students pursuing transfer majors in these areas will be required to take additional courses in Arts and/or Humanities.

American Sign Language	**1, 2, 3, 4, 18**
Arabic	**1, 2, 3, 4**
Art	**1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 20, 44, 63,** 64
Chinese	**1, 2, 3, 4**
Cinema	**25, 26**
Dance	**1, 2**
English	**1B, 1C, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76,** 77, **79, 80A, 80B, 81**
Fashion Design	20, 45
Fine Arts	**50**
French	**1, 2**
History	**1, 2, 4, 7, 16, 20, 40**
Humanities	**5, 6, 20**
Interior Design	11, 12
Music	**1, 2A, 2B, 3A, 3B, 4, 21, 22, 26, 70A, 70B**
Philosophy	**70, 72, 73, 75, 76, 77, 78, 80, 81, 82**
Photography	**1, 7, 9, 10**
Spanish	**1** or **1SS**, **2** or **2SS, 3, 4, 8, 13, 14, 16**
Theatre	**1, 4, 5, 10, 12**

2. SOCIAL & BEHAVIORAL SCIENCES:

[A302/18042/4903.30]

These courses emphasize the perspectives, concepts, theories and methodologies typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences. Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

Administration of Justice	**1**
Anthropology	**2, 3**
American Sign Language	**18**
Child Development and Education	**2, 4,** 6
Communication Studies	**2**, 4, **6, 8, 12, 14, 72, 74,** 76, 78
Consumer Studies	11, 40
Economics	**1, 2, 4, 8**
Education	**10**
Geography	**1, 10, 11**
Gerontology	11, **18, 22, 23**
History	**1, 2, 4, 5, 6, 7, 9, 10, 12, 16, 17, 18, 20, 21, 25, 40, 50, 51, 70, 71**
Political Science	**1, 2, 4, 7, 10, 25**
Psychology	**1,** 5, **20, 21, 25, 41, 65, 80**
Social Science	**10, 13, 17, 24**
Sociology	**10, 14, 15, 16, 18, 25, 26, 70, 80**

3. MATHEMATICS & SCIENCE:

[A303/18043/4902.00]

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in Math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world's civilizations. At least one course must be completed in Math and one in Science. This requirement will be met through the completion of CSUGE or IGETC; students pursuing transfer majors in these areas will be required to take additional courses in Math and/or Science.

Mathematics	**4, 25,** 31, **61, 65A, 65B, 75, 81, 85**
Anthropology	**1** or **1+1L**
Astronomy	**26, 35**
Biology	**1, 2, 3, 10, 11, 12, 14, 16, 20, 22, 23** or **23+23L, 61, 62, 63**
Chemistry	**7, 8, 9, 10, 12, 24A, 24B, 70, 75A, 75B**
Computer Science	**1, 21**
Earth Science	**1** or **1+1L, 5** or **5+5L**
Engineering	**26, 30, 50, 52, 60, 71**
Geography	**4** or **4+5, 6**
Geology	**1, 2,** 6, **30**
Nutrition & Food	**5, 15**
Physical Science	**10**
Physics	**5** or **5+6, 20A, 20B, 30A, 30B, 44, 45, 46, 47**
Social Science	**10**
Statistics	**10**

4. BUSINESS & TECHNOLOGY

[A304/18044/4999.00]

These courses emphasize the integration of theory and practice within the fields of business and technology. Students will develop the ability to effectively manage and lead organizations. Students will demonstrate an understanding of the place of business and technology within the global economy. Students will critically apply ethical standards to business practices and decisions. Technology represents the sum of a society's practical knowledge and is integrated throughout all aspects of business in our modern world. In this area of emphasis, technology courses are those that apply technical knowledge or tools in a discipline, such as Hotel and Food Service Management, Fashion, and Accounting; business courses would be those pertinent to all areas such as Business, Economics, Statistics, and Management. Students choosing this area of emphasis are required to take at least one course in business and one in technology.

Accounting	**1A, 1B**
Administration of Justice	**1, 2, 4**
Automotive Technology	10
Broadcasting	3, 55, 60, 62
Business	**10, 28A, 28B**
Business: Management	11, **40**
Business and Office Technologies	61, 64A
Computer Information Systems	**1,** 4
CIS: Programming	**1, 3**
Computer Science	**1, 21**
Correctional Science	1
Drafting	20, 21
Economics	**2, 4**
Fashion Design	40, 61, 65
Fashion Merchandising	**10,** 11, 15, **60**
Hotel and Food Service Management	10, 18, 20
Interior Design	10, 21
Mathematics	**60**
Nutrition and Food	**5, 15, 25**
Real Estate	10
Social Science	**10**
Statistics	**10**

Course Descriptions

How to Read the Course Entries

Courses listed in this catalog apply to the Fall 2012, Spring 2013, and Summer 2013 terms. Courses are ordered numerically within alphabetically arranged subject areas.

- The bolded first line(s) indicate the official course number, a descriptive title, the number of units, and credit-by-exam authority (if applicable). Alpha-suffixes to course numbers indicate either (a) modularized courses where "A" precedes "B", or (b) courses with variable units.
- The following line identifies the applicability of the course to college credit. All courses listed in this catalog are degree-applicable, non-degree-applicable, or non-credit. A subset of degree-applicable courses are also transferable to the CSU and/or the UC systems and are designated as such.
- The next line identifies the type of instructional delivery and the required range of hours for each delivery method per term.
- The next line identifies the grading schema for the course, which may be letter grade only, pass/no-pass grade only, letter grade with option for pass/no pass grading, or not graded.
- Next are italicized lines indicating limitations on enrollment, prerequisites, corequisites, and advisories (as applicable).
- The course description paragraph follows, with the C-ID number (if applicable) and TOP code assigned to the course appended at the end.

Course Numbering

1-99
Lower-division transfer and baccalaureate degree level courses. These courses are comparable to those offered in the first two years of a four-year college or university. Courses transferable to the California State University are marked ***(CSU)***; courses transferable to the University of California are marked ***(UC)***. Some transferable courses have credit limitations at either CSU or UC (or both); students should consult a counselor for details on these 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
Non degree applicable foundational 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 letter grade or pass/no-pass. If graded, the grades are not included in students' degree applicable grade point average computation.

600-699
Non-credit courses provide foundational, developmental, occupational, and general education opportunities. They do not earn unit credit, are not considered part of collegiate-level study, and are either not graded or have a pass/no-pass grading schema.

Other Information

Credit by Examination [Cx]
Courses designated [Cx] may be challenged for credit by examination.

Independent Study
Independent study courses provide individual students 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. Interested students should contact discipline faculty for more information.

Requisites and Advisories
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.

Advisories are recommendations for courses or competencies that students are encouraged - but not required - to meet before or in conjunction with the course to which they are attached.

Special Topics
Special topics courses offer in-depth study of topics not currently covered in the existing curriculum. Courses may be lecture, lab, or studio. Topics and unit value are determined by the department at the time of offering. Consult each term's Schedule of Classes for specifics.

Course Identification Number (C-ID)
The C-ID Numbering System is a statewide common number identifying specific courses that participating California colleges and universities have determined are comparable in scope and content to courses offered by other California community colleges, regardless of each college's unique numbering system. Because courses may be modified and qualified for or deleted from the C-ID database throughout the year, students should consult www.assist.org and an academic counselor to confirm how C-ID qualified courses apply to the four-year college or university to which they plan to transfer.

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 Systems Office reference and program planning/budgeting purposes, and is not intended for student use.

ACCOUNTING (ACCTG)

1A Financial Accounting (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems 1 or Business and Office Technologies 63.
Development and communication of 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. 0502.00

1B Managerial Accounting (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Accounting 1A.
Advisory: Completion of Computer Information Systems 1 or experience using spreadsheets.
Managerial accounting meets the information needs of internal users by developing and communicating information that is useful for management decision-making. Course material covered includes foundations of management accounting, planning, control, performance evaluation, financial statement analysis, and other dimensions of decision making. May be offered as an Honors course. 0502.00

70 Cost Accounting (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Accounting 1B.
Fundamentals of cost accounting including theoretical concepts, terminology, planning, controlling, and costing for products, services, and customers. Using cost accounting theoretical concepts, students perform comparative analyses related to product costing for manufacturing, merchandising, and service companies. Students also evaluate both quantitative and qualitative data to assist management with strategic decision-making, planning, and control. 0502.00

430 Accounting for Governmental and Not-for-Profit Organizations (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
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, with both theoretical and practical aspects explored. 0502.00

435 Payroll Accounting (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Accounting 1A, 480, or 481.
Comprehensive overview of federal and state payroll laws and their effect on payroll records and required government reports. Course may be taken every three years as needed to maintain currency with payroll laws. May be taken four times. 0502.00

450 Federal Tax Principles I (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Federal income tax principles and tax preparation for individuals and small business entities. 0502.10

460 Commercial Accounting Software (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Accounting 1A and completion of or concurrent enrollment in Computer Information Systems 1.
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. 0502.00

480 Applied Accounting I (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 individuals performing accounting for small businesses. May be taken twice. 0502.00

481 Applied Accounting II (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 the Certified Bookkeeper exam, and for persons involved with or interested in small business accounting. 0502.00

492A-H Special Topics: Accounting (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Selected topics for students who wish to pursue specialization within in accounting. Topics will be determined by the individual instructor; see class schedule for current emphasis. May be taken four times regardless of the unit combination, however no single topic may be repeated. May require prerequisites and/or corequisites based on the content of the course. 0502.00

492LA-H Special Topics Laboratory: Accounting (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Selected laboratory topics for students who desire in-depth exploration in specialized areas of accounting. 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. 0502.00

496A,B,C,D Internships in Accounting (1, 2, 3, or 4)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Consent of the Accounting Program Coordinator is required.
Corequisite: Concurrent enrollment in any Chaffey College course.
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. 0502.00

ACCOUNTING AND FINANCIAL SERVICES (ACCTGFS)

440 Introduction to Financial Planning (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 0504.00

442 Fundamentals of Finance and Investing (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 implications of investments. 0504.00

450 Tax Preparation for Small Business (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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. 0502.10

451 Volunteer Income Tax Assistance Program I (1)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade with option for pass/no-pass grade.
Prerequisite: Completion of Accounting and Financial Services 453.
Combining both theory and practical application, this course allows the student to research and analyze current federal and state tax issues and to assist lower income and elderly citizens in the preparation of their tax returns under the supervision of a CPA or certified tax preparer. May be taken four times. 0502.10

452 Volunteer Income Tax Assistance Program II (0.5)
(Degree-applicable)
Hours: 24-27 laboratory.
Grading: Letter grade with option for pass/no-pass grade.
Prerequisite: Accounting and Financial Services 451, or a passing grade on the VITA Intermediate IRS exam.
A continuation of ACCTGFS 451 (VITA I), this course allows the student to research and analyze current tax issues, to interview real taxpayers, and to prepare and electronically file real tax returns under the supervision of a CPA or certified tax preparer. Note: VITA I & II must be taken consecutively in the same academic year. May be taken four times. 0502.10

453 U.S. and California Income Tax Preparation (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
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. 0502.10

454 Introduction to the Taxation of Corporations and Partnerships (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
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. 0502.10

465 Financial Accounting for the Non-Accounting Major (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Creation, use, and interpretation of accounting data by the non-accounting business major, from an entrepreneurial perspective. Topics include business structure and financial statement analyses; forecasted financial statements; cash management and budgeting, including capital and operating budgets; management of receivables and payables; and an overview of financing options, banking relations, and credit management. 0502.00

472 International Trade Finance (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 61 or equivalent business experience.
Survey of the fundamentals of international financial management. Topics include the international financial environment, exchange rates, arbitrage, sources of finance for international trade (including commercial banks, government agencies, and non-bank lenders), risk analysis, budgeting, international cash management, and currency investment. Students analyze a variety of international financial management issues and problems through case studies and other techniques. 0508.00

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 Social and Behavioral Sciences for more information.

1 Introduction to the Criminal Justice System (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
History and philosophy of the American justice system, including roles, duties, and the various justice subsystems. Structure and function of police, courts and corrections. Concepts of crime causation, punishment and rehabilitation, and interrelationships with society. Major offense classifications and evidentiary requirements. Constitutional and procedural considerations affecting arrest, search, and seizure. California Penal Code. Analysis of ethics, education, and training for criminal justice professionals. 2105.00

2 Concepts of Criminal Law (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
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 Criminal Court Process (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
Step-by-step examination of the criminal prosecution process from arrest through final disposition, and the associated court actions taken by the defense and prosecution. Roles and responsibilities of law enforcement, the judiciary, and corrections, viewed as both independent and collectively operating segments within the criminal justice system. Review of past and current criminal justice procedures as they relate to individual Constitutional and procedural rights. 2105.00

4 Community-Based Problem Solving and the Justice System (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Roles of justice system agencies and practitioners, focusing on the interrelationships between the various agencies and their interaction with the public. Analysis of the differences between community-oriented and problem-solving policing, with emphasis on the resultant public perception and effectiveness of law enforcement actions. Examination of the factors that contribute to positive relationships between members of the justice system and the public. 2105.00

5 Legal Aspects of Evidence (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
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. (C-ID AJ 124) 2105.00

6 Juvenile Procedures (3)
(formerly Administration of Justice 406)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Administration of Justice 1.
Organization, functions, and jurisdiction of juvenile agencies, including investigation, arrest, interrogation, processing, detention, case disposition, statutes, probation, and court procedures. Evaluation of factors that contribute to delinquency, as well as those that aid in its prevention/repression. 2105.00

7 Criminal Investigation (3)
(formerly Administration of Justice 409)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
Fundamentals of investigation. Topics include collection and preservation of physical evidence, scientific aids, basic interview and interrogation techniques, modus operandi, sources of information, fingerprints, polygraphs, follow-up, and case preparation. 2105.00

8 Criminology (3)
(formerly Administration of Justice 414)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Administration of Justice 1.
Historical development of criminology and the application of contemporary thought to the problem of crime in America. Topics include theories of criminal behavior causes; the nature, extent, control, and prevention of crimes; individual and group criminal activity; criminal behavior systems; recidivism; crime categories; crime prevention theory; aspects of victimology and police behavioral response. 2105.00

9 Crime Scene Management and Forensic Evidence (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
An introduction to the role of forensics in criminal investigations including methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents and controlled substances. 2105.40

407 California Substantive Law (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Administration of Justice 1.
Study of the substantive laws commonly encountered by municipal and state police officers, investigators, prosecutors, defense attorneys, and criminal justice employees. Crime identification and classification, including elements of specific and general intent crimes per the California Penal Code and other California-specific bodies of law. Scope of course includes misdemeanor and felony violations of the law, status offenses, and strict liability offenses 2105.00

408 Patrol Operations (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Administration of Justice 1.
Responsibilities, techniques, and methods of police patrol. Topics include purpose and types of patrol, communications, observations, tactics, recording, courtroom testimony, and community relations. 2105.00

410 Narcotics and Vice Investigation (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Vice control (gambling, prostitution, sex crimes, alcohol, etc.) and the identification of narcotic and dangerous drug use. Detection, suppression, arrests, prosecution, and offenses as stipulated in the California Penal Code, Health and Safety Code, Welfare and Institutions Code, Business and Professional Code, and Vehicle Code. Topics include: surveillance, court testimony, probable cause, search warrants, and court decisions related to the narcotic and vice offenders. Special consideration is given to physical evidence and the Uniform Control Substance Act. 2105.00

412 Writing for Criminal Justice Professionals (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 455, or eligibility for English 450 or completion of English 550, or eligibility for English as a Second Language 450 or completion of English as a Second Language 558.
Different types of written reports prepared by criminal justice professionals. Students prepare misdemeanor, felony, pre-sentencing, parole/probation and administrative reports, organizing and presenting the information obtained from investigations, interviews and interrogations. Topics include content; criminal elements; correct style and structure; clarity and conciseness; grammar, punctuation, and spelling; neatness; completeness; and accuracy. The importance of quality reports is stressed. 2105.00

413 Police Supervision, Leadership, and Management (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Administration of Justice 408.
Role, function, and duties of the law enforcement supervisors and managers. Topics include defining the mission of law enforcement agencies; organizational structure; patrol operations, scheduling and deployment; department policies and procedures, personnel training; performance evaluations, selection, promotion of personnel; oral and written communications, including response to complaints and community concerns. 2105.00

415 Principles and Practices of Interviewing and Investigation (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Administration of Justice 1 and 409.
Techniques of effective interviewing and interrogation. An examination of laws that relate to admissibility of solicited statements in court. 2105.00

AERONAUTICS

(SEE AVIATION MAINTENANCE TECHNOLOGY)

AMERICAN SIGN LANGUAGE (ASL)

1 Elementary American Sign Language (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Study of American Sign Language (ASL) including an introduction to current and historical aspects of deaf culture. 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 learning 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)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: American Sign Language 1 or one year of high school American Sign Language.
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 learning in a Success Center that supports this course is required. 0850.00

3 Intermediate American Sign Language (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: American Sign Language 2 or two years of high school American Sign Language.
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 learning in a Success Center that supports this course is required. 0850.00

4 Intermediate American Sign Language (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: American Sign Language 3.
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 learning in a Success Center that supports this course is required. 0850.00

18 Introduction to Deaf Studies (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: American Sign Language 1.
Overview of Deaf history and the origins of American Sign Language. Introduction to the basic issues of Deaf culture and communication. Students will gain an overview of historical and contemporary issues and people in the Deaf community. This course introduces students to the wide variety of issues involved in Deaf Studies, including linguistics, education, sociology, psychology, and interpreting.
0850.00

ANTHROPOLOGY (ANTHRO)

(SEE ALSO SOCIAL SCIENCES)

1 Introduction to Physical Anthropology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Anthropology 1 (may be taken previously).
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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 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. 2202.00

98A,B,C Independent Study: Anthropology (1, 2, 3)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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 upon by both the student and the instructor before the student signs up for the course, since the scope of the project determines the number of units allowed. May be taken three times regardless of the unit combination. However, no single-subject paper or project may be repeated. 2202.00

ARABIC (ARABIC)

1 Elementary Modern Standard Arabic (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
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 learning in a Success Center that supports this course is required. Corresponds to the first year of high school Arabic. 1112.00

2 Elementary Modern Standard Arabic (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Arabic 1 or one year of high school Arabic.
Continued presentation of the four basic language skills in functional modern Arabic – aural, oral, reading, and writing. Skills focus on the continuing practice of Arabic script, correct pronunciation, vocabulary expansion, and applying the rules of grammar and tense to simple declarative sentences and short conversations. Arabic cultural norms, values, and customs are explored and serve as a basis for additional skill-building practice. Fourteen hours of supplemental learning in a Success Center that supports this course is required. Corresponds to the second year of high school Arabic. 1112.00

3 Intermediate Modern Standard Arabic (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Arabic 2 or two years of high school Arabic.
Review of basic Arabic grammar. Introduction to more complex sentence structures and verb tenses. Students use Modern Standard Arabic at an intermediate level in speaking, listening, reading, and writing. Includes intermediate uses of Modern Standard Arabic alphabet, conversation strategies, and cultural interactions. Arabic cultural norms, values, and customs are explored and serve as a basis for additional skill-building practice. Fourteen hours of supplemental learning in a Success Center that supports this course is required. 1112.00

4 Intermediate Modern Standard Arabic (4)
(CSU; UC pending)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Arabic 3.
Continued study of Modern Standard Arabic leading to a more accurate understanding and use of the language through placing emphasis on advanced-level speaking, reading, writing, and listening skills. Sophisticated vocabulary and complex grammatical structures are applied to speaking and writing assignments. Reading comprehension in Arabic is developed in the context of cultural texts and themes. Ten hours of supplemental learning in a Success Center that supports this course is required. 1112.00

ARCHITECTURE

(SEE DRAFTING)

ART (ART)

1 Contemporary Art: 1945 - Present (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Historical study of the diverse artistic movements from the end of WWII to the present, tracing the discourse of late modernism to postmodernism. Visual language, art terminology, philosophical issues and evolving art theories are used to examine works from a wide assortment of contexts. Course is an essential introduction to contemporary art for studio art, graphic design, photography, and art history majors. May be offered as an Honors course. 1001.00

3 Art History of Western World: Ancient to Medieval (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of the architecture, sculpture, and painting of past cultures from the ancient beginnings of art of the Western World through the Medieval Period. Analysis of how symbolism and artistic style reflect the daily life, philosophy, religion, values, and concerns of each culture and historical period. 1001.00

5 Art History of Western World: Renaissance to Modern (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of the architecture, sculpture, and painting of past cultures of the Western World from the Renaissance through the Modern period. Analysis of how symbolism, visual concepts, and artistic style reflect the philosophy, religion, values, and concerns of each culture and historical period. 1001.00

6 Women Artists in History (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Comprehensive study of the contributions of women artists to the Western art tradition from prehistory to the present day. Use of visual language and art terminology to examine artworks from a broad range of historic, social, political, and personal contexts. Critical analysis of arguments used to restrict women from artistic practices, institutions, movements, and histories. May be offered as an Honors course. 1001.00

7 Art of Africa, Oceania, and North America (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of visual and material culture within the historical context of selected civilizations of the South Pacific islands, Sub-Saharan Africa, and Native North America from ancient to modern times. 1001.00

8 Contemporary Media, Art and Visual Language (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Introduction to contemporary media, artists, and visual languages. Explores impact of new media, new concepts, and movements on art, artists and society. Theories and vocabulary of contemporary visual communication will be studied as a means to develop an understanding of artistic and societal trends, and as a way to investigate the process of creating and analyzing visual artwork. 1001.00

9 Art of the Pre-Columbian Americas (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of visual and material culture within the historical context of selected ancient American civilizations in Mexico, Central America, and South America. 1001.00

10 Fundamentals of Design in Two Dimensions (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. (C-ID ARTS 100) 1002.00

11 Asian Art History (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 are considered. Problems involved in viewing Asian art outside of its original cultural context are discussed at length. 1001.00

12 Fundamentals of Design in Three Dimensions (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Art 10.
Introduction to the fundamentals of design in three-dimensions with applications in a variety of sculptural media such as paper, plaster, wire, and mixed-media. Emphasis on the basic elements and principles of design, analysis of form, as well as the implications of space and time. This is a problem-solving course that encourages ideas/concepts, creative techniques, and manipulation of media in the development of three-dimensional projects. 1002.00

14 Introduction to Drawing (3)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Advisory: Completion of Art 10.
Introduction to freehand drawing with an emphasis on drawing from direct observation. Focuses on the development of perceptual skills and the fundamentals of composition. Exploration of traditional and experimental approaches using a variety of black-and-white and color media. 1002.10

16 Introduction to Painting (3)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Advisory: Completion of Art 10 or Art 14.
Introduction to painting in acrylic media. Exploration of traditional and contemporary approaches and techniques. Development of painting as a means of self-expression. Includes fundamentals of color theory and composition as applied to painting. 1002.10

18 Introduction to Ceramics (3)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
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

20 Ceramic Sculpture (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Introduction to three-dimensional (3D) design, sculptural processes, concepts, and materials with the emphasis on clay. 1002.20

30 Figure Drawing (3)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Drawing the human form from the model with a focus on structure, anatomy, and its expressive design with particular emphasis on contemporary approaches and conceptual strategies. Includes exploration of various methods, techniques, and media in life drawing. May be taken three times. 1002.10

32 Intermediate Drawing (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 14.
Advisory: Completion of Art 10.
Continued study of freehand drawing. Emphasis placed on solving complex formal and conceptual problems. Individual research in contemporary drawing practices. Students are encouraged to develop work for a portfolio. May be taken twice. 1002.10

34 Intermediate Painting (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 16.
Advisory: Completion of Art 10.
Continued study of painting in acrylic media. Emphasis placed on solving complex formal and conceptual problems. Individual research in contemporary painting practices. Students are encouraged to develop work for a portfolio. May be taken twice. 1002.10

35 Intermediate Ceramics (3)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Prerequisite: Art 18.
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)
(CSU; UC)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Prerequisite: Art 35.
Advanced use of the potter's wheel and off-wheel construction methods. Attention is given towards the development of a personal aesthetic and conceptual focus. Designed to prepare students to continue working with clay and glazes. 1002.30

44 Mixed-Media Studio and Theory (3)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Art 12.
Designed to explore experimental uses of materials and concepts through techniques such as collage, assemblage, installation and site-specific works, as well as contemporary art and craft. Development of both 2D and 3D mixed-media projects may include fiber, metal, wood, plastic, and found objects. Emphasis on technical processes, conceptual strategies, and personal expression. May be taken twice.
0614.10

62A Illustration I (3) [Cx]
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 10 or 14.
Advisory: Completion of Art 16, 44, or 63.
Study of significant works of art in the field of illustration and graphic design to increase awareness in the visual expression of social and individual concepts and ideas. Emphasis on the development of basic skills in visual communication.
1013.00

62B Illustration II (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 62A.
Illustration techniques and concepts with extensive emphasis on creating visual solutions to applied problems, stylistic and conceptual innovation, and portfolio development. May be taken twice. 1013.00

63 Introduction to Graphic Design (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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 principles of portfolio development. Project-based experience, with current hardware and software used for design and printing of contemporary visual communications. May be taken twice. 0614.60

73 Typography and Layout (4)
(CSU)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63.
Corequisite: Art 68B, 68C, 468B, 468C, or access to a Macintosh computer (G4 or higher, equipped with course appropriate software).
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) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Advisory: Completion of Art 10 and basic keyboarding skills are recommended.
Introduction to digital media production for interactive media: the Web, CD-ROM, DVD-ROM, and interactive kiosks. Emphasis on developing visual language using 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)
(CSU)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63.
Advisory: Completion of Art 82.
Principles of website 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 three times. 0614.30

89 Student Invitational Exhibition (4)
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Student must pass faculty review of creative project proposal and portfolio in November for the following Spring term course and exhibition. Interested students should contact an art or photography faculty member no later than September 1. Portfolios and applications are due in early November.
Honors course for highly motivated studio art, digital media, and photography students who meet portfolio requirements. This course will involve 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 of Contemporary Art Director/Curator and discipline faculty, selected students cooperatively undertake all phases of mounting a professional quality exhibition of their artworks. 1001.00

90A,B, C Art Honors Seminar (1)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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 (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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 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 (.5-6)
(CSU; UC credit limitations)
Hours:48-54 laboratory hours per unit of credit..
Grading: Letter grade only.
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 92 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)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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

407 History of Design (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 18.
Introduction to materials, equipment, and processes used in the creation and firing of ceramic glazes. 1002.30

412 Firing Techniques (3)
(Degree-applicable)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
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

421 Intermediate Ceramic Sculpture (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Art 20
Intermediate investigations of three-dimensional (3D) design, sculptural processes, concepts, and materials with the emphasis on clay. 1002.20

474 Identity System Design (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63.
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)
(Degree-applicable)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
Prerequisite: Art 82.
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. 0614.10

478 Illustration on the Computer (3)
(Degree-applicable)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63 or Art 82.
Introduction to commercial illustration using the computer. Applying understanding of the design features of software 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

482 Editing Digital Media (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63 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)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63 or 82.
Introduction to the art and design of 2-D 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. May be taken three times. 0614.60

487 3-D Animation I (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Art 63 or 82.
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 3-D. 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

488 Portfolio and Presentation (4)
(replaces Art 482)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration into this course.
Advisory: Completion of a substantial number of required courses in an art, graphic communication, or visual communications major or certificate.
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. 1001.00

ASTRONOMY (ASTRON)

26 Stars and Galaxies (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Math 410.
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)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Math 410.
Study of planets, moons, and other bodies within solar systems. Using observations from telescopes and spacecraft, the scientific method and basic concepts from physics, geology, and other sciences to identify and explain formative processes and unique characteristics. Laboratory activities include formulating a scientific investigation; selecting the appropriate tools and methods of planetary science to image, measure, and/or observe phenomena; analyzing data; identifying error; and reporting results. 1911.00

Automotive Collision Repair Technology (ACRT)

400 Basic Automotive Collision Repair (5) [Cx]
(Degree-applicable)
Hours: 40-45 lecture; 120-135 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 40-45 lecture; 120-135 laboratory.
Grading: Letter grade only.
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]
(Degree-applicable)
Hours: 40-45 lecture; 120-135 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 40-45 lecture; 120-135 laboratory.
Grading: Letter grade only.
Prerequisite: Automotive Collision Repair 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

492A-H Special Topics: Automotive Collision Repair Technology (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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 on the content of the course. 0949.00

Automotive Technology (AUTOTEC)

10 Service and Repair (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. 0948.00

15 Automotive Electricity and Electronics (2) [Cx]
(CSU)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
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 subject matter found in other automotive technology courses. May be taken twice. 0948.00

407 Introduction to Hybrid Vehicles (2.5)
(Degree-applicable)
Hours: 24-27 lecture; 48-54 laboratory.
Grading: Letter grade only.
An introduction to the operational theory, maintenance, and other service requirements for gasoline-electric hybrid vehicles. Safety requirements specific to hybrid vehicles are stressed May be taken twice. 0948.40

416 Basic Automotive Air Conditioning Systems (2) [Cx]
(formerly Automotive Technology 426A)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
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 prepares students to take the Automotive Service Excellence (ASE) A7 Technician Certification exam. May be taken twice. 0948.00

417 Brakes (4) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. 0948.00

418 Suspension and Steering Systems (4) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Automotive Technology 10 and 15.
Operation, diagnosis, and repair of steering and suspension systems, including wheel and tire service, and two- and four-wheel alignments. Course supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A4 Technician Certification exam. May be taken twice. 0948.00

422 Fuel, Ignition, and Emission Control Systems (5) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Automotive Technology 10 or 450, and Automotive Technology 15, 429 or 455
Operation and interrelationships of the fuel, ignition, emission control, and exhaust systems. Emphasis on the diagnosis of engine performance and related emissions. This course – together with Automotive Technology 423 - supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A8 Technician Certification exam, or the BAR California A8 Equivalent exam. 0948.00

423 Engine Management Systems and Drivability (4) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Automotive Technology 422.
Computer control of the ignition, fuel, and emissions systems. Emphasis on diagnosis and correction of conditions affecting engine performance. This course – together with Automotive Technology 422 - supports the Student Learning Outcomes of the Automotive Technology program by preparing students to take the Automotive Service Excellence (ASE) A8 Technician Certification exam, or the BAR California A8 Equivalent exam. May be taken twice. 0948.00

427 Engine Operation and Service (5) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Automotive engine operation, service, and repair. Machine work and 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) A1 Technician Certification exam. May be taken twice. 0948.00

429 Automotive Electrical Systems (4) [Cx]
(Degree-applicable)
Hours: 40-45 lecture; 72-81 laboratory.
Grading: Letter grade only.
Operation and service of automotive electrical systems. Emphasis on reading wiring diagrams and using test equipment to diagnose and troubleshoot electrical/electronic systems. Prepares 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

430 Engine Rebuilding - Upper Engine (5)
(Degree-applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Provides the knowledge and skills needed by automotive machinists. Reconditioning of automotive gasoline and diesel engines, including inspection, measuring, and machining of valve train components and construction of cylinder head assemblies. May be taken four times. 0948.00

431 Engine Rebuilding - Lower Engine (5)
(Degree-applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Provides the knowledge and skills needed by automotive machinists. Reconditioning of automotive gasoline and diesel engines, including inspection, measuring, and machining of lower engine components and the reassembly of cylinder blocks. May be taken four times. 0948.00

432 Manual and Automatic Transmissions, Transaxles and Drive Trains (5) [Cx]
(replaces Automotive Technology 419 and 425)
(Degree Applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Automotive Technology 10 or 450, and Automotive Technology 15, 429 or 455.
Diagnosis, maintenance, repair and overhaul of automatic and manual transmissions, transaxles and drive trains, to include four-wheel and all-wheel drive systems. Special emphasis on the use of diagnostic equipment and methods for accurately determining transmission and transaxle conditions. Prepares students to take the Automotive Service Excellence (ASE) A2 and A3 Technician Certification exams. 0948.00

435 High Performance Engine Building and Blueprinting (5)
(Degree-applicable)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Advisory: Completion of Automotive Technology 430 and 431.
Students develop advanced skills in automotive machining operations, use of precision measuring tools, and high performance engine modification and assembly techniques. Upon completion of this course, students will be able to "blueprint" an engine to industry standards. May be taken four times. 0948.00

443 Clean Air Emission Control (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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).
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. 0948.00

450 General Automotive Technician A (12)
(Degree-applicable)
Hours: 144-162 lecture; 144-162 laboratory
Grading: Letter grade only.
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 Brakes; and Steering and Suspension – with more emphasis placed on development of marketable skills. May be taken twice. 0948.00

455 General Automotive Technician B (12)
(Degree-applicable)
Hours: 144-162 lecture; 144-162 laboratory
Grading: Letter grade only.
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

492A-H Special Topics: Automotive Technology (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

492LA-H Special Topics Laboratory: Automotive Technology (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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 (1, 2, 3, or 4)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Consent of the Automotive Technology program coordinator is required.
Corequisite: Concurrent enrollment in any Chaffey College Automotive Technology course.
Advisory: Completion of Automotive Technology 10.
Supervised internship in cooperation with automotive service and repair 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. Additional prerequisites and/or corequisites may be required. May be taken four times, for a maximum of six units credit. 0948.00

Aviation Maintenance Technology
(AMT and AERO)

12 Aviation Science, Materials, Processes, Inspections & Regulations (12)
(CSU)
Hours: 144-162 lecture; 144-162 laboratory.
Grading: Letter grade only.
Aerospace materials, hardware, manufacturing practices and safety, blueprint reading, inspection techniques, aircraft servicing, cleaning and corrosion control and FAA regulations as required for an FAA Airframe and/or Powerplant Technician's License. Includes aircraft mathematics, physics, aerodynamics and flight controls, weight and balance calculations and basic AC and DC electricity required for an FAA Airframe and/or Powerplant Technician's License. This course includes General Aeronautics laboratory hours to fulfill FAA practical aeronautical applications in aerodynamics, physics, weight and balance, FAA and manufacturers publications, aircraft materials and processes, blueprint reading, aircraft servicing, electricity and mathematics. May be taken twice. 0950.00

14A,B,C,D General Aeronautics Laboratory (1-1-1-1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Aviation Maintenance Technology 12 (may be taken previously).
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 three times. 0950.00

20 Powerplant Theory and Maintenance (4.5) [Cx]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Theory, fundamentals, construction, maintenance, 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]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
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]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
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 (1.5-1.5-1.5)
(CSU)
Hours: 72-81 laboratory.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 20, 21, or 22
(may be taken previously).
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 three times. 0950.20

24A,B,C,D,E,F Powerplant Aeronautics Laboratory (1-1-1-1-1-1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 20, 21, or 22
(may be taken previously).
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 three times. 0950.20

30 Airframe Structures (4.5) [Cx]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 33ABC or 34ABCDEF.
Aircraft metallic and nonmetallic structural fabrication, inspection, and repair methods. Related training for FAA airframe maintenance technician's license. 0950.10

31 Airframe Primary Systems (4.5) [Cx]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 33ABC or 34ABCDEF.
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]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 33ABC or 34ABCDEF.
Aircraft cabin atmosphere, instrument, communication, navigation, avionics, 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 (1.5-1.5-1.5)
(CSU)
Hours: 72-81 laboratory.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 30, 31, or 32
(may be taken previously).
Airframe laboratory course to fulfill FAA requirements for practical airframe experience. Subjects are metallic and nonmetallic structural fabrication, inspection, and repair; welding, rigging and assembly; and airworthiness inspection. May be taken three times. 0950.10

34A,B,C,D,E,F Airframe Laboratory (1-1-1-1-1-1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Aviation Maintenance Technology 12.
Corequisite: Aviation Maintenance Technology 30, 31, or 32
(may be taken previously).
Airframe laboratory course to fulfill FAA requirements for practical airframe experience. Subjects are aircraft electrical, hydraulic, pneumatic, instruments, landing gear, fuel, cabin atmosphere, ice and rain, fire protection, navigation, communication, and position and warning systems. May be taken three times. 0950.10

BIOLOGY (BIOL)

1 General Biology (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Introduction to the major themes and principles in biology through lecture, laboratory and field experiences. Students investigate topics ranging from molecules to the ecosystem. Meets general education requirements. 0401.00

2 Environmental Biology (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
An overview of ecosystem structure and function, with critical evaluation of human-caused ecological problems. Topics include overpopulation, resource depletion, pollution, climate change, habitat fragmentation, and loss of biodiversity. Course includes a weekend field trip. 0301.00

3 California Natural History (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
An ecological introduction to California's natural communities. Lecture topics include energetics, materials cycling, succession, and characteristics of natural communities. Laboratory stresses interrelationships among flora and fauna, geology, and climate, with emphasis on field recognition. Course includes an overnight field trip. 0408.00

10 Concepts in Biology (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Introduction to the major themes and principles of biology including energy flow and metabolism, structure/function relationships, inheritance patterns, ecology, evolution, and diversity of biological organisms. Students investigate these themes through topics at various levels of organization ranging from molecules to ecosystems. 0401.00

11 Evolution, Sex, and Behavior (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
The dynamics, organization, and evolutionary origins of animal social structures, including human societies. Emphasis on the selective pressures that shape animal behavior and the relationships of behavioral traits to the reproductive success of the organism. Includes discussion of various forms of competition, nepotism, and altruistic behavior in a wide variety of animal species, including humans. 0401.00

12 Introduction to Human Genetics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
General introduction to the fundamentals of human heredity. Topics include patterns of inheritance, DNA structure and function, the role of mutation in genetic diseases and cancer, the interaction between genes and the environment, and recent advances in biotechnology and its impact on society. 0401.00

14 Health Science (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

16 Bioethics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
A survey of ethical issues in biology. Students investigate dilemmas in biology and apply ethical reasoning to specific issues. Topics may include, but are not limited to, genetic manipulation in agriculture and medicine, human and animal experimentation, stem cell research, environmental conservation, and global warming. 0401.00

20 Human Anatomy (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 1 as determined by the Chaffey assessment process, or completion of Reading 550.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
A systematic study of the microscopic and macroscopic structures of the human body. Emphasis on cell structures, integumentary, skeletal, muscular, respiratory, cardiovascular, nervous, digestive, urinary, endocrine, and reproductive systems. Includes considerations of pathologies and disorders of these systems. 0410.00

22 Human Physiology (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Biology 20, and Chemistry 9 or 10 or 1 year of high school chemistry.
The dynamic nature of life processes in the human body, including the physiology of the cell and the functions and interrelations of the organ systems. Lab emphasizes experimentation and scientific reasoning. 0410.00

23 General Microbiology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Biology 22, or Biology 50 and Chemistry 9 or 10 or high school chemistry.
Introduction to microbiology, with strong emphasis on microorganisms pathogenic to humans. Topics include microbial morphology, genetics, taxonomy, metabolism, the infectious disease process, mechanisms of controlling microbes, and immunology. 0403.00

23L General Microbiology Laboratory (2)
(CSU; UC)
Hours: 96-108 laboratory.
Grading: Letter grade only.
Corequisite: Biology 23 (may be taken previously).
Introduction to microbiology laboratory techniques. Methods of culturing, staining, biochemically analyzing, and classifying microorganisms. 0403.00

30 Beginning Medical Terminology (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Applied medical etymology including the origin, correct spelling, pronunciation, meaning, and current usage of common medical terms, disorders, and medical treatments in the context of body systems. Application of relevant vocabulary to clinical records and reports, emphasizing roots, prefixes, infixes, suffixes, medical abbreviations, symbols, and terms common in patients' records and laboratory reports. 0401.00

61 Introduction to Cell and Molecular Biology (5)
(CSU; UC)
Hours: 64-72 lecture, 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 10 or 1 year of high school chemistry, and eligibility for Mathematics 25 or higher level math as determined by the Chaffey assessment process or completion of Mathematics 425.
Advisory: Completion of ENGL-1A.
An intensive course designed to prepare students for upper division courses in cell and molecular biology. Topics include biochemical, structural, metabolic, and genetic aspects of cells. Laboratory will include experimental design, a variety of techniques (e.g. microscopy, spectrophotometry, electrophoresis), and data analysis. 0401.00

62 Biology of Organisms (5)
(CSU; UC)
Hours: 48-54 lecture, 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Biology 50 or 61.
An introduction to the origin and evolution of life on earth, emphasizing systematics, anatomy, physiology, development and ecology. Lab includes an evolutionary survey of prokaryotes, protists, fungi, plants, and animals. 0401.00

63 Evolutionary Ecology (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Biology 50 or 61.
Introduction to the principles, theories and methods of evolutionary ecology, including evolutionary theory, speciation, physiological ecology, population dynamics, demographics and life history strategies, niche theory, community interactions and community structure, succession, biogeography, ecosystem ecology, biodiversity, and conservation biology. Course includes one or more overnight field trips.
0401.00

92A-H Special Topics: Biology (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Specializations in the biological sciences. Prerequisites and/or corequisites may be required for topics that call for specific knowledge or preparation. Topics vary; see class schedule for current term focus. 0401.00

92LA-H Special Topics Laboratory: Biology (.5-6)
(CSU; UC credit limitations)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Laboratory activities associated with specializations in the biological sciences. Prerequisites and/or corequisites may be required for topics that call for specific knowledge or preparation. Topics vary; see class schedule for current term focus.
0401.00

98A,B,C Independent Study: Biology (1, 2 or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Advisory: Students should have successfully completed a transfer-level biology course.
Course is designed for the capable biology student who wishes to explore and develop an independent project in the biological sciences. Individual inquiry, special techniques, and selected readings are expected. Student and instructor must reach agreement concerning the topic and scope of the project prior to student's registration. Course may be repeated, however project must differ with each enrollment. May be taken four times. 0401.00

424 Anatomy and Physiology (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Letter grade only.
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)
(Non-degree-applicable)
Hours: 16-18 lecture.
Grading: Pass/No Pass grade only.
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

Botany

(SEE BIOLOGY)

Broadcasting (BRDCAST)

3 Survey of Broadcasting and Electronic Media (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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.
0604.00

55 Broadcast Audio and Announcing (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
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) [Cx]
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Knowledge of Macintosh computer keyboarding is recommended.
Principles of single-camera high definition videography, television screenwriting, audio and video flash card recording, and computer editing. Operation and placement of video cameras, microphones and lighting equipment. Overview of crew positions and production protocols for Electronic Field Production (EFP), Electronic News Gathering (ENG), commercial, public service announcement, and dramatic stories. Development of the fundamental and comprehensive skills required to create standard and alternative programming for television broadcast. 0604.20

62 Multi-Camera Television Production (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Possession of basic computer skills.
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 production crew members and master control-room personnel to produce, direct, and edit multi-camera studio productions. May be taken four times.
0604.20

65 Radio Production (2)
(CSU)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Possession of basic computer skills.
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 Postproduction for Broadcasting and Cinema (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Students assemble and create a broadcasting and/or cinematic story. Broadcasting and cinema editing assignments may also include some of the following: commercial/psa, music video, documentary and dramatic student projects. Other post production topics include editing workflows, audio sweetening, title sequences, keying, color grading, picture lock and mastering processes. Students from the photography, graphic arts, digital media, music, and theatre disciplines are encouraged to enroll and contribute to individual productions. May be taken four times. 0604.20

92A-H Special Topics: Broadcasting (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Special interest lecture course for students who wish further exploration in the field of broadcasting. 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. 0604.00

92LA-H Special Topics Laboratory: Broadcasting (.5-6)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Special interest laboratory course for students who wish further exploration in the field of broadcasting. 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. 0604.00

98A,B,C Independent Study: Broadcasting (1, 2, or 3)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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)
(Degree-applicable)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Possession of basic computer skills is 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 BUSINESS: MANAGEMENT, BUSINESS: MARKETING, AND BUSINESS: PARALEGAL STUDIES)

10 Introduction to Business (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
The American business system within its economic and social environments. A conceptual approach relating business and its legal forms to society as a whole. Examination of the scope, function, and organization of modern business, including environmental considerations, management challenges, ethics issues, and the use of technology to manage information. Emphasis on business operations in today's global competitive business environment. 0501.00

28A Business Law I (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Fundamental legal principles pertaining to business transactions. Introduction to the legal process and dispute resolution. Coverage of federal and state court systems. Comprehensive study of contracts under the common law and the Uniform Commercial Code. Other topics include sources of law, business ethics, constitutional law, tort law, agency, business organizations, and criminal law as applied to business. 0505.00

28B Business Law II (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Business 28A.
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

49 Business Decisions Using Basic Quantitative Tools (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Business and management decision-making using basic quantitative tools. Managerial decisions in the areas of marketing, finance, accounting, real estate, insurance, transportation, and logistics. Examples include markups, markdowns, discounts, simple interest, depreciation, financial ratios, compound interest, investment decisions, inventory decisions, and payroll. Instruction in the use of the electronic business calculator is an integral part of the coursework. Students must supply their own business calculator. 0501.00

60 Business Ethics (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

410 International Business Law (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Accounting and Financial Services 465 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 The Law of Marketing and Business Competition (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 28A.
Introduction to legal principles relevant to the marketing of goods and services. Examination of the impact of the United States Constitution, antitrust, unfair competition, business torts, trademark, copyright, patents, consumer protection, and franchising laws on products, pricing, promotion, and distribution. 0509.00

492A-H Special Topics: Business (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Specializations in business. See class schedule for current topics. May be taken 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. 0501.00

496A,B,C,D Internships in Business (1, 2, 3, or 4)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
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: MANAGEMENT (BUSMGT)

(ALSO SEE BUSINESS, BUSINESS: MARKETING, AND BUSINESS: PARALEGAL STUDIES)

11 Retail Merchandising and Management (3)
(also available as Fashion Merchandising 11)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 0506.50

13 Supply Chain Management (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

14 Transportation Management (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

40 Introduction to Management (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
A survey of management concepts, basic functions, and skills as they apply at all levels within the contemporary work environment. Application of management theory to managerial practices to improve organizational effectiveness and efficiency, and enhance national and international competitiveness. 0506.00

42 Human Resource Management (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business: Management 40.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Assists the individual in the business organization in understanding group and individual dynamics, perception, conflict, motivation, leadership, influence, authority relationships, and causation of behavior. 0506.30

45 Small Business Ownership and Management (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Business concepts and skills tailored to creating and maintaining a sustainable competitive advantage in a small business. Fundamentals of owning and operating a small business including finance, employment law, and marketing strategies. 0506.40

430 Warehouse Management and Material Handling (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

436 Introduction to Logistics Management (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Fundamental concepts of logistics with an emphasis on outbound goods movement. Techniques of organizing, analyzing and controlling logistics systems. Topics include supply chain, packaging, customer service, transportation, warehouse and distribution center site selection, and procurement functions. 0510.00

440 Principles of Leadership (2) [Cx]
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
Leadership principles in business. Topics include differentiation between management and leadership; traits and characteristics of natural, charismatic, and situational leaders; styles and tactics used by effective leaders to enhance individual and team performance; problem-solving, coaching, and conflict-resolution skills; and leadership's effects on organizational communication. Students use industry tools to assess their own leadership style and capabilities. 0506.30

460 Quality Management Principles (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
For individuals who want to understand and improve existing processes. Implementation of continuous improvement and the understanding of various quality philosophies and tools. Basic principles, objectives, and policies of a Quality Management program. 0506.00

480 Principles of Supervision (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 60 or Business: Management 40 or 460.
Management functions and techniques of supervising and motivating personnel. Topics include employee and management relations, systematic approach to problem solving, supervisor as leader, decision making, strategic planning, employee counseling and discipline, organizing and authority delegation, supervising diversity, conflict management, supervision laws, and case studies in functional supervision. 0506.30

Business: Marketing (BUSMKT)

(ALSO SEE BUSINESS, BUSINESS: MANAGEMENT, AND BUSINESS: PARALEGAL STUDIES)

13 Professional Selling (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Concepts and techniques used to sell ideas, products and services, especially the psychological and social aspects of persuasion. Effective tactics in prospecting, preapproach 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. 0509.40

40 Marketing Principles (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 10.
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

55 Advertising (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

402 Introduction to Import/Export (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 61 or equivalent business experience.
Fundamentals of importing and exporting goods including essential terms, strategies, organizations, regulations, terms of access, documentation, shipment, and financing involved with the international movement of merchandise. 0508.00

405 International Marketing (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business 61 or equivalent business experience.
Theory and practices of international marketing to include market entry strategies, analysis of foreign markets, culture and marketing, product design, pricing, distribution, promotion and sales. 0508.00

Business: Paralegal Studies (BUSPL)

(ALSO SEE BUSINESS, BUSINESS: MANAGEMENT, AND BUSINESS: MARKETING)

400 Introduction to Paralegal Studies (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 assistantship, legal research and writing, computer use, and general law office administration. 1402.00

401 Legal Research and Writing (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business: Paralegal Studies 400, and Business and Office Technologies 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 memorandums of law; and legal citation rules. 1402.00

402 Civil Litigation (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Business: Paralegal Studies 400 and Business 28A.
Fundamental aspects of civil procedure, with emphasis on the roles of the paralegal in civil litigation. Topics include evidence gathering and investigation, jurisdiction, venue, initiation of civil proceedings, pleadings (including complaints and answers), filing a lawsuit, discovery procedures, trial preparation and trial assistance, post-trial practice, and alternative dispute resolution. 1402.00

403 Evidence (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business: Paralegal Studies 400.
Study of the California Evidence Code, 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 of proving character, modern competency rules, impeachment, testimony by lay and expert opinions, hearsay and hearsay exceptions, constitutional constraints on the admissibility of evidence, the impact of California's 1982 Proposition 8 (Victim's Bill of Rights), and privileges. 1402.00

404 Law Office Operations (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 60B 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)

40A Beginning Computer Keyboarding (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 business correspondence. May be taken twice. 0514.00

40B Computer Keyboarding: Speed and Accuracy Development (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A.
Develop computer literacy. Analyze, evaluate, and improve keyboarding speed and accuracy using correct touch-typing techniques and Windows applications. Intense review of letters, numbers, symbols, 10-key, and the production of basic reports, business letters, and memoranda. Proficiency certificate issued after successful completion of course. 0514.00

50 Filing and Records Management (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Instruction and simulated work applications using basic filing principles, procedures, and systems defined by ARMA International. Emphasis is placed on information storage of multiple record types and retrieval systems. Also discussed are management aspects of records retention, disposition, and the operation of a records management program. 0514.40

60A Microsoft Office Word - Specialist (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A.
This module prepares students to use the current word processing application of business software. Students develop job skills while building a foundation for other software applications. Students will be able to create, edit, format and customize, save, print, and retrieve documents. Course helps prepare students for certification testing. Computer assignments are a required part of this course. 0514.00

60B Microsoft Office Word - Expert (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A and 60A.
A hands-on approach to advanced features of Microsoft Word: macros, bookmarks, forms, table of contents, indexes, hyperlinks, tables and charts, sorts, tracking in shared documents, customized document formatting using advanced features, autotext and quick parts, templates, citations and bibliographies, and document protection. Computer lab assignments are a required part of this course. 0514.00

61 Microsoft Office PowerPoint (1.5)
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A and 60A.
A hands-on introduction to concepts, terminology, and features of a presentation software program to create electronic presentations for support personnel and business managers. Topics include formatting and animating slide texts, charts, tables, and graphics as utilized in business presentations and integration with other software programs. 0514.00

62 Microsoft Office Outlook (1.5) [Cx]
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A, or a minimum keyboarding speed of 20 words per minute.
Hands-on introduction to the Outlook functions within the Microsoft Office Suite. Topics include email, electronic calendars, multiple-user conference scheduling, integration of MS Office files including Internet, interface with other programs, and task work flow management. Computer lab assignments are a required part of this course. 0514.00

63 Microsoft Office Excel - Comprehensive (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A and 60A.
This module integrates the spreadsheet application (MS Excel) into the MS Office suite, and is a full-featured spreadsheet application software offering core and advanced concepts. Emphasis is 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 Microsoft Office Application Certification Testing. Computer lab assignments are a required part of this course. 0514.00

64A Microsoft Office Access - Specialist (1.5)
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 60A.
Hands-on introduction to the concepts and terminology used to create, use, and manage information contained in databases. Students design tables, queries, forms, and reports using the features of the current database software. Computer assignments are a required part of this course. 0514.00

64B Microsoft Office Access - Expert (1.5)
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 64A.
Mastery of core features and introduction of advanced features of the current Microsoft Office Access database software application for working with databases, tables, reports, forms, and queries. Integration of Access data objects with the other Microsoft Office software. 0514.00

88 Written Communication for Business (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Business and Office Technologies 455.
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. Stress on developing writing fluency and professional tone in handling routine business communications including letters, memoranda, business reports (both written and oral), and business e-mail as well as developing a personal resume. 0514.00

98A,B,C Independent Study: Business and Office Technologies (1, 2, 3)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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. 0514.00

400 Job Search and Interviewing Techniques (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 30.
Strategies to organize a job search, prepare a marketable resume and cover, create a career portfolio, respond to frequently asked interview questions, and practice successful interviewing techniques. 0514.00

410A Microsoft Office Publisher - Specialist (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 60A.
This hands-on module introduces concepts, terminology, software, hardware, and uses of desktop publishing for business. Emphasis on creating, editing, and printing text, tables, and graphics. 0614.50

410B Microsoft Office Publisher - Expert (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 410A.
This module continues the study of a full-featured desktop publishing software, offering core and advanced concepts. Emphasis is on creating style sheets and master pages, special effects, templates, scanned images, and formatting and managing long documents. 0614.50

452 Office Financial Recordkeeping (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Recordkeeping procedures used to broaden the skills of the office professional handling business financial records and other supporting documents relevant to the operation of a small business. Includes mastery of the business financial features of the 10-key display calculator with speed and proficiency. 0514.00

455 Fundamentals of English for Business (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study and review of grammar, punctuation, vocabulary, and sentence structure to prepare students for employment and college-level business writing courses. Overview of sentence structure, paragraphs, business vocabulary, and basic communication skills. Practice in applying basic principles of communication and critical-thinking skills leading to understanding of effective business communications. 0514.00

460 Proofreading: Text-Editing Skills (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of or concurrent enrollment in Business and Office Technologies 60A 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

462 Machine Transcription and Voice Recognition Software (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 40A or 40B, and completion of or concurrent enrollment in Business and Office Technologies 60A and 460.
Development of a marketable skill in machine transcription using word processing skills and voice recognition software. Emphasis on increasing transcription skills in punctuation, spelling, vocabulary, and production of mailable business correspondence and reports from dictated, realistic materials from various professions. 0514.00

465 Speedwriting and Notetaking (3)
(Formerly BUSOT-645A)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 29.
Theory and principles of speedwriting, an abbreviated writing system based on the letters of the alphabet. Vocabulary development and practice taking accurate notes at a rapid rate in offices and other professional settings. 0514.00

470 Office Systems and Procedures (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Business and Office Technologies 60A and 88.
Coordination and refinement of the duties and responsibilities of the office professional, including the organization of those duties, the personal qualifications of the office professional, and business office ethics and etiquette in a diverse and global business environment. Emphasis on work procedures, technology in the office, stress- and time-management techniques, team work, customer service, event planning, and business travel arrangements. 0514.00

471 Administrative Office Management (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 business. Principles of management that pertain to objectives of the organization, scope and assignment of responsibilities, unity of functions, use of specialization, delegation of authority and responsibility, unity of command, span of control, centralization or decentralization of managerial authority, staffing, and work ethics. 0514.40

475 Medical Office Procedures (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Special topic course in specific office technology areas. Topics identified 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. 0514.00

492LA-H Special Topics Laboratory: Business and Office Technologies (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit..
Grading: Letter grade only.
Special projects designed to allow capable, well-motivated students in the major to develop a project in, or make a report on, a facet of office technology. 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)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Consent of the Business and Office Technologies Program Coordinator is required.
Corequisite: Concurrent enrollment in any Business and Office Technologies course.
Advisory: Completion of Business and Office Technologies 470.
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 twelve units credit. 0514.00

CHEMISTRY (CHEM)

7 Chemistry in Everyday Life with Lab (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory
Grading: Letter grade only.
Advisory: Completion of Math 520, or eligibility for Math 410 as determined by the Chaffey assessment process, or one year of high school algebra.
General education science course designed for non-science major students who are seeking a lab science course. Introduction to chemistry providing a basic understanding of how scientific measurements are taken and presented, the scientific method, and how chemical principles are applied to everyday life and used to address scientific issues in society. Laboratory work provides hands-on activities to teach laboratory skills and support the concepts presented in the lecture. 1905.00

8 World of Chemistry (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Math 410 or one year of high school algebra.
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. 1905.00

9 Health Science Chemistry (5)
(CSU; UC credit limitations)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Eligibility for Mathematics 425 as determined by the Chaffey assessment process, or completion of Mathematics 410 or 401.
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. 1905.00

10 Introductory Chemistry (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 425 as determined by the Chaffey assessment process, or completion of Mathematics 410, or one year of high school algebra.
Introduction to the principles of chemistry with an emphasis on measurements, atomic and molecular structure, classification of matter, nomenclature, stoichiometry, chemical equations, solutions and acid-base chemistry. Laboratory activities emphasize proper techniques, safety procedures, and experimental exercises in support of lecture content. 1905.00

12 Elementary Organic and Biochemistry (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 9 or 10
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. 1905.00

24A General Chemistry I (5)
(replaces Chemistry 21, 21L1, and 21L2)
(CSU; UC pending)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 10 or completion of 1 year of high school chemistry, and eligibility for Mathematics 25 as determined by the Chaffey assessment process or completion of Mathematics 425.
Advisory: Completion of or concurrent enrollment in Mathematics 25.
First semester General Chemistry for Science and Engineering students. Topics include: atomic structure and periodic properties; types and structure of matter; thermochemistry; chemical reactions; stoichiometry; nomenclature; bonding models and theories; gas, liquid, solid, and solution properties. Laboratory with hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific methods of inquiry. 1905.00

24B General Chemistry II (5)
(replaces Chemistry 22, 22L1, and 22L2)
(CSU; UC pending)
Hours: 48-54 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 24A.
Advisory: Completion of or concurrent enrollment in Mathematics 25.
Second semester General Chemistry for Science and Engineering students. Topics include kinetics, equilibrium, acid/base/buffers, thermodynamics, electrochemistry, nuclear chemistry, descriptive chemistry, and organic chemistry. Laboratory provides hands-on activities to reinforce lecture concepts, develop chemical laboratory techniques, and use the scientific method of inquiry. 1905.00

70 Quantitative Analysis (4)
(CSU; UC)
Hours: 32-36 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 24B, or Chemistry 22 and 22L1, and 22L2.
Introduction to the methods of gravimetric, volumetric and spectrophotometric analysis and to separation techniques. Designed to meet the normal four-unit course requirement for chemistry majors, pre-med students, and pre-dentistry students. Parallels the quantitative analysis usually offered in the sophomore year in most four-year colleges and universities. 1905.00

75A Organic Chemistry (5)
(CSU; UC)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 24B, or Chemistry 22 and 22L1, and 22L2.
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.1905.00

75B Organic Chemistry (5)
(CSU; UC)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Chemistry 75A.
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. 1905.00

90A,B Chemistry Honors Seminar (1)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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. 1905.00

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 Intro to Principles & Practices in Early Childhood Education (3) [Cx]
(CSU)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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]
(CSU; UC credit limitations)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Examination of the developmental years from birth through adolescence. Social, emotional, intellectual, and physical growth are studied from relevant theoretical positions. 1305.00

3 Child Study and Observation (3)
(CSU)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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)
(CSU; UC)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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)
(CSU)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Cardio-Pulmonary Resuscitation (CPR) and first aid training is recommended. Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Basic information on the building of children's good health habits, stressing the importance of good nutrition in the preschool years. Safety information and training for early childhood teachers including first aid and recognition of symptoms of childhood communicable diseases. 1305.40

6 The Child in a Multicultural Society (3) [Cx]
(CSU)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Cultural differences and similarities - their impact on children and education. Application of techniques for creating and designing anti-bias classrooms for young children. 1305.00

7 Curriculum Development: The Creative Arts (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Introduction to the creative arts for young children. Storytelling, language, visual arts, drama, music, and dance are examined as an integral part of the child's world. Theories and techniques to develop children's creative abilities are explored. Emphasis on creative processes through appreciation of diversity in art and culture. Perspectives on values and problem solving that engage children's participation at all levels. 1305.00

8 Curriculum Development: Math and Sciences (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Introduction to how children learn and develop concepts of math and science. Examination of young children's problem-solving abilities in regard to math and the sciences. Examination of theories that reinforce activities designed to practice skills in math and science domains. Introduction of learning strategies and styles are also explored. 1305.00

23 Introduction to Children with Special Needs (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Child Development and Education 2.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Presentation of different types of physical and behavioral difficulties that interfere with normal cognitive, social, and emotional growth. Recognition of these difficulties, where to seek appropriate professional help, and how to work with children with special needs in the home and in the school. 1305.20

24 Curriculum Theory I: Principles and Practices (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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.
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 Supervised Occupational Work Experience Practicum I (1)
(CSU)
Hours: 60 hours supervised practicum in various community child development programs.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Corequisite: Child Development and Education 24.
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)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Prerequisite: Child Development and Education 24 and 24W.
Corequisite: Child Development and Education 25W.
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 Supervised Occupational Work Experience Practicum II (1)
(CSU)
Hours: 60 hours supervised practicum in various community child development programs.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required.
Corequisite: Child Development and Education 25.
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)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Corequisite: Child Development and Education 25 and 25W.
Discussion and evaluation of professional issues as applied to a variety of child development professions. 1305.80

50 Administration of Child Development Programs (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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. Particular 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

92A-H Special Topics: Child Development and Education (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

92LA-H Special Topics Laboratory: Child Development and Education (.5-6)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Analysis of the ways that play affects the social, emotional, and physical development of young children. 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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Child Development and Education 2. Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Introduction to a child's brain physiology and functioning. Current brain research and its relevance to educational practices and the guidance of young 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 for the developing child. Implications of brain research on communicating and interacting with young children in ways that elicit positive behaviors. 1305.00

430A Infant and Toddler: Group Caregiving I (3)
(Degree-applicable)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Completion of Child Development and Education 2. Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Infant and toddler (birth through three years of age) development, as reflected in theory and research findings, including socialization, emotional development and temperament. Appropriate health, safety, and nutritional practices for environments; routines; and culturally sensitive care for infants and toddlers are also covered. 1305.90

430B Infant and Toddler: Group Caregiving II (3)
(Degree-applicable)
Hours: 48-54 lecture
Grading: Letter grade only.
Prerequisite: Child Development and Education 430A.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Further study of 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 Administration of Child Development Programs: Policy and Procedure (3)
(Degree-applicable)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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 of Child Development Programs: Personnel Supervision (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
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

CHINESE (CHIN)

1 Elementary Mandarin Chinese (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
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. Ten hours of supplemental learning 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)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Chinese 1 or one year of high school Chinese.
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 conversation, 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. Ten hours of supplemental learning in a Success Center that supports this course is required. This course corresponds to the second year of high school Chinese. 1107.00

3 Intermediate Mandarin Chinese I (4)
(CSU; UC pending)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Chinese 2 or two years of high school Chinese.
Third semester 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 development of conversation, reading, and writing skills. Development of idioms and more advanced grammar. Emphasis on the communicative approach to language acquisition with special attention to the appreciation of the Chinese culture. Ten hours of supplemental learning in a Success Center that supports this course is required. 1107.00

4 Intermediate Mandarin Chinese II (4)
(CSU; UC pending)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Chinese 3.
Fourth semester 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 development of conversation, reading, and writing skills. Development of idioms and more advanced grammar. Emphasis on the communicative approach to language acquisition with special attention to the appreciation of the Chinese culture. Ten hours of supplemental learning in a Success Center that supports this course is required. 1107.00

CINEMA (CINEMA)

20 Scriptwriting (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 0601.00

25 Survey of World Cinema (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
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 directorial decisions involved to complete various types of cinematic productions. Students produce and edit projects. 0612.20

80 Producing for Broadcast and Cinema (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: A minimum of 3 units in broadcasting or cinema coursework, or consent of the instructor.
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 (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

92LA-H Special Topics Laboratory: Cinema (.5-6)
(CSU; UC credit limitations)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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)
(CSU)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
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.
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

98A,B,C Independent Study: Cinema (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Emphasis on preparing and delivering various types of speeches 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. May be offered as an Honors course. 1506.00

4 Fundamentals of Interpersonal Communication (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Develop competence and confidence as a group member and leader through a combination of theoretical and practical application of small group principles 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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
A critical examination of the form, content, and influence of the processes of mass communication. Historical overview and examination of mass-mediated reality using theories of 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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Theoretical and practical experience in the oral interpretation of prose, poetry, and dramatic literature. In-depth study of the oral and analytical skills required to perform literature and 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

72 Logic and Argumentation (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
The study of argumentation within an oral debate setting. Treatment 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 debates, extensive writing requirements including advocacy papers, and analysis of refutations of arguments. 1506.00

74 Intercultural Communication (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Identification and analysis of processes and problems of communication between people of different cultures. Effects of differences in attitudes, social organization, role expectations, language and nonverbal behavior and their interrelationships. Principles of communication theory as applied to an intercultural setting. May be offered as an Honors course. 1506.00

76 Gender and Communication (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Communication Studies 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.
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

78 Family Communication (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Introduction to communication in the family setting. Analysis of how communication-related behavior affects the development, maintenance, enhancement, and deterioration of family relationships. Through group and class discussion, students develop insights about speech variables and communication processes which affect familial interaction. 1506.00

90A Communications Honors Seminar (1)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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

Computer Information Systems: Core (CIS)

1 Introduction to Computer Information Systems (3) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Principles and applications of computers, including their role in business and society. Designed to provide computer competency for both Computer Information Systems majors and non-majors. Fundamentals of hardware, operating systems, application software, storage, networking, communications, and the Internet. May be offered as a Honors course. 0702.00

4 Fundamentals of Microsoft Windows (1.5) [Cx]
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Introduction to the terminology, application, and use of the graphical operating system. Topics include installation and setup, file management, security, networking, Internet access and communication, hardware and software maintenance, administrative tools, and others. May be taken four times. 0702.00

15 Microsoft Access Database Design and Development (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 1.
Microsoft Access database design and development for database administrators responsible for company-wide database access and control. May be taken four times. 0707.20

50 Introduction to Computer Networks (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 1.
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

68 Using the Internet (1.5) [Cx]
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Introduction to and use of the Internet. Topics include access, hardware, software, protocols, security, communication, file transfer, search tools, e-commerce, and other current Internet and Web technologies. 0709.00

92A-H Special Topics: Computer Information Systems (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature and prior Computer Information Systems coursework is required for registration.
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)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of 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. 0702.10

435 Fundamentals of Microsoft Visio (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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

492A-H Special Topics: Computer Information Systems (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
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)
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems 1 or equivalent experience.
First in a four-course sequence that qualifies students to take the Cisco Certified Entry Networking Technician (CCENT) and the more advanced Cisco Certified Network Associate (CCNA) examinations. Topics include: PC hardware/software review, Local Area and Wide Area Networks (LAN's and WAN's), network devices, the Open System Interconnect (OSI) model, media, cable installation, network design, routing, switching, addressing, security, documentation, and basic wireless. May be taken three times. 0708.00

2 Cisco Internetworking II (4)
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 1 or equivalent experience.
Second in a four-course sequence that qualifies students to take the Cisco CCENT and CCNA examinations. Topics include: implementing basic LAN and WAN connectivity using routers and switches, TCP/IP addressing, network protocols, and troubleshooting. Students gain hands-on skills through configuring Cisco devices and managing the software. Comprehensive review of all topics covered in Cisco I and II in preparation for the CCENT certification exam. May be taken three times. 0708.00

3 Cisco Internetworking III (4)
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 2 or equivalent experience.
Third in a four-course sequence that qualifies students to take the Cisco CCNA examination. Topics include: switching basics and intermediate routing; command line interface and configuration of routers and switches for wired and wireless networks; 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; and network security issues, troubleshooting, and management. May be taken three times. 0708.00

4 Cisco Internetworking IV (4)
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 3 or equivalent experience.
Final course in a four-course sequence that qualifies students to take the Cisco CCNA examination. Topics include: network design and security policies; more advanced LAN/WAN technologies; terminology and IP addressing techniques; IPv6, NAT, PAT and DHCP; Frame relay, Cable, DSL, PPP, VPN, VOIP, and Wireless. Comprehensive review of all topics covered in Cisco I, II, III, and IV courses in preparation for the CCNA certification exam. May be taken three times. 0708.00

415 Cisco Internetworking V (4)
(Degree-applicable)
Hours: 64-72 lecture
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.
CCNP ROUTE, Implementing Cisco IP Routing. Topics include overview of converged and scalable routed internetworks. Advanced routing principles and protocols, EIGRP, OSPF in multiple areas, IS-IS, and BGP for enterprise ISP connectivity. Route optimization and routing features, manipulating routing updates; redistribution, filtering, and multicasting. Advanced IP address management: IPv4 and IPv6. Qualifies students to take the Cisco Level 5 examination, including the new CCNP Route Exam (642-902). May be taken three times. 0708.00

416 Cisco Internetworking VI (4)
(Degree-applicable)
Hours: 64-72 lecture
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.
Implementing Secure Converged Wide-Area Networks (ISCW). Topics include secure teleworker access and configuration; data over cable; DSL; Frame-mode MPLS; site-site IPSec VPN; GRE tunneling; Cisco EZVPN; authentication, authorization, accounting (AAA), device hardening; IOS firewall and threat defense features; intrusion detection systems (IDA); and intrusion prevention systems (IPS). Qualifies students to take the Cisco Level 6 examination. May be taken three times. 0708.00

417 Cisco Internetworking VII (4)
(Degree-applicable)
Hours: 64-72 lecture
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.
CCNP SWITCH, Implementing Cisco Switched Networks. Topics include use of routing and switching technologies together, virtual LANs (VLANs), inter VLAN routing, virtual transport protocol (VTP), spanning tree protocol (STP), and redundancy technologies such as HSRP and VRRP. Access control and security issues, port security, root guard, mac flooding, rogue devices, and spoofing. Implement support for wireless and voice over IP (VOIP). Qualifies students to take the Cisco Level 7 examination, including the new CCNP Switch Exam (642-813). May be taken three times. 0708.00

418 Cisco Internetworking VIII (4)
(Degree-applicable)
Hours: 64-72 lecture
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 4 or current CCNA certification or equivalent experience.
Optimizing Converged Networks (ONT). Topics include optimizing quality of service (QoS), converged networks supporting voice over IP (VOIP), wireless and security applications, voice network implementation, Network Based Applicable Recognition (NBAR), traffic classification, marking, congestion management, link efficiency mechanisms, policing, shaping, and AutoQos. Implement, configure, and manage a Wireless (WLAN) network, security, encryption, authentication, QoS, and management. Qualifies students to take the Cisco Level 8 examination. May be taken three times. 0708.00

419 Cisco Internetworking IX (4)
(Degree-applicable)
Hours: 64-72 lecture
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of Computer Information Systems: Cisco Internetworking 415 and 417, or equivalent experience.
Monitoring and maintain complex, enterprise routed and switched IP networks. Skills include planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices, following systematic and industry recognized approaches. Labs emphasize hands-on learning and practice to reinforce troubleshooting techniques. Prepares student for the externally administered Cisco CCNP TSHOOT 642-832 exam. May be taken three times. 0708.10

492A-H Special Topics: CIS Cisco Internetworking (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

Computer Information Systems: Game Development (CISGAME)

401 Fundamentals of Game Development (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

403 Fundamentals of Game Programming (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of 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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 0707.10

Computer Information Systems: Hardware and Support (CISHDSP)

401 Microcomputer Hardware (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 1.
Provides current and relevant computer technical skills required for entry level PC Technician positions and/or preparation for computer industry certification. Topics include basic analysis of microcomputers and related equipment including computer hardware installations, configuring (upgrading) computers, troubleshooting techniques and the interaction between computer hardware and software. 0708.20

405 A+ Certification Preparation (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Hardware and Support 401.
A practical course designed to prepare students for the A+ Certification exams. Subject matter includes computer hardware installation, configuration, diagnosing issues, operating system basics, safety, customer relations, security and basic networking. The A+ Certification exams are administered by independent testing organizations. 0708.20

492A-H Special Topics: CIS Hardware and Support (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

Computer Information Systems: Internet and Web Development (CISIWEB)

70 Creating Web Pages with HTML (1.5) [Cx]
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems 68.
Creation of HTML (Hypertext Markup Language) pages for the Web, including integration of links, formatting, graphics and multimedia, and tables. Introduction to the concepts, foundations, syntax, and structure of HTML and XHTML (extensible Hypertext Markup Language). May be taken four times. 0707.10

92A-H Special Topics: CIS Internet and Web Development (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 0707.10

410 WebMaster Tools (1.5) [Cx]
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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/XHTML programming, JavaScript, Dynamic HTML, XML, Web Publishing, and the use of Cascading Style Sheets (CSS) for formatting. May be taken three times. 0709.00

412 Web Development: Microsoft FrontPage/Expression (3.0) [Cx]
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Use of the Web development, editing, and management software to create standards-based Web sites. Topics include text, links, graphics, Cascading Style Sheets (CSS), site navigation, tables, forms, behaviors, site reports, Dynamic Web Templates, and others. May be taken four times. 0702.10

414 Creating Dynamic Web Content using Javascript/AJAX (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems: Internet and Web Development 70.
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 online dynamic content and client-side Web applications using Asynchronous Java and XML (AJAX). 0707.10

420A Web Development: Flash (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

436 Web Development: PHP/MySQL (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Building Web-based applications using PHP in conjunction with MySQL to create database-driven Web sites. Topics include an introduction to PHP and syntax, configuring a Web server for use with PHP, programming in PHP using basic scripting, data types, looping, conditional constructs, functions, operators, lists and arrays, databases and data files, e-mail, forms, and cookies. May be taken three times. 0709.00

438 Web Development: Ruby on Rails (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems: Internet and Web Development 70.
Development and implementation of Web sites using MySQL database technology and Ruby on Rails, an open source web application framework for the Ruby programming language. Topics include Ruby basics and installation, Ruby syntax and application development, the Model-View Controller (MVC), creating dynamic Web pages with Rails, simple model validation, data validation, storage, retrieval, and application prototyping. 0709.00

492A-H Special Topics: CIS Internet and Web Development (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 0709.00

Computer Information Systems: Networking (CISNTWK)

11 Microsoft Network Server (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 50.
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. 0708.10

92A-H Special Topics: CIS Networking (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

413 TCP/IP (1.5)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 50.
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. 0708.10

440 Introduction to Network Security Administration (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 50.
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 examination. May be taken three times. 0708.10

492A-H Special Topics: CIS Networking (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

Computer Information Systems: Programming (CISPROG)

1 Introduction to Computer Programming (3) [Cx]
(CSU; UC)
Hours:48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 1.
Introduction to the principles of computer programming. Topics include the program development life cycle, control structures, syntax and object-oriented programming development. A popular programming language will be used. 0707.10

3 Fundamentals of Visual Basic Programming (3)
(CSU; UC)
Hours:48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems 1.
Beginning Visual Basic programming for business applications. Emphasis on problem analysis, solution planning, and object oriented programming solutions. May be taken three times. 0707.10

92A-H Special Topics: CIS Programming (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 0707.10

403 Advanced Visual Basic Programming (3)
(Degree-applicable)
Hours:48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Information Systems: Programming 3.
Advanced Visual Basic programming for business applications. Emphasis on report generation, database interface, and project design. May be taken three times. 0707.10

492A-H Special Topics: CIS Programming (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 0707.10

Computer Science (CS)

1 Fundamentals of Computer Science (3) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 61.
Survey of the computer science field. Familiarizes science, computer science, and engineering students with elementary computer science concepts and methods. Topics include: hardware, software, computer architecture, memory and registers, input-output data operations, storage, information control, problem solving, and Object Oriented Programming (OOP). 0706.00

21 Fundamentals of C++ Programming (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Computer Science 1 or Computer Information Systems: Programming 1.
Introduction to the concepts, terminology, syntax, and uses of the C++ programming language. May be taken three times. 0707.10

492A-H Special Topics: Computer Science (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Specializations in computer science. See class schedule for current topic. 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. 0706.00

Consumer Studies (CONSUM)

(SEE ALSO NUTRITION AND FOOD)

11 Housing and Environment (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

92A-H Special Topics: Consumer Studies (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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

Cooperative Education (COOPED)

(WORK EXPERIENCE COURSES MAY ALSO BE FOUND WITHIN SOME DISCIPLINES.)

96A,B,C,D Cooperative Education: Career Field Studies (1, 2, 3, or 4)
(CSU credit limitations)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
Corequisite: Employment directly related to major and enrollment in at least seven units including Cooperative Education.
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)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: 2.0 GPA and instructor signature is required for registration.
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)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Student must be employed or participating in an internship.
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 repeated any number of times and in any unit combination not exceeding six units per semester and sixteen units total for all types of work experience. 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 Corrections (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Philosophical and practical overview of the history, evolution and current practices of the field of corrections, including extensive examination of the roles and responsibilities of the three prongs of the United States criminal justice system. Critical analysis of five correctional philosophies and their impact on correctional systems, processes, case law and client's rights. Includes a critical examination of the types of correctional institutions and community-based programs, and an examination of contemporary correctional issues. Exploration of the diverse career opportunities available at the city, county, state, and federal levels. (C-ID AJ 200) 2105.10

2 Control and Supervision of Inmates (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Correctional Science 1.
Inmate supervision in correctional institutions, including security procedures, contraband control, treatment programs, and prison dynamics. Prison staff responsibilities and the effect of their application on inmate culture and institution characteristics. Current and historical methods of controlling inmates. 2105.10

3 Correctional Law (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Correctional Science 1.
Legal aspects of corrections from conviction/commitment to release. Discussion of laws addressing processes of the correctional system and facilities, including county jails, juvenile halls, state prisons, probation, parole, executions, clemency, commutations, and terms of imprisonment. Policy, procedure, and regulations governing escapes, treatment, and prison records. Survey of correctional programs at the various levels of government from a legal perspective. Legal and due process rights of offenders. The balance of protecting the rights of offenders individuals versus the need to protect society. 2105.10

4 Public Relations and Corrections (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Correctional Science 1.
An analysis of the causation theories attributed to crime, delinquency and deviance, and the implications for the offender, the victim and the justice system. An examination of the history and progression of our country's attempts to control its crime problem. Classification of crimes, criminals and statutory laws are explored.
2105.10

6 Correctional Interviewing and Counseling (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Powerful and appropriate interviewing and counseling techniques for use with correctional clients, who may include perpetrators, victims, family members, and witnesses. Strategies for dealing with sidetracking, aversion, and defensive responses. Effective use of encouragement, silence, redirection, non-verbal communication, and rapport in interviews. Intervention, counseling, and appropriate referrals in crisis situations. Ethics, boundary, and confidentiality issues encountered by counselors and caseworkers.
2105.10

7 Probation and Parole (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Correctional Science 1.
Overview of the history and philosophical foundations of probation and parole in the United States. Organization and operations of probation and parole agencies as particular segments of the criminal justice system. Probation as part of the judicial process, and parole as part of the corrections system. Theoretical concerns exemplified in probation and parole supervision, as well as the practical aspects of probation and parole services. Review and evaluation of community-based corrections and the programs included in response to criminal behavior. Issues and problems relating to the pre-sentence investigation report, determinate versus indeterminate sentencing, the vast and diverse roles of the probation officer and parole agent, and case law decisions affecting probation and parole practice.
2105.20

8 Ethnic Group Relations (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of minority roles, problems, and relationships within the criminal justice system. Explanation of the impact and effect of stereotypes and prejudice within the system and how it affects its decision-makers. Examination of our society's stratification and perspectives based on race, ethnicity, class, and gender as they relate to crime and justice in America. Identification of cultural traditions that may affect the rehabilitation process of the correctional client.
2105.10

10 Violence in America (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
An exploration of victimization theories, classification of violent crimes, and perpetrator identification. Crime and its impact on victims and society as a whole. Primary, secondary and tertiary victimization, intimate violence, workplace violence, school violence and terrorism are explored.
2105.10

409 Women and the Criminal Justice System (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
A historical study of women involved in the criminal justice system as victims, offenders, and criminal justice professionals. Causative factors for women's increased propensity for crime are reviewed, as well as the female professionals' rise to prominence and effectiveness in a male-dominated career.
2105.10

410 Street Gangs and Subcultures (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Impact of juvenile delinquency on offenders, family, community and society. Responsibilities of the various components of the juvenile justice system involved in arrest, investigation, reporting, court procedures, probation, detention, and residential treatment of juvenile offenders. Programs and policies of the Juvenile Justice Division of the California Department of Corrections and Rehabilitation.
2105.10

450 Correctional Report Writing (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Essential elements of report writing. Emphasis on correct sentence structure, grammar, technical writing style, and accuracy in reporting the facts relating to a crime, behavioral incident, institutional board report, annual review, discharge, pre-sentence investigation, violation of conditions, and case summary review. Actual reports are examined and analyzed to help demonstrate relevance and purpose of this correctional process.
2105.10

501 Preparation for Correctional Peace Officer Examination Process (2)
(Non-degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Student must be 18 years of age or older.
Course is designed to provide a competitive edge to students planning to enter the field of corrections as a probation officer, counselor, custody assistant, corrections officer, or parole agent. Topics include job search strategies, application processing, testing techniques, background checks, and effective interview tactics.
2105.10

DANCE (DANCE)

1 Survey of Dance (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A and Reading 1 as determined by the Chaffey assessment process, or completion of English 450 and Reading 550.
A conceptual and historical study of dance from antiquity to the present, emphasizing the cultural and historical development of dance as a theatrical and social form. This non-studio course includes lectures, readings, and films.
1008.00

2 Theatrical Dance (3)
(Also available as Theatre 2)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study of physical movement as it relates to the body on the stage, including movements commonly used in musical theatre, jazz, and modern dance techniques. This course is for the theatre and/or dance major, or any performer or student interested in developing awareness and understanding importance of control, coordination, balance, strength, and conscious development of movement habits.
1008.00

4A Ballet IA (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Advisory: Completion of Dance 4A.
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)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Advisory: Completion of Dance 4B.
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)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Advisory: Completion of Dance 6A.
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 IA (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Introduction of basic jazz dance skills and vocabulary emphasizing technique and style through warm-ups; center-floor strength, flexibility, body control techniques; and travelling techniques progressing to choreographed combinations. May be taken twice. 1008.00

10B Jazz Dance IB (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 10A.
Further development of jazz dance skills and vocabulary at the advanced beginning level emphasizing technique and style, and adding more complexity to warm-ups; center-floor strength, flexibility, body control techniques; travelling techniques; and choreographed combinations. May be taken twice. 1008.00

20A Modern Dance IA (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Introduction of basic modern dance skills and vocabulary emphasizing technique and creativity, and drawing upon classical, post-modern, and contemporary styles. Application of skills through warm-ups; center-floor strength, flexibility, body control techniques; and travelling techniques progressing to choreographed combinations. May be taken twice. 1008.00

20B Modern Dance IB (1)
(CSU; UC)
Hours: 32-36 studio.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 20A.
Further development of modern dance skills and vocabulary at the intermediate level emphasizing technique and creativity, and drawing upon classical, post-modern, and contemporary styles. Continued application of skills through more complex warm-ups; center-floor strength, flexibility, body control techniques; travelling techniques and choreographed combinations. May be taken twice. 1008.00

30A Tap Dance IA (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Introduction of basic tap dance skills and vocabulary, emphasizing technique, styles, and rhythms through warm-ups, travelling techniques, and choreographed combinations. May be taken twice. 1008.00

30B Tap Dance IB (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 30A.
Further development of tap dance skills and vocabulary at the advanced beginning level, emphasizing technique, styles, and rhythms adding more complexity to warm-ups, travelling techniques, and choreographed combinations. May be taken twice. 1008.00

42 Dance Production (3)
(CSU; UC)
Hours: 144-162 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Audition to determine technical proficiency in various dance styles, or obtain consent of instructor.
Course provides theatrical dance experience in a fully produced dance concert production. Students gain knowledge of all aspects of the choreographic and rehearsal process culminating in dance performance of faculty and advanced student dance works. May be taken four times. 1008.00

50A Jazz Dance IIA (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 10B.
Further development of jazz dance skills and vocabulary at the intermediate level, emphasizing technique and style. Increasing technical and artistic range through more complex warm-ups; center-floor strength, flexibility, and body techniques; travelling techniques; and choreographed combinations. May be taken twice. 1008.00

50B Jazz Dance IIB (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 50A.
Further development of jazz dance skills and vocabulary at the advanced level, emphasizing technique and style. Increasing technical and artistic range through more complex warm-ups; center-floor strength, flexibility, and body techniques; travelling techniques; and choreographed combinations. May be taken twice. 1008.00

60A Tap Dance IIA (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 30B.
Further development of tap dance skills and vocabulary at the intermediate level, emphasizing technique, styles, and rhythms. Increasing technical and artistic range through more complex warm-ups, travelling techniques, and choreographed combinations. May be taken twice. 1008.00

60B Tap Dance IIB (1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Limitation on Enrollment: Level placement pending instructor approval.
Advisory: Completion of Dance 60A.
Further development of tap dance skills and vocabulary at the advanced level emphasizing technique, styles, and rhythms. Increasing technical and artistic range through more complex warm-ups, travelling techniques, and choreographed combinations. 1008.00

400 Hip Hop Dance (1)
(Degree-applicable)
Hours: 32-36 studio.
Grading: Letter grade only.
Basic techniques and styles of Hip Hop dance – both historical and current - emphasizing musicality, rhythms, basic and complex movements required to develop performance and choreographic skills. Critical viewing and analysis of Hip Hop dance choreography. May be taken twice. 1008.00

420 Social Dance (1)
(Degree-applicable)
Hours: 32-36 scheduled-hours studio.
Grading: Letter grade only.
Basic technique and styles of American and Latin ballroom dance including salsa, tango, rumba, merengue, cha-cha, swing, waltz, and foxtrot with emphasis on partnering techniques, footwork, rhythms and musicality, and performance presentation. May be taken four times. 1008.00

Dental Assisting (DENTAL)

Student must furnish their own uniform and pay for a physical examination.

400 Dental Assisting Core Sciences (6) [Cx]
(Degree-applicable)
Hours: 64-72 lecture; 96-108 laboratory
Grading: Letter grade only.
Core competencies and foundational skills. Topics include an overview of applicable biomedical terms and functions, dental anatomy, infection prevention and control, medical and dental emergencies, ethics and professionalism, patient interaction, dental charting, community health and diversity, and basic laboratory skills. 1240.10

410 Dental Assisting Preclinical Sciences (6) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 144-162 laboratory.
Grading: Letter grade only.
Prerequisite: Dental Assisting 400.
Study and application of dental processes, performed in a preclinical site. Students engage in an in-depth study of dental materials, instrumentation, procedures, protocols, and familiar with the various dental specialties. 1240.10

420 Radiography for Dental Assistants (6) [Cx]
(Degree-applicable)
Hours: 48-54 lecture; 144-162 laboratory.
Grading: Letter grade only.
Prerequisite: Dental Assisting 400.
In-depth study of dental radiography. Topics include evolution of standard and digital radiography; basic principles, characteristics and terminology; oral physics and biological effects; sterilization and infection control; film types and exposures; safety procedures in the use and maintenance of equipment; placement and processing techniques; film mounting; error identification and correction; and the use of radiographs in diagnoses and treatment planning. Evaluation and documenting of pathological intraoral findings during mouth inspections are also covered. Students master skills in pre-clinical and clinical assignments. 1240.10

430 Clinical Practice (6) [Cx]
(Degree-applicable)
Hours: 288-324 laboratory.
Grading: Letter grade only.
Prerequisite: Dental Assisting 410.
Advisory: Completion of Dental Assisting 420.
Students are assigned to extramural (off-site) clinical facilities, which include general and specialty dental practices. Experiential objectives are the application of four-handed dentistry concepts, auxiliary utilization, direct patient care, and dental office procedures. Student participation in community and professional development activities that occur within the term is a required part of the course. May be taken twice. 1240.10

496A,B,C,D Occupational Work Experience: Dental Assisting (1, 2, 3, or 4)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
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

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 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-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.

505 Assessment of Learning Abilities and Limitations (.5)
(Non-degree-applicable)
Hours: 24-27 self-paced, open-entry/exit laboratory.
Grading: Pass/No Pass grade only.
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

522A, B Basic Skills for Job Readiness (1, 2)
(Non-degree-applicable)
Hours: 48-54 hours/term self-paced laboratory for each unit of credit.
Grading: Pass/No Pass grade only.
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)
(Non-degree-applicable)
Hours: 48-54 self-paced laboratory.
Grading: Pass/No Pass grade only.
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

575 Problem Solving for Job Readiness (1)
(Non-degree-applicable)
Hours: 48-54 self-paced laboratory.
Grading: Pass/No Pass grade only.
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

651 Job Placement Practicum for Students with Disabilities (0)
(Non-credit)
Hours: Variable arranged
Grading: Not graded.
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, supported employment, and/or job placement and follow-up services are provided as a practicum for applying learned skills in a real work environment. May be repeated. 4930.31

657 Vocational Skills for Students with Disabilities (0)
(Non-credit)
Hours: Variable arranged
Grading: Not graded.
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 academics (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

DRAFTING (DRAFT)

20 Computer-Aided Drafting and Design (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Computer Information Systems 4 or Windows experience.
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. 0953.00

21 Mechanical Design I (3) [Cx]
(CSU)
Hours: 16-18 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 20 or one year of high school drafting using AutoCAD.
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. 0953.40

41 Computer-Aided Drafting and Design: Mechanical (4)
(CSU)
Hours: 32-36 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 20.
Advanced drawing 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. 0953.40

43 Three-Dimensional Computer Modeling and Solids Modeling (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 20.
Advanced concepts and development of three-dimensional visualization skills. Drawing techniques for solid modeling and solid assembly modeling, using a CAD solid modeling program. Technique for changing a three-dimensional solid model drawing into an industrial standard orthographic projection drawing. May be taken three times. 0953.00

50 Architectural Design I (3) [Cx]
(CSU)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Drafting 20 or one year of high school drafting.
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. 0953.10

51 Architectural Design II (3) [Cx]
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 50.
Design issues associated with more complex buildings and settings, including the impact of zoning, local codes, and challenging sites. 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. 0953.10

53 Architectural Applications of CAD (4)
(CSU)
Hours: 32-36 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 20 and 51.
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. 0953.10

78 Advanced Design Applications (4) [Cx]
(CSU)
Hours: 32-36 lecture; 96-108 laboratory.
Grading: Letter grade only.
Prerequisite: Drafting 22, or Engineering Technology 10, or four years of high school drafting.
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. 0953.00

92A-H Special Topics: Drafting (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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 four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 0953.00

92LA-H Special Topics Laboratory: Drafting (.5-6)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Selected laboratory 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 four times regardless of the unit combination. However, no single-subject, special-interest class may be repeated. 0953.00

98A,B,C Independent Study: Drafting (1, 2, 3)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a 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. 0953.00

452 Light Commercial Construction Design (3)
(Degree-applicable)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. 0953.10

DRAMA

(SEE THEATRE ARTS)

EARTH SCIENCE (ESC)

(SEE ALSO GEOLOGY)

1 Earth Science (3)
(CSU; UC)
Hours:48-54 lecture.
Grading: Letter grade only.
Geology, oceanography, meteorology, and planetology aspects of the physical environment; designed for general education and earth science majors.
(C-ID GEOL 120) 1930.00

1L Earth Science Laboratory (1)
(CSU; UC)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Earth Science 1 (may be taken previously).
Use of scientific tools and methods to image, measure and observe phenomenon in geology, oceanography, astronomy and meteorology. (C-ID GEOL 120L) 1930.00

5 Oceanography (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Earth Science 5 (may be taken previously).
Use of the tools and methods of science to image, measure and observe phenomenon in oceanography. 1919.00

92A-H Special Topics: Earth Science (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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 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]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Origins of the economic institutions of capitalism and socialism, development of economics ideas, and tools of analysis. The ideas of the great economists – e.g. Smith, Ricardo, Marx, Veblen, Marshall, Keynes, Friedman, and Galbraith. The U.S. economic system and economic issues of domestic and international importance, including unemployment, economic growth, globalization, the environment, regulation, deregulation, inflation, interest rates, price discrimination, corporations, and labor unions. May be offered as an Honors course. 2204.00

2 Principles of Macroeconomics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 425.
Study of the principles of macroeconomics. Emphasis on the U.S. economic system and institutions. 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, New Classical, Keynesian, post-Keynesian, and monetarist. May be offered as an Honors course. 2204.00

4 Principles of Microeconomics (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 425.
Study of the principles of microeconomics. 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 near-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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Students must be concurrently enrolled in one of the corequisite courses or have completed one of the corequisite courses with an A or B grade in the immediately preceding term, and must also meet Honor's eligibility criteria delineated in the schedule of classes.
Corequisite: Economics 1, 2, 4, or 8 (may have been taken previously)
Honors component for Economics 1, 2, 4, and 8. Topics of interest vary, are chosen by the instructor and students, and are presented in a seminar format with change in topic emphasis each term. May be taken four times with change in topic emphasis. 2204.00

EDUCATION (ED)

10 Introduction to Education and Teaching II (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative TB test within past 12 months and Chaffey College fingerprint clearance are required for fieldwork placement.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450.
Corequisite: Education 400 (may be taken previously)
Introductory course exploring concepts and issues related to teaching diverse learners in today's contemporary schools, kindergarten through grade twelve (K-12). Topics include teaching as a profession and career, contemporary educational issues, California's content and performance standards and frameworks, and requirements for earning a teaching credential. In addition to class time, the course requires 30-45 hours of structured fieldwork in a classroom that represents California's diverse student population, and includes cooperation with a carefully selected campus-approved certificated classroom teacher. 0801.00

400 Introduction to Education and Teaching I (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 450 or English as a Second Language 450.
Introduction to careers in education, exploring professional responsibilities, career pathways, and job search strategies for tutors, paraeducators, activity supervisors, and credentialed teachers. Entry-level training in classroom student diversity, child guidance and discipline, teaching and learning strategies, and effective communication skills. 0802.00

492A-H Special Topics: Education (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Selected special lecture topics in the field of education, designed to augment the program curriculum or serve as useful preparation for students within the discipline. Topics vary and are determined by the instructor. Prerequisites and/or corequisites may be required, based on the scope and content of individual offerings. See the schedule of classes for current term emphases. May be taken four times, for a maximum of 12 units, in any unit combination, however no single-topic, special interest class may be repeated.0 801.00

ELECTRICITY

(SEE INDUSTRIAL ELECTRICAL TECHNOLOGY)

EMERGENCY MEDICAL TECHNICIAN (EMT)

405 First Responder for Emergency Medical Services (3)
(Degree-applicable)
Hours: 40-45 lecture; 24-27 laboratory
Grading: Letter grade only.
Limitation on Enrollment: Student must be 18 years or older at the start of the course.
Advisory: Students should possess good dexterity and physical condition, have the ability to lift and carry up to 150 pounds, and be able to work in confined spaces and different positions (e.g. on the ground or floor).
Emergency Responder and CPR training for the professional rescuer, fulfilling California Code of Regulations Title 22 requirements. Emergency care knowledge and skills required for Emergency Medical Technicians, Professional and Volunteer Firefighters, and Peace Officers. Course meets the American Heart Association CPR prerequisite and recommended preparation for admission to the EMT program, and is approved by the Inland County Emergency Medical Agency (ICEMA). 1250.00

410 Emergency Medical Technician (6.5) [Cx]
(Degree-applicable)
Hours: 80-90 lecture; 72-81 laboratory
Grading: Letter grade only.
Limitations on Enrollment: Student must be 18 years or older at the start of the course and possess a current American Heart Association Health Care Provider CPR card.
Prerequisite: Emergency Medical Technician 405.
Advisory: Students should possess good dexterity and have good physical condition with the ability to lift 150 pounds, and work in confined areas and in different positions (i.e. on the ground or floor).
Students develop basic rescue skills needed for assessment, immediate treatment, and transport of urgently ill or injured clients, by identifying and addressing traumatic injuries, medical emergencies, and environmental hazards using rescue techniques and equipment. Emphasis on accurate evaluation and treatment of life-threatening conditions and development of appropriate client care strategies. This course prepares the student for National Registry and the Inland Counties Emergency Medical Agency (ICEMA) requirements and certifying exam. Twelve hours of an ambulance ride-along and twelve hours of observation in a hospital emergency room are required components of the course. 1250.00

ENGINEERING (ENGIN)

11 Introduction to Engineering (2)
(CSU; UC)
Hours: 32-36 lecture
Grading: Letter grade only.
Introduction to the engineering profession. Exploration of the educational requirements for engineers and engineering programs available at four-year schools. Students examine the various engineering fields, along with the design standards, creativity, and professional ethics unique to the profession. Guest speakers and industry exposure provide first-hand accounts of the profession's scope and responsibilities. 0901.00

26 Engineering Graphics and CAD (3)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Mathematics 430 or Drafting 21.
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 manufacturing, 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)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 65A.
Structured programming concepts applied to engineering problem types, such as center of mass, ballistics, column buckling, design, and reduction of experimental data. Structured approach used, with applications to flow charts and computer programming. Mathematical techniques include iterative solution, bisection, Raphson-Newton, statistics, and matrix operations. Computer techniques include formatted input and output, selection, loops, functions, pointers, arrays, and characters. 0901.00

50 Engineering Statics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Physics 45 and Mathematics 65A.
Vector treatment of statics of Particles and Rigid Bodies. 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, Moments of Inertia for area and mass, and Shear and Bending Moment. 0901.00

52 Engineering Dynamics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Engineering 50 and Mathematics 65B.
Kinematics and kinetics of particles, systems of particles, and rigid bodies from a Newtonian viewpoint. Force-acceleration, work-energy, and impulse-momentum principles. Planar kinematics and kinetics of rigid bodies. Introduction to mechanical vibration. Vector mathematics where appropriate. 0901.00

60 Materials of Engineering (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Chemistry 24A, or Chemistry 21 and 21L1, and 21L2.
Properties of materials as they relate to atomic and crystal structure. Topics include atomic structure and bonding; crystalline structures; phases and phase diagrams; metals, polymers, ceramics, and composites; mechanical deformation and fracture; electrical, magnetic, and optical properties; corrosion; and process methods. 0901.00

71 Circuit Analysis (4)
(CSU; UC credit pending)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 46 and Mathematics 65B.
Modeling and analysis of electrical networks. Basic network theorems. Sinusoidal steady state and transient analysis of RLC network. Response as a function of frequency. Current, voltage, and power relationships. Laboratory investigation of Ohm's Law; voltage and current division; mesh and nodal analysis; Thevenin and Norton equivalents; superposition; simple PL, RC, and RLC circuits; and phasers. Use of voltmeters, ammeters, ohmmeters and oscilloscopes. 0901.00

Engineering Technology (EGTECH)

10 Introduction to Engineering Design (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of 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 documentation. 0924.00

12 Principles of Engineering (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 425.
Exploration of technology systems and engineering processes that demonstrate the benefits of math, science, and technology. Topics include the design process, communication and documentation, engineering systems, statics, properties of materials, quality assurance, materials testing, and engineering for reliability. 0924.00

14 Electronics for Engineering Technologists I (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 425.
Introduction to the application of electronics in engineering technology. Course covers DC circuit theory, including system of units, resistive circuits, inductors, capacitors, impedance, and Ohm's Law. Emphasis is on the application of Kirchhoff's Laws and Thevenin's and Norton's Theorems to DC circuits, Mesh and Nodal analysis, RL and RC transients, and Maximum Power Transfer. 0924.00

15 Electronics for Engineering Technologists II (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 31 and Engineering Technology 14.
Introduction to AC circuit theory and analysis, series and parallel capacitors and inductors, applied use of phasors to determine voltage, current, impedance and phase for circuit analysis, principles of trigonometry. Principles of electronics including average power, the power triangle and power factor. 0924.00

16 Computer Integrated Manufacturing – CNC Material Removal (3)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Engineering Technology 10, or one year of high school CAD/ Engineering courses using feature-based modeling software such as AutoDesk Inventor or Solidworks, or demonstrated performance with feature-based modeling software.
An overview of automated manufacturing concepts using designs created with industry standard modeling software, material removal manufacturing processes, machine tool operations, industrial practices, tool motion, CNC programming, simulations, and prototyping. Physical examples of designs using computer-based numerically controlled (CNC) machine tools are produced. 0924.00

English (ENGL)

1A Composition (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Careful study and practice of expository and argumentative writing techniques and the frequent writing of compositions with the ultimate goal of a research project. A minimum of 6,000 written words is expected over the course of the term. Three hours of supplemental learning in a Success Center that supports this course is required. Designed to prepare the student for satisfactory college writing. May be offered as an Honors course. 1501.00

1B Advanced Composition and Critical Thinking (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Using primarily non-fiction reading models, students emulate and incorporate various rhetorical strategies in the development of written analysis and researched argumentation. Focus on logical analysis and effective reasoning (e.g., inductive and deductive), establishing credibility, and emotional appeals to develop persuasive arguments. Course is writing intensive with a minimum production requirement of 6,000 words. May be offered as an Honors course. 1501.00

1C Introduction to Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Foundation course in the study of literature introduces the central literary genres: novel, short story, poem, and play. Close reading of the literature guides inexperienced 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 organize and compose the literary essay. May be offered as an Honors course. 1501.00

7A Creative Writing: Short Fiction (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Seminar in fiction writing, focused on longer works. Students study the underlying principles of this form of literature; write longer and more developed short stories, novellas, or several chapters of a novel; analyze and critique each other's work; edit/revise/rewrite to ready for publication; and research potential markets for submission. 1507.00

7D Creative Writing: Poetry (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Course in creative nonfiction writing. Review of the principles employed in writing creative nonfiction such as memoirs, personal essays, review, profiles, nature articles, and reportage. Students create essays, analyze and respond to student and professional writing, craft works intended for publication, and research potential markets for submission. 1507.00

32 Introduction to the Novel (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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.
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

68 Mythology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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

70A World Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
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

70B World Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Chronological survey of significant authors and texts of world literature from the mid-1600s 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 textural analysis. 1503.00

71 Folklore (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Introduction to Folklore and analysis of its various forms: myths, legends, fairy tales, fables, epics, and tall tales. Course consists of close reading of selected works and discussion of criteria for assessing the literary value of these stories and determining their significance as the primary source of themes, motifs, metaphors, and allusions that are encountered throughout literature. 1503.00

74 Asian-American Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Introductory analysis of Asian-American literatures. Investigation of literary modes including drama, poetry, essays, short stories, and the novel. Identification and analysis of recurrent themes, gender portrayals, writing styles, and topics associated with Asian-American authors. Evaluation of the social, cultural, and political influence of Asian-American writers on the United States, as well as the impact of the dominant U.S. society in Asian-American writing during the twentieth century. 1503.00

75A American Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Chronological survey of significant authors and texts of American literature from the colonial period to the 1860s. 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

75B American Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Chronological survey of significant authors and texts of American literature from the 1860s to the present. 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

76 African-American Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Introductory analysis of African-American literatures. Investigation of literary modes including drama, poetry, essays, short stories, and the novel. Identification and analysis of recurrent themes, gender portrayals, writing styles, and topics associated with African-American authors. Evaluation of the social, cultural, and political influence of African-American writers on the United States, as well as the impact of the dominant U.S. society in African-American writing during the twentieth century. 1503.00

77 Latino Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Introductory analysis of Latino literature written in English. Investigation of literary modes including drama, poetry, essays, short stories, and the novel. Identification and analysis of recurring themes, gender portrayals, writing styles, and topics associated with Latino writers. Evaluation of the social, cultural, and political influence of Latino writers on the United States, as well as the impact of the dominant U.S. society in Latino writing during the twentieth and into the twenty-first centuries. 1503.00

79 Native American Literatures (3)
(CSU; UC)
Hours: 48-54 lecture
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Advisory: Completion of English 80A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A and 80A.
Intensive reading, along with oral and written discussion, of a selected group of Shakespearean plays. 1503.00

92A-H Special Topics: Literature (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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 by 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)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. Three hours of supplemental learning in a Success Center that supports this course is required. NOTE: Students who have successfully completed English as a Second Language 450 may not take English 450. 1501.00

500 Preparation for College Writing (3)
(Non-degree-applicable)
Hours: 48-54 lecture
Grading: Pass/No Pass grade only.
Prerequisite: Eligibility for English 500 as determined by the Chaffey assessment process.
Introduces the entry-level writer to elements of the composing process (prewriting, drafting, revising, and editing). Focuses on composition development through writing, reading, and critical thinking. Includes strategies for improving study and college success. Four hours of supplemental learning in a Success Center that supports this course is required. 1501.00

550 Introduction to College Writing (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Eligibility for English 550 as determined by the Chaffey assessment process, or completion of English 500.
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. Four hours of supplemental learning in a Success Center that supports this course is required. 1501.00

English as a Second Language (ESL)

450 Fundamentals of Composition for ESL Students (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of English as a Second Language 556 or 558.
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 and other degree-applicable coursework. NOTE: Students who have successfully completed English 450 may not take English as a Second Language 450. 4930.87

452 Fundamentals of Composition Lab for ESL Students - Level 7 (.75)
(Degree-applicable)
Hours: 32-36 laboratory.
Grading: Pass/No Pass grade only.
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. 4930.87

506 Computer-Based Multiple Skills English (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation into English as a Second Language 534, 536, or 538 or higher level course by the ESL assessment test, or satisfactory completion English as a Second Language 641.
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. Designed for the non-native speaker of English. 4930.87

508 Pronunciation of American English (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation into English as a Second Language 544, 546, or 548 or higher level course by the ESL assessment test, or satisfactory completion of English as a Second Language 534, 536, or 538.
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. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.86

534 Intermediate Oral Communication (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-641.
A conversational approach to learning English. Conversation skills and language used in reading, listening, writing, and grammar form. Course builds fluency and comprehension. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.86

536 Intermediate Reading Skills (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-641.
An intermediate level reading course. Emphasis is on reading in class, vocabulary development, general comprehension, reading for details, fact versus opinion, and reading speed. 4930.85

538 Intermediate Writing and Grammar (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-641.
An intermediate level writing and grammar course. Focus is on improving written grammar and fluency. Skills emphasis: tenses, mechanics, sentence structures, transitions, and basic paragraph structure. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.84

544 High-Intermediate Oral Communication (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-534.
A communicative approach to learning English. Conversation strategies, pronunciation work, and directed listening activities help build strong fluency and comprehension. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.86

546 High-Intermediate Reading Skills (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-536.
A high-intermediate reading course. Emphasis is on independent reading, vocabulary enrichment and development, morphology, comprehension, reading for details, and critical thinking. 4930.85

548 High-Intermediate Writing and Grammar (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-538.
A high-intermediate writing and grammar course. Focus moves the writer away from personal to academic writing. Emphasis: syntax, mechanics, usage, sentence types, paragraphs, purpose, and audience. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.84

554 Advanced Oral Communication (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-544.
A communicative approach to advanced spoken English. Conversational tactics, presentation strategies, and debating skills help build strong fluency and comprehension of academic topics. Prepares students for degree-applicable courses. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.86

556 Advanced Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-546.
An advanced reading course. Focus: improve reading efficiency by expanding vocabulary, comprehension, critical thinking, and study skills. Students practice and develop whole language and critical thinking skills. Prepares students for degree-applicable courses. 4930.85

558 Advanced Writing and Grammar (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the ESL assessment test, or satisfactory completion of ESL-548.
An advanced writing course. Focus: paragraph development and expository writing, including basic essays. Skills emphasis: audience, purpose, point of view, advanced syntax, tone, and rhetorical modes. Prepares students for degree-applicable courses. Eight hours of supplemental learning in a Success Center that supports this course is required. 4930.84

640 Literacy-Level English (0)
(Non-credit)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation by the Chaffey ESL assessment test.
Beginning course in English as a Second Language that focuses on survival English skills and introduces the student to the structure of the American classroom. Emphasis is on basic vocabulary and deducing meaning from the written and spoken word. This course – in conjunction with ESL-641 - prepares students for English as a Second Language credit courses. Ten hours of supplemental learning in a Success Center that supports this course is required. May be taken twice. 4930.87

641 Everyday English (0)
(Non-credit)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Advisory: Placement recommendation by the Chaffey ESL assessment test, or completion of English as a Second Language 640.
Multi-level course (high-beginning to intermediate) in English as a Second Language that focuses on the use of English language skills in everyday contexts. Emphasis on vocabulary development, listening comprehension, pronunciation, oral practice, and basic reading and writing. This course - in conjunction with ESL-640 - prepares students for English as a Second Language credit courses. Ten hours of supplemental learning in a Success Center that supports this course is required. May be taken twice. 4930.87

650 English and Citizenship (0)
(Non-credit)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Placement recommendation at English as a Second Language 534, 536 or 538 or higher by the ESL assessment test, or satisfactory completion of English as a Second Language 641.
A beginning course for non-native speakers of English who wish to become citizens of the United States. Topics: basic English, basic U.S. history and government, and American culture and civics. May be repeated. 4930.90

FASHION DESIGN (FASHD)

16 Principles of Costume Design and Production (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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]
(CSU)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Principles and techniques for developing fundamental skills in clothing construction using woven fabrics. 1303.10

42 Advanced Clothing Construction (2)
(CSU)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Fashion Design 40.
Techniques of couture sewing, tailoring, and the handling of specialty fabrics. May be taken twice. 1303.10

45 Design Fundamentals for Fashion and Interiors (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Identification and utilization of the elements and principles of design common to fashion and interior design, while encompassing all arts including painting, sculpture, and architecture. Emphasis on creative expression through utilization of good design principles and elements. 1303.10

61 Pattern Drafting I (3) [Cx]
(CSU)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Fashion Design 40 (may be taken previously).
Theory and practice in developing flat patterns for apparel utilizing industry standards and full-scale blocks. Garments, photos and illustrations are analyzed for design and translated to paper patterns, then sewn in muslin to test for design replaction, garment fit and pattern accuracy. 1303.10

65 Fashion Illustration (2) [Cx]
(CSU)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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)
(CSU)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Fashion Design 40.
Advisory: Completion of Fashion Design 61.
Three dimensional draping in muslin and translation of the drape to a hard pattern. 1303.10

421 Cultures and World Fashion (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 Design (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Basic computer skills are recommended.
Introductory course using CAD software to create flat sketches, colorize designs, and scan images. Effective use of program features to create and alter shapes, and manipulate text. May be taken twice. 1303.10

442 Industrial Sewing (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Fashion Design 40.
Industrial construction techniques and assembly of apparel utilizing industrial sewing machines, with a special emphasis on stretch fabrics. May be taken twice. 1303.30

445 Fitting and Alterations of Patterns and Apparel (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Fashion Design 40.
Analysis of personal figure variations and application of pattern adjustments for customized dimensions and proper fit. Topics include ready-to-wear and commercial pattern alterations, and the development of custom patterns. Students will examine how pricing, skills and equipment requirements, and client management issues affecting small alterations businesses. 1303.30

470 Apparel Production (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Corequisite: Fashion Merchandising 10 (may be taken previously).
Advisory: Completion of Fashion Design 40.
The design, development, pricing, sourcing, sample making, manufacturing, and marketing of a line of clothing. 1303.30

471 Advanced Patternmaking (3)
(Degree-applicable)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Fashion Design 61.
Theory and practice in developing flat patterns for sportswear, 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 ready for the production process. 1303.30

472 Computer-Aided Patternmaking (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Fashion Design 61.
Advisory: Basic computer skills are recommended.
Beginning study of computer applications in patternmaking, including terminology and operation of the software programs. Topics include pattern creation, manipulation, grading, 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)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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 patterns, select fabrics, and construct garments for a collection. 1303.30

482 Industry Internship: Fashion Design (1)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter grade only.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Prerequisite: Fashion Design 61 and Fashion Merchandising 10.
Corequisite: Fashion Design 42 (may be taken previously) and Fashion Merchandising 60 (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. 1303.00

492A-H Special Topics: Fashion Design (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 Business: Management 11)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 Internship: Fashion Merchandising (1)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter grade only.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Prerequisite: Fashion Merchandising 11.
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)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC credit limitations).
Hours: 16-18 lecture.
Grading: Letter grade only.
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) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Components of building construction relating to fire safety. Effects of construction and structural design as key factors in building inspection, fire operations preplanning, 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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Fire Technology 1.
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 fire ground. 2133.00

8 Fire Ground Hydraulics (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
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

Food Service

(SEE HOTEL AND FOOD SERVICE, AND NUTRITION AND FOOD)

French (FR)

1 Elementary French (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
A systematic presentation of language patterns and of the underlying cultural ideas necessary for communicating in the four basic skills of listening, speaking, reading, and writing. Students are introduced to the life, culture, and language of the French-speaking populations. Ten hours of supplemental learning 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)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: French 1 or one year of high school French.
Continued systematic presentation of language patterns and of the underlying cultural ideas that lead to facility in the four basic skills of listening, speaking, reading, and writing. Reading selections introduce various aspects of the life and culture of the French-speaking peoples. Ten hours of supplemental learning in a Success Center that supports this course is required. 1102.00

15 French Conversation (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Prerequisite: French 1 or one year of high school French.
Practice in listening to and speaking French, with emphasis on everyday speech patterns. Subjects for extemporaneous conversation stress practical situations and cultural background. 1102.00

92A-H Special Topics: French Literature, Language and Culture (.5-6)
(CSU; UC credit limitations).
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 1102.00

Geography (GEOG)

1 World Regional Geography (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Regional geography of the world, surveying the major cultural and physical regions. Use of maps and regional analysis to interpret world patterns of demography, economies, resources, religions, and languages in relationship to landforms and climate. Current world problems discussed in an international framework. 2206.00

3 Geography of California (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 2206.00

4 Physical Geography (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Geography 4 (may be taken previously).
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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, global climate change and contemporary values in global environmental issues. 2206.00

7 Introduction to Geographic Information Systems (3)
(replaces Geographic Information Systems 1)
(CSU; UC credit limitations)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
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. 2206.10

8 Intermediate Geographic Information Systems (3)
(formerly Geographic Information Systems 2)
(CSU)
Hours: 32-36 lecture; 48-54 laboratory
Grading: Letter grade only.
Prerequisite: Geography 7.
Intermediate level course providing further study in ArcView, and an introduction to using its discipline-specific applications in a GIS. Mapping and spatial analysis capabilities of ArcView and other GIS software. Introduction to Global Positioning Systems (GPS), including terminology, technology, data structures, use of metadata, and hands-on training using GPS remote sensing hardware and software. Use of GIS and geostatistical methods to establish criteria for multi-disciplinary applications analysis. 2206.10

10 Cultural Geography of North America (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Cultural geography of North America in time and space. The dynamics and ethnicity of North American culture is traced through discovery, exploration, settlement patterns, aboriginal patterns, national interests, economic exploitation, agriculture, commerce, ethnicity, demography, and changing attitudes. Emphasis on the origin and diffusion of North American cultural traditions. 2206.00

11 World Cultures (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
An examination of world cultures in relation to land and sea. Dynamics of different societies and their impact on the world; the complex relationship between development, growth, settlement patterns, economic development, and agricultural practices; and the impact of commercial exploitation, demographics, and political evolution. 2206.00

98A,B,C Independent Study: Physical/Cultural Geography (1, 2, or 3)
(CSU and UC credit limitations).
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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

GEOLOGY (GEOL)

(SEE ALSO EARTH SCIENCE)

1 Physical Geology (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
History of the earth and the evolution of life forms including dinosaurs. Formation of the earth, plate tectonics, ancient environments recorded in sedimentary rocks, and evolution of life as reflected in the fossil record. 1914.00

6 Geology of National Parks and Monuments (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Geology and history of selected national parks and monuments throughout the United States with emphasis on the geological processes which formed them. 1914.00

30 Geology of California (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
An introduction to the geology, tectonic evolution and landscape development of California. Also a brief survey of California's petroleum, mineral, geothermal and water resources. 1914.00

70 California Field Trip (2)
(CSU; UC credit limitations)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Any geology course or Earth Science 1 (may be taken previously).
Geologic investigation of an area within California. Camping trip of varying length (approximately one week). May be taken four times as trip sites change. 1914.00

75A, B Out-of-State Field Trip (2, 3)
(CSU; UC credit limitations)
Hours: 16-18 lecture; 48-54 or 96-108 hours field trip.
Grading: Letter grade only.
Corequisite: Any geology course or Earth Science 1 (may be taken previously).
Geologic investigation of an area or related areas with all or a portion located outside of California. A camping trip either 1 week (for the 2-unit course) or two weeks (for the 3-unit course) follows the lecture portion of the course. Students apply concepts and vocabulary to the geology of the visited region, and document their field observations. Hiking safety, group responsibilities, and cultural sites of interest are included. May be four times with change in trip sites. 1914.00

92A-H Special Topics: Geology (.5-6)
(CSU; UC credit limitations).
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Current topics, geological occurrences of geological interest or geological specialization. Field trip may be required. May be taken four times. 1914.00

98A,B,C Independent Study: Geology (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Prerequisite: Geology 1.
Individual study course for capable students who are interested in furthering their knowledge of geology. 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 four times. 1914.00

GERONTOLOGY (GERO)

11 Introduction to Gerontology (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Also available also as Sociology 18)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

22 Dying and Death (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study of death from a gerontological perspective, including historical views, societal practices, cross-cultural influences, biomedical issues including active and passive euthanasia, suicide, death rites, and the grieving process. Overview of the legal aspects of organ donation, autopsies, advanced directives, and living wills.1309.00

23 Aging and Older Adulthood (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study of the aging process from a gerontological perspective with emphasis on major theories of aging, stereotypes about aging and older adults, changes in physical health, cognition, and social relationships during later life. 1309.00

404 Health and Wellness for Older Adults (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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, programs, and services for older adults. 1309.00

406 Gerontology Career Practicum (1)
(Degree-applicable)
Hours: 60 hours/term unpaid on-site work experience.
Grading: Letter grade only.
Corequisite: Gerontology 11 (may be taken previously)
Supervised work experience in public or private agencies, facilities, or 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

422 Dementia Care: Understanding Dementing Illnesses (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
The study of dementing illness from a gerontological perspective, including normal aging versus dementia, Alzheimer's Disease and other dementias, and the assessment and treatment of dementing illnesses. Overview of medical and social models of care, the influence of environmental design, ethical issues, cultural differences that affect the experience of dementing illness and care, and the availability of community resources for those with dementia. 1309.00

462 Activity Coordinator Training (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
State-certified training for individuals working as activity directors in a skilled nursing facility. Practice in documentation 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) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Functions and responsibilities of the social work designee charged with meeting the medically-related social and emotional needs of residents in long-term care facilities. Topics include assessment, care plans, patient advocacy, interventions, problem solving, behavioral modifications, family dynamics, elder care and abuse, bioethics, spiritual needs, and community resource development. 1309.00

482 Internships in Gerontology (1)
(Degree-applicable)
Hours: 60 hours/term unpaid on-site work experience.
Grading: Letter grade only.
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

492A-H Special Topics: Gerontology (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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 Life Planning (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Career and life planning for students seeking direction in setting life, academic and career goals. Use of a psychological-social perspective highlights the person environment dynamics influential in the preparation for a fulfilling career and personal development. Topics include problem-solving approaches; evaluation of values, interests, skills, and personality characteristics; intensive career investigation; self-marketing skills development; psychological and social issues that impact career and life choices; academic learning strategies; college and life skills; diversity; and assessment of personal characteristics related to educational success. 4930.10

503 Orientation to College (2)
(Non-degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
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

507 Opening Doors to Student Effectiveness (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Designed for returning and continuing students to address the academic and personal challenges of student effectiveness. Various assessment tools are employed to identify and evaluate student preparation and attitude for a successful college experience. Positive growth and self-motivation strategies are explored, with a special focus on developing an educational plan and life goals. Students address previously employed learning skills and methods to evaluate their effectiveness. New and improved methods of study, time management, and the utilization of college support programs are mastered and applied. Five hours of supplemental learning in a Success Center that supports this course is required. 4930.14

508 Bridging to College Success (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade with option for pass/no-pass grade.
Advisory: Completion of the Chaffey assessment process.
Designed to increase new student proficiency and retention in college through the development of study techniques, improved strategies for learning associated with learning styles theory, and in depth exploration of college programs and services. Targeting at-risk students, this course addresses effective personal habits, emotional and social intelligence, self-esteem and confidence building, educational planning, and goal setting. Five hours of supplemental learning in a Success Center that supports this course is required. 4930.14

592A-H Special Topics: Guidance (.5-6)
(Non-degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Opportunity to explore guidance-related topics in greater depth. Emphasis selected by the instructor from variety of topics. See class schedule for emphasis. May be taken twice. 4930.10

650 Supervised Tutoring (0)
(Non-credit)
Hours: Variable and arranged; based on student need as determined by assessment, diagnostic instruments, and/or instructor recommendation.
Grading: Not graded.
Limitation on Enrollment: Referral by course instructor or academic counselor is required.
Open-entry/open-exit supervised tutoring course that facilitates study skills development and provides students assistance in understanding college course assignments. Individualized tutoring is conducted outside 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 specific subject matter. The content of this course varies according to the course for which tutoring is sought. May be repeated. 4930.09

660 Interdisciplinary Study Skills (0)
(Non-credit)
Hours: Variable and arranged; based on student need and/or instructor recommendation.
Grading: Not graded.
Limitation on Enrollment: Concurrent enrollment in (an)other Chaffey College course(s).
Course is designed to introduce, enhance, and reinforce study strategies for students in any course at Chaffey College. Emphasis on directed learning activities, study/learning groups, and workshops to improve learning. Conducted in a Success Center appropriate for the strategies being developed. The content of this course varies depending on the strategy emphasis. May be repeated. 4930.14

HEALTH SCIENCE (HS)

401 Basic ECG and Dysrhythmia Interpretation (2) [Cx]
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
Study of basic electrocardiogram (ECG) waveforms in relation to atrial, junctional and ventricular dysrhythmias. Designed to assist health care workers with recognition and treatment of basic cardiac dysrhythmias. 1230.00

428 Basic Pharmacology (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of 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 diseases, infectious diseases and in 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. 1230.00

492A-H Special Topics: Health Science (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Selected special topics in a Health Science field for students who desire an extensive exploration of a specialized Health Science subject. May be taken for a total of 12 units regardless of the unit combination, however, no single-subject, special-interest course may be repeated. 1230.00

492LA-H Special Topics Laboratory: Health Science (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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 Science Skills Development I (1)
(Non-degree-applicable)
Hours: 48-54 self-paced laboratory.
Grading: Pass/No Pass grade only.
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 Science Skills Development II (1)
(Non-degree-applicable)
Hours: 48-54 self-paced laboratory.
Grading: Pass/No Pass grade only.
Use of computers to improve test taking skills, critical thinking skills, and technical skills in conjunction with current health science courses. May be taken four times. 1230.00

HISTORY (HIST)

1 World History: Pre-Civilization to 1500 (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Reading proficient or eligibility for READ-1 as determined by the Chaffey assessment process, or completion of READ-550.
Comparative, integrative study of the world's major civilizations, from pre-history to 1500, including those in Eurasia (Mesopotamia, Egypt, Hebrews, Greece and 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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Reading proficient or eligibility for READ-1 as determined by the Chaffey assessment process, or completion of READ-550.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 period in Western Europe. 2205.00

6 Modern Western Civilizations (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Reading proficient or eligibility for READ-1 as determined by the Chaffey assessment process, or completion of READ-550.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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, Japan, and Korea. 2205.00

10 History of Asian Civilizations II (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

12 Asian American History (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Historical experience of the Asian-American community in the United States from the mid-nineteenth century to today. Overview of specific issues confronted by Asian groups, and their cultural roots, immigration experiences, and settlement patterns. 2205.00

16 Westward Movement and the Indian Wars 1840-90 (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Reading proficient or eligibility for READ-1 as determined by the Chaffey assessment process, or completion of READ-550.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Reading proficient or eligibility for READ-1 as determined by the Chaffey assessment process, or completion of READ-550.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Issues and events of the 1960's - one of the most turbulent decades in American history – including Civil Rights and the Vietnam War. May be taught in lecture or seminar format. 2205.00

25 Women in United States History (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
African-American experience from emancipation to the present. Focuses on legal and extra-legal racial and gender discrimination in rural and urban settings after emancipation; migrations to northern industries and western lands; and black contributions to United States polity and economy. 2203.00

70 Chicanos: The Common History of Mexico and the United States (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study of the historical relationship between Mexico and the United States from their common Native American roots to present-day. Examination of pivotal events and their outcomes, such as the Spanish and British colonial systems, processes of independence and nation-building, the Mexican-American War, the 1910 Mexican Revolution, the Oil Crisis of the 1970's, NAFTA, and present border conflicts. 2203.00

71 Chicanos: The Chicano Minority in the United States (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Designed to bring together one or more faculty members and a small group of students with a common interest, to pursue study of a selected topic in history through the seminar approach. May be taken twice. 2205.00

90A History Honors Seminar (1)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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. 2205.00

92A-H Special Topics: History (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 2205.00

98A,B,C Independent Study: History (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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. 2205.00

Homeland National Security (HNS)

400 Introduction to Homeland Security (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
This course introduces and explores the fundamentals of national security, global security and terrorism. Aspects of U.S. federal, state and local inter-agency cooperation to combat domestic and foreign threats will be discussed. Additional issues of discussion will include Narco-terrorism, terrorist groups and motivation of terrorists. 2105.30

401 Intelligence Analysis and Security Management (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
This course introduces the concept of intelligence analysis and its relationship to the security management of terrorist attacks, man-made disasters and natural disasters. Vulnerabilities of U.S. national defense and the private sector, as well as the threats posed to these institutions, will be analyzed. Course examines intelligence community operations and associated intelligence support of homeland security measures implemented by the U.S.. 2105.30

402 Transportation and Border Security (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Overview of post 09/11/2001 border and transportation security challenges and strategies used to address them, along with discussion of related security threats from previous periods of history. Investigation of the agencies and allied infrastructure associated with U.S. border security. Assessment of the vulnerabilities inherent to seaports, ships, aircraft, airports, trains, rail lines, trucking, public buses, and pipelines. Impact of technology in security threats and countermeasures. 2105.30

Hotel and Food Service Management (HOTFS)

10 Introduction to Hospitality Management (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 1307.00

14 Quantity Food Production Management (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of or concurrent enrollment in Hotel and Food Service Management 16.
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. 1307.10

16 Principles of Food Preparation (2) [Cx]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Corequisite: Hotel and Food Service Management 16L.
Advisory: Concurrent enrollment in Hotel and Food Service Management 18.
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. 1306.30

16L Principles of Food Preparation Laboratory (1) [Cx]
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Hotel and Food Service Management 16.
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. 1306.30

18 Sanitation, Safety and Equipment Management (2) [Cx]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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, forestall 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. 1307.10

20 Purchasing, Cost Controls, and Menu Planning (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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. 1307.10

422 Hotel Operations (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 1307.20

424 Dining Systems and Restaurant Operations (3)
(Degree-applicable)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
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. 1307.10

428 Human Resource Management (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: 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. 1307.00

430 Hospitality Marketing Management (2)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
Marketing strategies applied to hotel-motel industries, restaurant and institutional food service. Identification of the market, image development, advertising, sales promotions, public relations, and administering and control of a marketing plan. 1307.00

432 Hospitality and Healthcare Law (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 1307.00

434 Catering and Banquet Organization (3)
(Degree-applicable)
Hours: 24-27 lecture; 72-81 laboratory.
Grading: Letter grade only.
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. 1306.30

436A Culinary Arts I (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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 comestibles; and the cold kitchen, including salad, cold sauce, and sandwich preparation. Kitchen safety and sanitation rules are revisited and practiced. 1306.30

436B Culinary Arts II (2)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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, pates, 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)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. Introduction 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. 1306.30

492A-H Special Topics: Hotel and Food Service Management (.5-6)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective. 1504.00

6 Arts and Ideas: Renaissance to Modern (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective. 1504.00

20 The Holocaust: History and Philosophy (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 2205.00

90A,B Humanities Honors Seminar (2)
(CSU; UC credit limitations)
Hours: 32-36 lecture.
Grading: Letter grade only.
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. 1504.00

92A-H Special Topics: Humanities (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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. 2205.00

INDUSTRIAL ELECTRICAL TECHNOLOGY: CORE (IET)

401A Introduction to Electricity (2.5) [Cx]
(Degree-applicable)
Hours: 32-36 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Mathematics 510 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)
(Degree-applicable)
Hours: 32-36 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 401A, or one year or more of professional work experience in a related field.
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)
(Degree-applicable)
Hours: 32-36 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 401A, or one year or more of professional work experience in a related field.
Principles of motor controls. Topics include: direct current motors, basic trigonometry, alternating current, inductance in alternating current circuits, resistive-inductive series circuits, capacitors, and resistive-inductive-capacitive parallel circuits. 0934.40

403B Electrical Motors and Controls II (2.5)
(Degree-applicable)
Hours: 32-36 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403A, or one year or more of professional work experience in a related field.
Applications of motor controls. Topics include: resistive-inductive 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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403A, or two years or more of professional work experience in a related field.
Interpretation and application of the National Electric Code (NEC), with emphasis on wire size, conduit, motor load protection, classified areas, grounding, and the latest NEC updates. May be taken four times. 0934.40

407 Electrical Blueprints (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403A, or one year or more of professional work experience in a related field.
Interpretation of basic ladder diagrams, one line diagrams, electrical symbols, schematics, hydraulic symbols, and diagrams including pictorials. 0934.40

409 Static Devices (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403B, or one year or more of professional work experience in a related field.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403B and 407, or two years or more of professional work experience that includes basic computer skills.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 411, or two years or more of professional work experience that includes basic knowledge of PLC's.
PLC advanced ladder diagrams; operations of the programmer; 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)
(Degree-applicable)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 405, 407, 409, and 411, or two years or more of professional work experience that includes knowledge of PLC's and static devices.
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)
(Degree-applicable)
Hours: 40-45 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403A, 409, and 411, or two years or more of professional work experience that includes knowledge of static devices.
Applying the knowledge learned on DC/AC motor controls, blueprint reading, and developing troubleshooting skills. May be taken four times. 0934.40

419 DC Variable Speed Drive (1.5)
(Degree-applicable)
Hours: 16-18 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 403A, or two or more years of professional work experience in a related field.
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)
(Degree-applicable)
Hours: 16-18 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 419, or two years or more of professional work experience in a related field.
Function and controls of an AC variable frequency drive and its application on the field, including parameter, setting, tuning, and configuration. May be taken twice. 0934.40

422 OSHA Construction Safety Training (2)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
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) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Tools and construction techniques used in cabling, along with study of applicable industry standards. Mastery of troubleshooting and repair skills used by entry-level technicians in the network cabling industry. A certificate is issued by C-Tech Associates (recognized for industry standards) upon successful completion of this course. 0934.40

459 Fundamentals of Fiber Optic Cabling: The Physical Layer (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 458, or one year or more of professional work experience in a related field.
Tools and construction techniques used in fiber optic cabling, along with study of fiber optic theory and the characteristics of various fiber optic components. Mastery of the troubleshooting and repair skills used by entry-level technicians in the network cabling industry, focusing on fiber optics. A certificate is issued by C-Tech Associates upon successful completion of this course. 0934.40

460 Introduction to Photovoltaic Installation (4)
(Degree-applicable)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Industrial Electrical Technology 401A.
Introduction to solar energy, equipment installation and controls. Topics include electricity fundamentals, system components, electrical and mechanical design considerations, performance standards, troubleshooting basics, system checks and inspections, and industry safety requirements. May be taken twice. 0946.10

482 Internship in Industrial Electricity (1)
(formerly Industrial Electrical Technology 496A)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required prior to enrollment.
Prerequisite: Industrial Electrical Technology 401A.
Corequisite: Enrollment 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

IET: Electromechanical Technology (IETELMT)

430 Hydraulic Fundamentals (2) [Cx]
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Introduction to hydraulic fundamentals, demonstration of hydraulic power, basic circuits, functional circuits, and troubleshooting. 0935.00

432 Electrical Control of Hydraulic Systems (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Electromechanical Technology 430, or one year of professional work experience in a related field.
Principles of electrical control of hydraulic systems, electrical concepts of ladder diagrams, functional systems of electrical/hydraulic sequencing of cylinders, industrial applications, and troubleshooting electrically-controlled hydraulic systems. 0935.00

434 Hydraulic Applications with Programmable Logic Controllers (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology 411, or one year or more of professional work experience that includes knowledge of PLC's.
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]
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Electromechanical Technology 436, or one year or more of professional work experience in a related field.
Electrical control of pneumatics, concepts, functional systems, industrial-type electropneumatic circuits, and troubleshooting of electrical control and electropneumatic circuits. 0935.00

440 Sensors for Hydraulics and Pneumatics Training Systems (1.5)
(Degree-applicable)
Hours: 16-18 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Electromechanical Technology 432, or two years or more of professional work experience in a related field.
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]
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Instrumentation Technology 441, or one year or more of professional work experience in a related field.
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

443 Level Measurement Fundamentals (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Introduction to level measurement fundamentals. Understanding the many applications of level transmitters, characteristics, and time response. Operation and calibration of the instruments used to control the process. 0943.00

444 Level Measurement and Control (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Instrumentation Technology 443, or one year or more of professional work experience in a related field.
Notch, ultimate period, and open-loop tuning of a level process. Operation and troubleshooting of level measurement channel and control processes. Differences between two- and three-element control processes. Operation and calibration of the instruments used to control the process under unstable conditions. 0943.00

445 Temperature Process Fundamentals (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Instruction in and performance of the tasks done by instrument technicians in industry, including calibration, troubleshooting, and operation of microprocessor-based controllers. 0943.00

446 Temperature Process Controller (2)
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Completion of Industrial Electrical Technology: Instrumentation Technology 445, or one year or more of professional work experience in a related field.
Instruction in and performance of the tasks done by instrument technicians in industry, including calibration, troubleshooting, and repair of instruments ranging from pneumatic booster relays to microprocessor-based automatic controllers. 0943.00

Interior Design (ID)

10 Introduction to Interior Design (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Overview of the residential interior design field. Examination of floor plans, furniture arrangement, design elements and principles, furniture styles, lighting, flooring, and wall and window treatments. 1302.00

11 History of Western Architecture and Interiors I (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Furniture, interior and architectural styles of ancient Egypt, Greece, and Rome; and the European Middle Ages, Renaissance, and French periods to 1820. 1302.00

12 History of Western Architecture and Interiors II (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Furniture, interior and architectural styles of the English, Anglo-American, and late 19th and 20th century Western periods. 1302.00

16 Quick Sketching for Interior Designers (2.5)
(CSU)
Hours: 32-36 lecture; 24-27 laboratory.
Grading: Letter grade only.
Freehand sketching techniques for illustrating interiors in 3D. Includes perspective, shading, textures, and use of a variety of techniques and materials. Emphasis on quick presentation of ideas for designer or client. 1302.00

17 Introduction to Lighting (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

21 Space Planning (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Furniture layouts and space planning for residential and commercial interiors.
1302.00

22 Interior Design Materials (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Materials and treatments used in interior design for commercial and residential installations, including new "green" resources. 1302.00

25 Interior Design Management (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture; 24-27 laboratory.
Grading: Letter grade only.
Prerequisite: Interior Design 16, 21, and 22.
Advanced course integrating knowledge, problem solving, and visual and oral communication concerning furniture layouts, space planning, elevations, reflected ceilings, lighting, electrical plans and renderings, selection of interior components and materials, and estimates and scheduling for a residential and a commercial project.
1302.00

427 CAD for Set and Interior Design (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Fashion Design 45 and basic familiarity with Macintosh or Windows computers.
Computer aided design using professional software, such as AutoCAD, Rivit, Architectural Desktop, and ArchiCAD. Floor plans, furniture layouts, elevations, lighting plans, 3-D perspectives, and renderings. Use of various printers and plotters.
1302.00

482 Industry Internship: Interior Design (1)
(Degree-applicable)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter grade only.
Limitation on Enrollment: Consent of instructor is required prior to registration.
Prerequisite: Interior Design 16, 21, and 22.
Corequisite: Interior Design 30.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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: Ability to type.
Principles of writing news stories with emphasis on selecting and organizing information in a clear, accurate, coherent, and concise manner. Fundamentals of correct grammar and spelling are stressed, as well as news copy preparation and format. Five hours of supplemental learning in the newspaper production laboratory is required. 0602.00

11 Advanced Newswriting and Editing (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Advisory: Completion of Journalism 10.
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)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Advisory: Typing and/or computer skills, and the ability to take black-and-white photos.
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. 0602.00

92A-H Special Topics: Journalism (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Special interest class of varying length for students who seek further development in specific areas of journalism. Wide variety of topics with particular emphasis left to the instructor. May be taken four times. However, no single-subject, special-interest class may be repeated. 0602.00

98A-H Independent Study: Journalism (1,2,3)
(CSU credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Advisory: Prior journalism coursework is recommended.
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 journalism. Nature and extent of the project must be decided by both the student and instructor before the student registers, since the scope of the project determines the number of units awarded. May be taken four times. 0602.00

MANAGEMENT (MGMT)

(SEE BUSINESS AND BUSINESS: MANAGEMENT)

MATHEMATICS (MATH)

4 Mathematical Concepts for Elementary School Teachers (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 425.
Study of mathematical concepts, targeted primarily to students preparing to teach elementary school mathematics. For such students, this course fulfills the same transfer requirement as MATH-25.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)
(CSU; UC credit limitations)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 as determined by the Chaffey assessment process, or completion of Mathematics 425.
Coordinate geometry and graphing techniques; conic sections; solutions to higher degree polynomial equations; functions; polynomial, rational, inverse, exponential and logarithmic functions; systems of nonlinear equations and inequalities; matrices and determinants; sequences and series; binomial expansion; mathematical induction; and introduction to mathematical proof. 1701.00

31 Plane Trigonometry (4)
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 25.
Advisory: Completion of Mathematics 430 or 1 year of high school geometry.
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 for Business (4) [Cx]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 31 as determined by the Chaffey assessment process, or completion of MATH-25.
Techniques of calculus as applied to problem solving in business and economics. Topics include: limits, continuity, differentiation and integration in one and several dimensions, optimization, and transcendental functions. 1701.00

61 Pre-Calculus (4) [Cx]
(CSU; UC credit limitations)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 61 as determined by the Chaffey assessment process, or completion of Mathematics 25 and 31.
Further studies in algebra and trigonometry for students intending to take calculus. Polynomial equations, functions and inverses; factoring techniques, nonlinear inequalities including absolute values, partial fractions, introduction to limits, graphing polynomial and rational functions, conic sections, trigonometric functions and their inverses, parametric equations, exponential and logarithmic functions, polar coordinates, and vectors. Trigonometric concepts emphasized as needed for calculus, including identities, equations, and applications. A graphing calculator is required; students should see instructor for specifics, since CAS-based calculators may be prohibited. 1701.00

65A Calculus I (4) [Cx]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 61.
Advisory: Prior experience with a graphing calculator is needed.
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]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 65A.
Advisory: Prior experience with a graphing calculator is needed.
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]
(CSU; UC)
Hours: 80-90 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 65B.
Advisory: Prior experience with a graphing calculator is needed.
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. (C-ID MATH 230) 1701.00

81 Linear Algebra (4) [Cx]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 75.
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]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 75.
Advisory: Prior experience with a graphing calculator is needed.
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)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 410 as determined by the Chaffey assessment process, or completion of Mathematics 520 .
Course is targeted to students applying for the Nursing A.D.N. program. Topics include: metric, apothecary, and household systems of measurement; system conversions; adult and child dosages; and calculations involving oral, intravenous, and intramuscular medication administrations. 1701.00

410 Elementary Algebra (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 410 as determined by the Chaffey assessment process, or completion of Mathematics 520.
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 and quadratic equations in two variables, introduction to radicals and quadratic equations, function notation, and introduction to linear systems of equations. 1701.00

425 Intermediate Algebra (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 425 as determined by the Chaffey assessment process, or completion of Mathematics 410.
More advanced study of the following topics introduced in elementary algebra: factoring, algebraic fractions, equations and inequalities with rational expressions, exponents and radicals, quadratic equations, and equations with radicals. New topics include: absolute value equations and inequalities, quadratic inequalities, applications, graphing of elementary nonlinear functions and conic sections, determining the equation of a line, solving nonlinear one-variable inequalities, complex numbers, composition and inverse of functions, solving linear systems by matrices and determinants, logarithmic and exponential expressions and equations, binomial theorem, summation notation, probability, and sequences and series.
1701.00

430 Geometry (4)
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Mathematics 425.
Deductive reasoning, polygons, triangles, quadrilaterals, circles, parallels, constructions, similarity, volumes and surface areas, elements of analytic geometry, and introduction to trigonometry. 1701.00

510 Arithmetic (4)
(Non-degree-applicable)
Hours: 56-63 lecture and 24-27 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 510 as determined by the Chaffey assessment process.
Complete study of arithmetic, including operations and applications involving whole numbers, fractions, decimals, ratios, proportions, measurement, percents, and signed numbers. Four hours of supplemental learning in a Success Center that supports this course is required. 1701.00

520 Pre-Algebra (4)
(Non-degree-applicable)
Hours: 56-63 lecture and 24-27 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 520 as determined by the Chaffey assessment process, or completion of Mathematics 510.
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 rational number arithmetic, order of operations, Pythagorean theorem, variable expressions, solving linear equations, application problems, graphing linear equations, polynomial operations, and factoring using the Greatest Common Factor. 1701.00

592LA-H Special Topics: Basic Mathematics (.5-6)
(Non-degree-applicable)
Hours: 48-54 hours/term self-paced laboratory for each unit of credit.
Grading: Pass/No Pass grade only.
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. 1701.00

610 Preparation for the Study of Algebra (0)
(Non-credit)
Hours: 25-29 lecture.
Grading: Pass/No Pass grade only.
Mathematics review for students whose assessment results indicate placement into Arithmetic or PreAlgebra, and who wish to re-acquire the skills needed to re-assess into a higher level mathematics course. Course focuses on mastery of basic mathematics competencies, including addition/subtraction/multiplication/division, rounding, order of operations, fractions, decimals, ratios, percent, graphing and solving linear equations, exponents and polynomials, roots and radicals. 1702.00

625 Preparation for the Study of College Algebra (0)
(Non-credit)
Hours: 25-29 lecture.
Grading: Pass/No Pass grade only.
Mathematics review for students whose assessment results indicate placement into Elementary Algebra and Intermediate Algebra, and who wish to re-acquire the skills needed to re-assess into a higher level mathematics course. Course focuses on mastery of algebra competencies, including: linear equations, inequalities and systems; absolute value equations and inequalities; factoring; rational expressions; radical expressions; quadratic equations and inequalities; graphing of functions; composition and inverse of functions; complex numbers; and logarithmic and exponential expressions and equations. 1701.00

MULTIMEDIA

(SEE ART)

MUSIC (MUSIC)

1 Fundamentals of Music (3) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Concurrent enrollment in Music 51A.
Introduction to developing at an elementary level the basics of sight singing, ear training, reading music, and simple chord structures. Designed for the general college student, the elementary education major, and as an introduction to musicianship. Recommended for the student starting in music with no scholastic music background. Concurrent enrollment in Beginning Piano helpful. Music 1 is not open to students who have credit for Music 3A and 3B. 1004.00

2A Music History and Literature (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Corequisite for music majors and minors: Concurrent enrollment in Music 51A or 51B or satisfactory completion of a piano proficiency examination.
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]
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
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.
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]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

11 Record Production (1.5)
(CSU)
Hours: 48-54 studio.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Some keyboard skill and/or experience with electronic components.
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]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

22 History and Survey of Rock Music (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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

26 World Music (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 64-72 studio.
Grading: Letter grade only.
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.
Study and performance of a wide variety of standard and contemporary literature for mixed choirs, both a cappella and accompanied. Primary focus is classical. Emphasis on the development of the ability to carry independently the assigned part and on problems of phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. May be taken four times. 1004.00

33 Concert Ensemble Singers (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
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.
Chamber ensemble for the advanced choral musician who is dedicated to high-level performances of the finest vocal chamber literature. Attendance at all public performances is required. May be taken four times. 1004.00

40 Beginning Guitar (1) [Cx]
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Advisory: Completion of Music 40 or the ability to sight-read in the first position.
Further exploration of guitar literature and the capabilities of the solo guitar. Student must provide own guitar for use in class. May be taken twice. 1004.00

51A,B Beginning Class Piano (1-1)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Advisory: Completion of Music 51B.
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)
(CSU; UC)
Hours: 32-36 studio.
Grading: Letter grade only.
Advisory: Completion of Music 51B.
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)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
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.
Instrumental studio/performing group, emphasizing reading, improvisation and stylistic concepts as they apply to the intermediate/advanced player. In most instances, student is expected to supply his/her own instrument. Attendance at public performances is required. May be taken four times. 1004.00

62A Beginning Community Concert Band (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Limitation on Enrollment: Audition on the first day of class on any one of the standard band instruments. Basic beginning proficiency required.
Instrumental music group specializing in training and experience in a wide sampling of band repertoire, through rehearsals and performance. Attendance at on-campus end of semester concert in the theater is required. May be taken four times.1004.00

62B Intermediate Community Concert Band (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Prerequisite: Music 62A or acceptance via audition on the first day of class.
Course is designed for student musicians with a minimum of one year of experience. Open to band students of flute, clarinet, trumpet, trombone, baritone, tuba, saxophone, oboe, bassoon, and percussion. Attendance at on-campus end of semester concert in the theater is required. May be taken four times. 1004.00

62C Advanced Community Concert Band (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Prerequisite: Music 62B or acceptance via audition/performance for chair placement during the first week of class.
Course is designed for the advanced band student with a high level of instrumental ability. Open to students of flute, clarinet, saxophone, trumpet, trombone, baritone, tuba, oboe, bassoon, and percussion. Attendance at on-campus end of semester concert in the theater is required. May be taken four times. 1004.00

67 Latin Jazz Band (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
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.
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

68 Mariachi Band (1.5)
(CSU; UC)
Hours: 48-54 studio.
Grading: Letter grade only.
Limitation on Enrollment: Nominal proficiency on one's musical instrument (including voice). Some music reading for instrumentalists (not including voice) desirable. Audition at the first class meeting.
Instrumental/vocal ensemble emphasizing Mariachi music and its various genres. Indigenous instruments are employed in the ensemble such as the guitarron, vihuela, guitar and jarocho harp as well as the violin, flute, and trumpet. Mandatory attendance at up to two public performances is required. Student must provide own transportation to all public performance venues. May be taken four times. 1004.00

70A Harmony and Intermediate Musicianship (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Corequisite: Music 52 or satisfactory completion of keyboard skill proficiency examination.
Advisory: Completion of Music 3B and 51B.
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 inversion. Includes study of cadences, non-chord tones, and diatonic seventh chords. 1004.00

70B Harmony and Intermediate Musicianship (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Corequisite: Music 52.
Advisory: Completion of Music 70A.
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

98A,B,C Independent Study: Music (1, 2, 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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

Nursing: Acute Care Technician (NURACT)

Students must apply for admission into the 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".

420 Acute Care Technician (4) [Cx]
(Degree-applicable)
Hours: 64-72 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 96-108 laboratory.
Grading: Pass/No Pass grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
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 workforce, 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]
(Degree-applicable)
Hours: 56-63 lecture.
Grading: Letter grade only.
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 health care team members. Course follows the guidelines established by the California Department of Health Services. 1230.30

400L Nursing Assistant Laboratory (2) [Cx]
(Degree-applicable)
Hours: 96-108 laboratory.
Grading: Pass/No Pass grade only.
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]
(Degree-applicable)
Hours: 24-27 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Admission into the Nursing Assistant program.
Corequisite: Nursing Assistant 400 and 400L
Demonstration and student practice of the twenty-eight core skills requiring mastery, in preparation for the state competency evaluation for the California Department of Public Health Services (CDPH) Certified Nurse Assistant (CNA) exam. 1230.30

420 Home Health Aide (1.5) [Cx]
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission into the Nursing Assistant program, and possession of an active California Certified Nursing Assistant (CNA) certificate.
Corequisite: Nursing Assistant 420L.
Role of the home health aide in providing personal client care in assisted living and home care settings. Topics include: interpretation of medical and social needs of patients, preparation of nutritionally-appropriate meals, assistance with the administration of medication, provision of personal care and cleaning tasks in patient's homes, and client care status reporting procedures. Course is based on model curriculum developed by the Department of Health Services. 1230.80

420L Home Health Aide Laboratory (1) [Cx]
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing Assistant 420.
Clinical application of the care functions required to meet the physical, medical, and social needs of home-care and assisted living clients. Demonstration and practice in providing personal care, preparing food, administering medications, performing basic cleaning of clients' living environments, and assessing and reporting client status. 1230.80

450 Professional Development for the Nursing Assistant (1)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission into the Nursing Assistant program.
Advisory: Basic computer skills are recommended.
Development of the interpersonal and professional skills needed by entry-level healthcare providers joining the workforce. Topics include: overview of the healthcare workforce and career ladder, the role of the CNA in the nursing process, critical thinking skills, employment opportunities, résumé preparation, and job interview techniques. 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 satisfactory. A minimum grade of "C" in the lecture course and "CR" in the lab course is required to advance in the Nursing A.D.N. program.

3 Transition in Nursing (1.5) [Cx]
(CSU)
Hours: 24-27 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Must be a graduate of a Vocational Nursing School with an active LVN license.
Corequisite: Nursing A.D.N. 3L.
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, therapeutic communications and skills in client care. 1230.10

3L Transition in Nursing Laboratory (.5) [Cx]
(CSU)
Hours: 24-27 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Must be a graduate of a Vocational Nursing School with an active LVN license, or have successfully completed one year of an accredited ADN program of study.
Corequisite: Nursing A.D.N. 3.
Application of basic nursing skills in the nursing-skills lab. 1230.10

6 Clinical Nursing Skills (1.5) [Cx]
(CSU)
Hours: 72-81 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Nursing A.D.N. program.
Development of the essential components of client care, enabling the practice of safe and effective nursing. 1230.10

12 Nursing Process I (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission into the Nursing A.D.N. Program
Corequisite: Nursing A.D.N. 12L.
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

12L Nursing Process I Laboratory (3.5) [Cx]
(CSU)
Hours: 168-189 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 12.
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. 1230.10

13 Mental Health and Psychiatric Nursing (2) [Cx]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N. Program.
Corequisite: Nursing A.D.N. 13L.
Mental health and psychiatric illness across the life span. Application of client-centered communication and critical thinking skills. 1230.10

13L Mental Health and Psychiatric Nursing Laboratory (1) [Cx]
(CSU)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 13.
Clinical application of psychiatric nursing. Performance of client-centered communication and critical thinking skills at psychiatric and community health facilities. 1230.10

25 Nursing Process II (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Nursing A.D.N. 12.
Corequisite: Nursing A.D.N. 25L.
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical/surgical units. 1230.10

25L Nursing Process II Laboratory (3) [Cx]
(CSU)
Hours: 144-162 laboratory.
Grading: Pass/No Pass grade only.
Prerequisite: Nursing A.D.N. 12 and 12L.
Corequisite: Nursing A.D.N. 25.
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical/surgical units. 1230.10

26 Maternal-Newborn Nursing (2) [Cx]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission into the Nursing A.D.N. Program.
Corequisite: Nursing A.D.N. 26L.
Nursing care of the child-bearing family. Use of the nursing process and critical thinking skills in perinatology and ambulatory settings, and in selected community agencies. 1230.10

26L Maternal-Newborn Nursing Laboratory (1.5) [Cx]
(CSU)
Hours: 72-81 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 26.
Clinical application of maternal-newborn concepts in ambulatory, hospital, and home care settings. 1230.10

34 Nursing Process III (4) [Cx]
(CSU)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Nursing A.D.N. 25 and 25L, or Nursing A.D.N. 3 and 3L.
Corequisite: Nursing A.D.N. 34L .
Utilization of the nursing process and management of care for the gerontological, acute, and chronically ill individuals/family. 1230.10

34L Nursing Process III Laboratory (3) [Cx]
(CSU)
Hours: 144-162 .
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 34.
Management of care for the gerontological, acute, and chronically ill individuals and their families. 1230.10

38 Family-Child Nursing (2) [Cx]
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N Program.
Corequisite: Nursing A.D.N. 38L.
Nursing care of infants, children, and adolescents. Use of the nursing process and critical thinking skills in pediatric units and selected community agencies. 1230.10

38L Family-Child Nursing (1.5) [Cx]
(CSU)
Hours: 72-81 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 38.
Clinical application in the nursing care of infants, children, and adolescents in ambulatory, hospital, and community settings. 1230.10

44 Nursing Process IV (4.5) [Cx]
(CSU)
Hours: 72-81 lecture.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N Program.
Corequisite: Nursing A.D.N. 44L.
Nursing management of critically ill clients, family, and groups of clients in high acuity medical surgical and community health settings. 1230.10

44L Nursing Process IV Laboratory (5) [Cx]
(CSU)
Hours: 240-270 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing A.D.N. 44.
Clinical application in the nursing management of critically ill clients, family, and groups of clients in high acuity medical surgical and community health settings. 1230.10

50 Professional Issues in Nursing (1) [Cx]
(CSU)
Hours: 16-18 lecture.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N. Program.
Historical contributions, ethics, current health care delivery systems, quality assurance, expanded role of the nurse, political action, continuing education, and health care reform. 1230.10

92A-H Special Topics: Nursing (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N. Program.
Individualized courses designed to assist the student in nursing and related fields of study. May be taken four times regardless of unit combination. However, no single-subject, special-interest class may be repeated. 1230.10

92LA-H Special Topics Laboratory: Nursing (.5-6)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Limitation of Enrollment: Admission into the Nursing A.D.N. Program.
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. 1230.10

96A,B,C,D Cooperative Education: Nursing A.D.N. (1, 2, 3, or 4)
(CSU credit limitations)
Hours: 75 hours/term paid on-site work experience for each unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Completion of at least one semester of the Nursing A.D.N. program in good standing. Both student and work experience must meet the California Board of Registered Nursing work experience education regulations. Students must also meet the following state 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.
Work experience in cooperation with clinical agencies. Provides expanded learning opportunities directly related to the student's clinical experience. May be taken 5 times for a maximum of 16 units. 1230.10

403 Pathophysiology for Nursing (3) [Cx]
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission into a nursing (A.D.N. or V.N.) program or equivalent.
Advisory: Completion of Biology 22.
Mechanisms of disease processes, the resultant structural and functional changes, and the effects of these dysfunctional changes on the body as they relate to nursing practice. The use of the Nursing Process in prevention, evaluation and treatment of disease outcomes within the scope of nursing practice. 1230.10

470 Nursing Seminar (1)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
Professional issues related to nursing student's work experience. May be taken four times. 1230.10

NURSING: VOCATIONAL (NURVN)

Students must apply for admission into the Vocational Nursing program. See the Programs of Study for information on entrance requirements.

Students enrolled in two corequisite-linked courses (i.e. Nursing: V.N. 403 and 403L) will have the lower of the two grades earned assigned to both courses when either course grade is less than a satisfactory. A minimum grade of "C" in the lecture course and "CR" in the lab course is required to advance in the Vocational Nursing program.

401 Foundations of Vocational Nursing Practice (2)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
Advisory: Placement at the Reading Proficient level as determined by the Chaffey assessment process or completion of Reading 1, and eligibility for MATH-410 as determined by the Chaffey assessment process or completion of Mathematics 520.
Examination of the health care delivery system and the role of the vocational nurse as a member of the health care team. Discussion of the history of nursing and the ethical and legal responsibilities of the vocational nurse. Introduction of the nursing process as a critical thinking tool. Examination of the impact of cultural diversity on vocational nursing practice. Introduction to the policies and expectations of the vocational nursing program and an exploration of strategies for successful program completion. 1230.20

403 Fundamentals of Nursing (3) [Cx]
(Degree-applicable)
Hours: 57 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program.
Corequisite: Nursing: Vocational 403L.
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 adult and geriatric patients. Study of loss/grief concepts, health and disease, stress adaptation, and therapeutic communication styles is included. Includes twelve hours of related pharmacology content. 1230.20

403L Fundamentals of Nursing Laboratory (2)
(Degree-applicable)
Hours: 108 laboratory.
Grading: Pass/No Pass grade only.
Corequisite: Nursing: Vocational 403.
Discussion, demonstration, and application of nursing theory, principles, and effective communication techniques. Using the nursing process and developmental theories as a framework, students provide care for adult and geriatric patients in home, acute, and extended-care clinical settings. Focus on medication administration and patient status reporting. 1230.20

405 Beginning Medical-Surgical Nursing (4) [Cx]
(Degree-applicable)
Hours: 72 lecture.
Grading: Letter grade only.
Prerequisite: Nursing: Vocational 403 and 403L.
Corequisite: Nursing: Vocational 405L.
Nursing care of adult patients in the hospital/clinical setting. Utilization of the nursing process as a framework for providing care to patients with musculoskeletal, genitourinary, integumentary, and gastrointestinal disorders. Includes twelve hours of related pharmacology content. 1230.20

405L Beginning Medical-Surgical Nursing Laboratory (3)
(Degree-applicable)
Hours: 158 laboratory.
Grading: Pass/No Pass grade only.
Prerequisite: Nursing: Vocational 403 and 403L.
Corequisite: Nursing: Vocational 405.
Discussion, demonstration, and application of the nursing process and developmental theory to the care of adult patients with diseases and disorders of the musculoskeletal, integumentary, genitourinary, and gastrointestinal systems in the clinical setting. 1230.20

407A Beginning Nursing Skills/Clinical Simulation Laboratory (1)
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program.
Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity patient care simulators. Course focuses on the musculoskeletal, integumentary, gastrointestinal and genitourinary systems. 1230.20

407B Intermediate Nursing Skills/Clinical Simulation Laboratory (1)
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the second semester of the Vocational Nursing program.
Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity patient care simulators. Course focuses on maternal/child health nursing and on the cardiac, respiratory and endocrine systems. 1230.20

407C Advanced Nursing Skills/Clinical Simulation Laboratory (1)
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the third semester of the Vocational Nursing program.
Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity patient care simulators. Course focuses on emergency and trauma situations, and on diseases and disorders of the reproductive, hematologic and immune systems. 1230.20

409 Intermediate Medical Surgical Nursing (4) [Cx]
(Degree-applicable)
Hours: 72 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester VN curriculum or equivalent.
Prerequisite: Nursing: Vocational 405 and 405L.
Corequisite: Nursing: Vocational 409L.
Discussion, demonstration, and application of the nursing process and developmental theory to the care of adult patients with diseases and disorders of the cardiac, respiratory, and endocrine systems. Includes 12 hours of related pharmacology content. 1230.20

409L Intermediate Medical Surgical Nursing Laboratory (3)
(Degree-applicable)
Hours: 158 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester VN curriculum or equivalent.
Prerequisite: Nursing: Vocational-405 and 405L.
Corequisite: Nursing: Vocational 409.
Nursing care of adult patients in the hospital/clinical setting. Utilization of the nursing process as a framework for providing care to patients with cardiac, respiratory, and endocrine disorders. 1230.20

411 Advanced Medical-Surgical Nursing (7) [Cx]
(Degree-applicable)
Hours: 126 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the second semester VN curriculum or equivalent.
Prerequisite: Nursing: Vocational 409 and 409L.
Corequisite: Nursing: Vocational 411L.
Discussion, demonstration, and application of the nursing process and developmental theory to the care of adult patients with diseases and disorders of the reproductive, hematologic and immune systems. Emergency nursing and care of the patient with cancer is also emphasized. Includes 12 hours of related pharmacology content. 1230.20

411L Advanced Medical-Surgical Nursing Laboratory (3)
(Degree-applicable)
Hours: 162 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the second semester VN curriculum or equivalent.
Prerequisite: Nursing: Vocational 409 and 409L.
Corequisite: Nursing: Vocational 411.
Nursing care of adult patients in the hospital/clinical setting. Utilization of the nursing process as a framework for providing care to patients with reproductive, hematologic and immunologic disorders. Care of the patient with cancer, and of patients with emergency and traumatic disorders is also emphasized. 1230.20

413 Leadership for the Vocational Nurse (3) [Cx]
(Degree-applicable)
Hours: 54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the second semester VN curriculum or equivalent.
Corequisite: Nursing: Vocational 413L.
Leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care. Managerial traits, styles, roles, and models are explored. 1230.20

413L Leadership for the Vocational Nurse Laboratory (2)
(Degree-applicable)
Hours: 108 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the second semester VN curriculum or equivalent.
Corequisite: Nursing: Vocational 413.
Clinical application of leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care. 1230.20

415A Growth/Development: Psychology Adult-Geriatric (1) [Cx]
(Degree-applicable)
Hours: 18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program.
Stages of growth and development, behavior, and characteristics of the adult and elderly. Influences of and differences between the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Theories and perspectives of mental health nursing. 1230.20

415B Growth and Development of the Child (1) [Cx]
(Degree-applicable)
Hours: 18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester of the VN curriculum or equivalent.
Prerequisite: Nursing: Vocational 415A.
Stages of growth and development, behavior, and characteristics of the child. Influences of and differences between the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Theories and perspectives of mental health nursing as it relates to the care of children and adolescents. 1230.20

417A Critical Thinking and the Nursing Process I (1) [Cx]
(Degree-applicable)
Hours: 18 lecture.
Grading: Letter grade only.
Advisory: Acceptance into the Vocational Nursing program.
Increase effectiveness of everyday health care decision-making. Application of critical thinking skills in the health care setting. Introduction to care planning and utilization of the nursing process in clinical decision-making. 1230.20

417B Critical Thinking and the Nursing Process II (1) [Cx]
(Degree-applicable)
Hours: 18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester VN curriculum or equivalent.
Prerequisite: Nursing: Vocational 417A.
Application of advanced critical thinking skills in the health care setting. Advanced concepts in the development of a plan of care and in clinical decision-making. 1230.20

421 Maternal and Child Health Nursing (4) [Cx]
(Degree-applicable)
Hours: 72 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester of the VN curriculum or equivalent.
Corequisite: Nursing: Vocational 421L.
Nursing care of mothers, newborns, and children in both health and illness, using Maslow's theory of human needs to guide the plan of care. 1230.20

421L Maternal and Child Health Nursing Lab (2)
(Degree-applicable)
Hours: 108 laboratory.
Grading: Pass/No Pass grade only.
Limitation on Enrollment: Acceptance into the Vocational Nursing program, and successful completion of the first semester of the VN curriculum or equivalent.
Corequisite: Nursing: Vocational 421.
Nursing care of mothers, newborns, and children in the clinical setting, in both health and illness, using Maslow's theory of human needs to guide the plan of care. 1230.20

500 NCLEX Review for VN Licensure Examination (2)
(Non-degree-applicable)
Hours: 32-36 lecture.
Grading: Pass/No Pass grade only.
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. May be taken three times. 1230.20

Nutrition and Food (NF)

(ALSO SEE 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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Nutrition and Food 5 or 15.
Advisory: Concurrent enrollment in Nutrition and Food 470.
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

22 Nutrition and the Active Person (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Introduction to sports nutrition as related to the nutritional needs of all individuals interested in physical fitness, from the serious athlete to the more leisurely active person. Topics include the study of basic nutrition, disease prevention, methods for increasing cardiovascular endurance, weight control, increasing strength and flexibility, and stress management through the components of diet and fitness. 1301.00

25 Culture and Nutrition (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
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

470 Dietetic Service Supervisor (1)
(Degree-applicable)
Hours: 16-18 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis 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/clients 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)
(Degree-applicable)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Proof of a negative tuberculosis 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

492LA-H Special Topics Laboratory: Nutrition and Food (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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 (PHARMT)

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, when 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)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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, genitourinary, cardiovascular, and the special senses. Introduces the related medical terms and standard abbreviations used in pharmacy practice. 1221.00

405 Sterile Products (2)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
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 maintenance of pharmacy equipment. Quality assurance processes and applicable governing laws, regulations, and standards, including <USP797>. 1221.00

415 Pharmaceutical Calculations (2)
(Degree-applicable)
Hours: 32-36 lecture.
Grading: Letter grade only.
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 520.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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; 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)
(Degree-applicable)
Hours: 24-27 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 24-27 laboratory.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 240 hours unpaid on-site work experience.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

492LA-H Special Topics Laboratory: Pharmacy Technician (.5-6)
(Degree-applicable)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Pharmacy Technician program.
Selected laboratory experience 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

PHILOSOPHY (PHIL)

70 Introduction to Philosophy (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Introductory study of questions and ideas pondered by philosophy's great thinkers. Topics include problems of knowledge (epistemology), the nature of reality (metaphysics), issues of values, aesthetics, religion (axiology), and social/political influences. 1509.00

72 Seminar in Ethics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Seminar for the study of ethics with emphasis on personal, social, and political values. May be offered as an Honors course. 1509.00

73 Seminar in Contemporary American Philosophy (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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.
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. 1509.00

75 Introduction to Symbolic Logic (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A and Philosophy 76.
An introduction to symbolic methods of reasoning, covering sentential logic and predicate logic. Students translate ordinary language sentences and arguments into symbolic form and evaluate symbolized arguments using Truth Tables, Truth Trees and Natural Deduction. 1509.00

76 Critical Thinking (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: English 1A.
Exploration of the underlying structure of argument and the role of sound reasoning in the investigation of claims. Analysis of inductive and deductive argument reasoning, distinction of fact from opinion and belief from knowledge, identification of formal and informal fallacies, and application of learned skills to realistic life problems. 1509.00

77 History of Philosophy: Ancient to Medieval (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
A survey of many of the major figures and ideas of Western philosophy from Pre-Socrates to Descartes, including Plato, Aristotle, Augustine, Maimonides, Averroës, Aquinas, and others. May be offered as an Honors course. 1509.00

78 History of Philosophy: Modern (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
A survey of the major philosophers and ideas from Descartes to the 19th century, including Kant, Locke, Hume, Nietzsche, Kierkegaard, and others. May be offered as an Honors course. 1509.00

80 Introduction to Religion (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Exploration into the philosophies of religion and their intellectual, cultural, and personal expressions. 1510.00

81 Introduction to Eastern Philosophy (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Survey of the philosophies and practices of Hinduism, Buddhism, Confucianism, and Taoism, and their influences in contemporary society. 1510.00

82 Introduction to Monotheistic Religions: Judaism/ Christianity/ Islam (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
The origins and manifestations for the Jewish, Christian, and Muslim belief systems. 1510.00

92A-H Special Topics: Philosophy (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Special-interest course of varying length for students who wish further exploration in specific areas of philosophy. 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. 1509.00

98A,B,C Independent Study: Philosophy (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a paper on an area of personal interest. Nature and extent of the project must be decided by student and instructor before the student may sign up for the course. Type and extent of the project determines the number of units allowed. May be attempted only three times, regardless of the unit combination. 1509.00

PHOTOGRAPHY (PHOTO)

1 History of Photography (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
History and appreciation of photography as a medium of artistic and social communication. May be offered as an Honors course. 1011.00

7 Introduction to Digital Photography (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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 adjustable digital camera. 1012.00

9 Digital Imaging (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
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. 1012.00

10 Beginning Photography (4) [Cx]
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Introduction to the principles of traditional photography, emphasizing the role of cameras and photographic images in art, mass media, and media history. Instruction in the basic principles of black-and-white photography including darkroom experience. Students must furnish an adjustable non-digital camera. 1012.00

11 Intermediate Photography (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 10.
Continuation of the principles learned in Photography 10 with more advanced film-based conceptual and technical approaches to contemporary photography. Student must furnish an adjustable camera. May be taken three times. 1012.00

12 Studio Lighting (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 7 or 10.
Introduction to the use of studio equipment and lighting techniques. Topics include portrait, still life, advertising, and art photography. Students must furnish an adjustable camera. May be taken three times. 1012.00

13 Fine Art Photography (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 10 or 7.
Students explore photography as an art form. The focus will be on contemporary issues in art photography. Emphasis on students making photographic artwork. May be taken three times. 1012.00

20 Photography for Publications (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 7.
Introduction to commercial publications and mediums that use photography to convey visual information, including photojournalism, sports, advertising, and editorials. Focus on the technical and aesthetic aspects of photo creation and the resultant communication impact. Student must supply an adjustable digital camera. May be taken three times. 1012.00

21 Public Relations and Communications Photography (2) [Cx]
(CSU)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 7 or 10.
Theory and practice of photographing people and locations for commercial and promotional purposes. Selection and use of equipment, set-ups, lighting, directing, presentation, and simple business practices are explored. Students produce a portfolio of projects, and must supply an adjustable camera for use in the course. 1012.00

50 Introduction to Color Photography (4)
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 7.
Advisory: Completion of Photography 9
Basic background in the aesthetics, history, theory, techniques, and materials of color photography. Students must furnish an adjustable digital camera. May be taken three times. 1012.00

80 Specialized Study in Photography (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: PHOTO-10 (may be taken previously)
Students pursue specialized study of selected photographic topics/themes and refinement of conceptual photographic images. Term project subject and scope are determined by instructor and student in relationship to each student's area of study. Focus is on building a portfolio in preparation for transfer. May be taken four times with change in topic/theme (with approval of instructor, expansion upon an existing project is permitted). 1011.00

90A,B Photography Honors Seminar (1)
(CSU; UC credit limitations)
Hours: 16-18 lecture.
Grading: Letter grade only.
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: Photography (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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

422 Wedding Photography (2) [Cx]
(Degree-applicable)
Hours: 24-27 lecture; 24-27 laboratory.
Grading: Letter grade only.
Prerequisite: Photography 7.
Theory and practice in the basic techniques of wedding photography. Combining artistic vision with the use of light, composition and subject posing to produce creative images. Appropriate selection and use of cameras, lenses, filters, lighting, and special effects are explored, as well as business presentations and sales strategies. Student must furnish an adjustable digital camera. May be taken three times. 1012.00

PHYSICAL EDUCATION: ACTIVITY (PEACT)

Courses 1-99: (CSU; UC credit limitations)

All Activity courses are letter grade only.

Cluster repeatability: Students are limited to four (4) enrollments in any combination of courses within a designated cluster regardless of individual course unit values.

- ***PEACT-1, PEACT- 2, (Tennis)***
- ***PEACT-16, PEACT-17 (Volleyball)***
- ***PEACT-22, PEACT-23 (Soccer)***
- ***PEACT-26, PEACT-27 (Body Conditioning)***

1 Beginning Tennis (1)
Hours: 48-54 laboratory.
Emphasis on court etiquette, history, and fundamental skills for tennis including singles and doubles play, so that students may participate in a lifetime activity. Fundamental instruction includes serving, forehand, backhand, volley shots, and game strategy. May be taken four times. 0835.10

2 Advanced Tennis (1)
Hours: 48-54 laboratory.
Rules, court etiquette, history, and advanced skills of tennis. 0835.10

5 Beginning Golf (1)
Hours: 48-54 laboratory.
Basic skills and course etiquette of golf. 0835.10

9 Swimming (1)
Hours: 48-54 laboratory.
Basic skills and safety precautions for swimming. Several different strokes are taught according to skill levels. 0835.10

12 Bowling (1)
Hours: 48-54 laboratory.
Basic skills, rules, and etiquette of bowling. 0835.10

14 Archery (1)
Hours:48-54 laboratory.
Basic skills, rules, and etiquette of archery. 0835.10

16 Volleyball (1)
Hours: 48-54 laboratory.
Course emphasizes rules, strategy, and basic volleyball skill development such as setting, digging, serving, spiking and team strategies. 0835.10

17 Advanced Volleyball (1)
Hours: 48-54 laboratory.
Advisory: Previous volleyball experience.
Advanced volleyball skills with emphasis on strategy, skills, and complex offensive and defensive schemes. 0835.10

20 Basketball (1)
Hours: 48-54 laboratory.
Rules, court etiquette, basic offensive and defensive positions, and basic passing and dribbling techniques of basketball. 0835.10

22 Soccer (1)
Hours: 48-54 laboratory.
Introduction to the game of soccer, with emphasis on information and practice in the skills of kicking, trapping, shooting, passing, rules, and basic tactics. Class is suitable for both beginners and students who have played soccer. 0835.10

23 Intermediate Soccer (1)
Hours: 48-54 laboratory.
Advisory: Completion of Physical Education: Activity 22.
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)
Hours: 48-54 laboratory.
High energy aerobic exercises to improve overall cardiovascular fitness including muscle strength and endurance, flexibility, and body composition. The use of step benches, medicine balls, hand weights, and flex bands along with discussions of health related topics. 0835.10

25 Spinning for Fitness (1)
Hours: 48-54 laboratory.
Use of indoor cycling bikes for improving overall physical fitness and health. Students develop a safe and efficient spinning program designed to meet their fitness goals. Suitable for both genders and all fitness levels. 0835.10

26 Body Conditioning: Cardio/Weight Training (1)
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

27 Advanced Body Conditioning: Cardio/Weight Training (1)
Hours: 48-54 laboratory.
Advanced cardio and weight training. Builds upon the fundamentals of biomechanics and exercise covered in Physical Education: Activity 26, including explosive training defined as plyometrics and Olympic training, and advanced multi-joint strength training using flexibility and cardio strength training. 0835.10

28 Yoga (1)
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

31 Introduction to Self-Defense and Personal Safety (1)
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

35 Cardio Fitness for Life (1)
Hours: 48-54 laboratory.
Walking or running for physical health, muscular strength, fitness, weight control, and general well-being. Students develop a personalized fitness program with the assistance of the instructor, allowing them to work at their own pace. Focus includes both cardiovascular efficiency and muscular strength. Suitable for all ages and fitness levels. May be taken 4 times. 0835.10

50 Baseball Fundamentals (1)
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

92LA-H Special Topics Lab: Physical Education (.5-6)
Hours: 48-54 laboratory hours per unit of credit.
Special-interest course of varying length for students who wish further exploration in specific areas of physical education. Topics will be determined by the individual instructor. 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. 0835.10

PHYSICAL EDUCATION: LECTURE (PELEC)

2 Introduction to Athletic Training (3)
(CSU; UC)
Hours: 40-45 lecture; 24-27 laboratory.
Grading: Letter grade only.
Advisory: Possession of current first-aid and cardiopulmonary resuscitation cards.
Principles and knowledge necessary to provide fundamental health care for athletics for those not directly involved with sports medicine. Supplements first-aid background while stressing a preventive approach. 0835.00

11 Football Video Analysis (2)
(CSU; UC)
Hours: 32-36 lecture.
Grading: Letter grade only.
Comprehensive video review of football techniques by football coaches. Video tape from four-year colleges, community colleges, and high schools will be reviewed and analyzed. For physical education majors who want to coach football. May be taken twice. 0835.60

12 Principles and Practices of Officiating Team Sports (3) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. 0835.00

13 Professional Activities: Coaching Team Sports (3) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
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]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Ability to swim 500 yards continuously using each of the following strokes for at least 100 yards: crawl, breaststroke, sidestroke, tread water for two minutes using legs only, and submerge to a depth of seven feet and return a ten pound object to the surface.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
A lifestyle approach to fitness, including the study of nutrition, disease prevention, increased cardiovascular endurance, increased strength, flexibility, stress management, and considerations of aging on the body. 0835.00

16 First Aid (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 one-person 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 First Aid and Emergency Response to Community Disasters (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Students should be able to work in confined spaces and in different positions (e.g. on the ground or the floor).
Prepares the participant to make appropriate decisions in an emergency situation to help sustain life, reduce pain, and minimize the consequence of sudden injury or illness until more advanced medical help can arrive. Course covers triage; professional CPR for adult, child and infant; use of automated external defibrillators, OSHA guidelines for the isolation of blood-borne pathogens in the workplace; open/closed wounds; broken bones; drowning; childbirth; and spinal injuries. Those who successfully complete this course, will be awarded an American Red Cross certificate qualifying the holder to be entered into the National American Red Cross database and be called upon in the case of disasters. Holders of the certificate are also qualified to work at first aid stations at public events such as sporting events, concerts and parades. 0835.00

18 Introduction to Kinesiology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
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 Kinesiology students and assists them in making early career decisions. 0835.00

24 Biomechanics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Biology 20.
An introductory study of anatomical and mechanical analysis of motion as it pertains to exercise and sport. Students will study muscles, joints, bones, nerves and muscle analysis of movement patterns. 0835.20

32 Outdoor Adventures (2)
(CSU; UC credit limitations)
Hours: 16-18 lecture; 48-54 laboratory.
Grading: Letter grade only.
Advisory: Comfort in an outdoors environment and good physical fitness are recommended for course success.
Introduces the techniques of environmentally-sensitive backpacking, evaluation and selection of backpacking equipment, group planning, conditioning, back country safety and first aid, and survival information. Team work and leadership skills appropriate for the back country are introduced. Field trips are required. May be taken twice. 0835.10

92A-H Special Topics: Physical Education Lecture (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

98A,B,C Independent Study: Physical Education (1, 2 or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Designed for the capable, well-motivated student. Each student develops a project in a physical education area of his/her own interest. Student-instructor-division chairperson agreement as to the nature and extent of the project must be reached before the student may enroll. 0835.00

PHYSICAL EDUCATION: TEAM (PETEAM)

For all Physical Education Team courses:
- ***Letter grade only.***
- ***CSU; UC credit limitations***
- ***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 with athletes competing in two seasons).***

Cluster repeatability: Students are limited to four (4) enrollments in any combination of courses within a designated cluster regardless of individual course unit values.

• PETEAM-16, PETEAM-36 (Dance/Spirit Team)

1A Football Team Activity, Offense (1)
Hours: 48-54 laboratory.
Advisory: Competitive football background is recommended.
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)
Hours: 48-54 laboratory.
Advisory: Competitive football background is recommended.
Information and practice in the development of football basic defensive 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)
Hours: 48-54 laboratory.
Advisory: Competitive volleyball background is recommended.
Designed for women interested in learning competitive volleyball and joining the women's intercollegiate team. 0835.10

3 Basketball Team Activity, Women (1)
Hours: 48-54 laboratory.
Focus on history, conditioning, rules, and fundamental skills needed for competitive women's basketball. 0835.10

4 Softball Team Activity, Women (1)
Hours: 48-54 laboratory.
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)
Hours: 48-54 laboratory.
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)
Hours: 48-54 laboratory.
Advisory: Competitive basketball background is recommended.
Designed for men interested in playing competitive men's basketball. 0835.10

7 Baseball Team Activity, Men (1)
Hours: 48-54 laboratory.
Limitation on Enrollment: Competitive baseball experience is required.
Designed for men interested in learning to play competitive baseball at the college level. 0835.10

9 Water Polo Team Activity, Women (1)
Hours: 48-54 laboratory.
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)
Hours: 48-54 laboratory.
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)
Hours: 48-54 laboratory.
Advisory: Competitive track and/or field background is recommended.
Specific experience in track and field. Emphasis on fundamental theory and basic skills. Designed for men interested in competitive track and field events at the college level. 0835.10

13 Track and Field Team Activity, Women (1)
Hours: 48-54 laboratory.
Advisory: Competitive track and/or field background is recommended.
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)
Hours: 48-54 laboratory.
Advisory: Competitive soccer background is recommended.
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)
Hours: 48-54 laboratory.
Advisory: Competitive soccer background is recommended.
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

16 Dance/Spirit Team (1)
(replaces Dance 410)
Hours: 48-54 laboratory.
Limitation on Enrollment: Admission is by audition.
Advisory: Previous dance training is recommended.
Development of performance skills, focusing on Hip Hop and Jazz style techniques. Course is for students who will represent the college at football and basketball games, national dance competitions, and community events. Emphasis on competition-level performance skills, as well as dance team protocol and etiquette. May be taken four times. 0835.10

27 Baseball Team Class, Men (2)
Hours: 96-108 laboratory
Limitation on Enrollment: Retention based on a successful tryout.
Designed for men interested in playing competitive baseball at the college level. Primarily for men who wish to compete in the intercollegiate sport of baseball. 0835.10

36 Dance/Spirit Team (2)
(replaces Dance 410)
Hours: 96-108 laboratory.
Limitation on Enrollment: Admission is by audition.
Advisory: Previous dance training is recommended.
Development of performance skills, focusing on Hip Hop and Jazz style techniques, for dance team members representing the college at sporting events, national competitions, and community events. Emphasis on competition-level performance skills, as well as dance team protocol and etiquette. May be taken four times. 0835.10

Hours for Physical Education (Intercollegiate) Team 41 through 59:
175 laboratory hours arranged per sports season.

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

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)
Limitation on Enrollment: Water polo experience or above average swimming ability is required.
Competitive intercollegiate water polo team involving skills and knowledge of all aspects of competitive play. 0835.50

47 Intercollegiate Baseball Team, Men (2)
Opportunity for men to compete at the intercollegiate level in baseball. 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

56 Intercollegiate Basketball Team, Women (1)
Limitation on Enrollment: Retention based on successful tryout.
Opportunity for women to compete at the intercollegiate level in basketball. Information and daily practice to develop a high level of proficiency in basketball skills and techniques. 0835.50

57 Intercollegiate Basketball Team, Men (1)
Limitation on Enrollment: Retention based on successful tryout.
Opportunity for men to compete at the intercollegiate level in basketball. Information and daily practice to develop a high level of proficiency in basketball skills and techniques. 0835.50

59 Intercollegiate Water Polo Team, Women (2)
Limitation on Enrollment: Water polo experience or above 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.
Safety and proper use of weight training equipment. Performing sport-specific drills and exercises necessary for proper conditioning for competitive athletes. Designed for out-of-season athletes competing at the intercollegiate level. 0835.50

83 Strength and Conditioning for Athletes (In-Season) (2)
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

84 Strength and Conditioning for Athletes (Off-Season) (2)
Advisory: Concurrent or previous enrollment in any Physical Education: Team course.
Advanced sport-specific drills and exercises designed for off-season athletes. Increased volume, intensity, frequency, and duration of specific activities improve strength, speed, flexibility, and overall conditioning, to enhance athletic performance. Exercises are prescribed by the instructor and are tailored to the physical demands of each sport and individuals' capabilities. May be taken twice. 0835.50

PHYSICAL SCIENCE (PHSCI)

10 Survey of Chemistry and Physics (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 425 as determined by the Chaffey assessment process, or completion of Mathematics 410.
Introduction to the principles of physics and chemistry. Topics include: motion, forms of energy, electricity, magnetism, waves, electromagnetic radiation, atomic structure, bonding, phases of matter, pH and nuclear chemistry, acids and bases, and solutions. Course is recommended for liberal studies majors and future teachers. 1901.00

PHYSICS (PHYS)

5 The Ideas of Physics (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 425 as determined by the Chaffey assessment process, or completion of Mathematics 410.
Basic concepts of mass, force, and Newton's Laws of Motion will be covered, as well as work, energy, atoms, temperature, heat, waves, light, electricity, magnetism, and radioactivity. Introduction to physics for students not majoring in a science or in engineering. 1902.00

6 The Ideas of Physics Laboratory (1)
(CSU; UC credit limitations)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Corequisite: Physics 5 (may be taken previously)
Introduction to physics laboratory, for students not majoring in a science or in engineering. Experiments with some of the lecture concepts may include: measurement, free fall, vector addition and components, springs, centripetal force, kinetic energy, gravitational potential energy, conservation of momentum, and Archimedes' principle. 1902.00

20A College Physics I (4) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 31, and Physics 5 or 44 or one year of high school physics.
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major does not require calculus-based physics. Position, velocity, and acceleration of objects are described using vectors. The 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 vibration. Rotational motion includes torque, moment of inertia, angular momentum, and static equilibrium. 1902.00

20B College Physics II (4) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 20A.
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major does not require 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. 1902.00

30A Physics for the Medical and Life Sciences I (4) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 5 or 44 or one year of high-school physics.
Corequisite: Mathematics 65A.
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. The 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. Rotational 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

30B Physics for the Medical and Life Sciences II (4) [Cx]
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 30A.
Course is designed for students majoring in a life or medical science, or engineering technology, whose university major requires calculus-based physics. Simple harmonic motion in spring-mass systems and pendula. Fluid properties as explained by Archimedes' principle and Bernoulli's equation. Thermodynamics, including temperature, heat and heat transfer, ideal gas law, and the differential form of the first and second laws of thermodynamics. Electricity and magnetism, including electric force and field, electric potential energy, potential, capacitance, resistance, electromotive force, magnetic force and field, and Faraday's Law. Inductors, with induced electromotive force presented as a derivative of flux. Power, intensity and loudness of sound waves. Interference, diffraction, and geometrical optics of light waves. 1902.00

44 Introduction to Motion (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Mathematics 61.
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. 1902.00

45 Physics for Scientists and Engineers I (5)
(CSU; UC credit limitations)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 44 and Mathematics 65A.
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 vibration. 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)
(CSU; UC credit limitations)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 45 and Mathematics 65B.
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, electromotive 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)
(CSU; UC credit limitations)
Hours: 64-72 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Physics 46.
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)
(CSU; UC credit limitations)
Hours: 48-54 laboratory hours per unit of credit.
Grading: Letter grade only.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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. May be offered as an Honors course. 2207.00

3 California Politics and Culture (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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

4 Political Theory (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Introduction to the philosophical underpinnings of historical and contemporary political systems. Analysis of theoretical concepts including the nature of justice, power, freedom, and democracy. Views of theorists such as Plato, Machiavelli, and Marx are examined. 2207.00

7 International Relations (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Introduction to the study of comparative politics by analyzing the political systems of select industrialized democracies, current/former communist states, and developing states. Focus on each state's unique ideological, social, economic, and historical factors and an examination of how these factors impact their governments and politics. In addition to surveying democratic and non-democratic systems of governance, emphasis on the process of democratization. 2207.00

21 Urban Politics (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 450 as determined by the Chaffey assessment process, or completion of English 550.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
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

92A-H Special Topics: Political Science (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

PSYCHOLOGY (PSYCH)

1 Introduction to Psychology (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Guidance 2 and Reading 550.
Psychology is the scientific study of behavior and mental processes. This introductory survey course explores major psychological theories and concepts, core empirical findings, and the methods used in psychological science. Topics include biological basis of behavior, perception, cognition and consciousness, learning, memory, emotion, motivation, developmental psychology, personality, social behavior, lifespan development, psychological disorders and their treatment, and applied psychology. May be offered as an Honors course. (C-ID PSY 110) 2001.00

5 Personal and Social Awareness (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
Study of the psychology of human development in adulthood with particular emphasis on biological and social influences. Environmental, cognitive, social, 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 biopsychosocial perspective. 2001.00

25 Developmental Psychology: Lifespan Development (3)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
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. (C-ID PSY 180) 2001.00

41 Biological Psychology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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 method 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

45 Psychoactive Drugs: The Chemistry of Consciousness (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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. (C-ID PSY 120) 2001.00

65 Social Psychology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Psychology 1.
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)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Psychology 1 and Social Science 10.
Survey of research methods currently used in psychology: archival, naturalistic observation, case study, survey, and field and laboratory experiments. Designed for the psychology major and others who require familiarity with such research techniques. Emphasis on student participation in conducting research and analyzing data. (C-ID PSY 205B) 2001.00

430 Health Psychology (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
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.

10 Anatomy and Radiographic Positioning I (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Corequisite: Radiologic Technology 10L.
Comprehensive study of radiographic positioning of the chest, upper extremity, lower extremity, shoulder and pelvic girdle, abdomen, and urinary system, with emphasis on associated anatomy, radiographic image evaluation, communication, patient care and safety. 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 Anatomy and Radiographic Positioning I (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Corequisite: Radiologic Technology 10.
Discussion, application, demonstration, role-play and timed simulated procedure evaluations for positioning of the chest, upper extremity, lower extremity, shoulder girdle, pelvic girdles, abdomen, and urinary system. Emphasis on associated anatomy, radiation protection, patient communication and effective interaction and communication with patient/family. Radiographic images are evaluated for appropriate anatomy, image quality and radiation protection according to standard criteria.
1225.00

16 Medical Procedures for Radiologic Technologists (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Corequisite: Radiologic Technology 16L.
Overview of radiography's foundations and the practitioner's role in the health care delivery system, to include radiology's history, legal terminology, concepts, principles, professional responsibilities, and safety. Topics include ethical issues and dilemmas found in clinical practice, role of the radiographer in patient education; attitudes and communication in patient care; professional standards and the ASRT scope of practice; patient care of pediatric, geriatric, and patents with tubes, catheters and lines; routine, unique situations, and trauma care patient procedures; Infection control procedures (medical and surgical asepsis) using standard precautions; skills theory including the acquired of vital signs, enema administration, and urinary catheterization; and the recognition and treatment of adverse reactions to contrast agents. Patient and radiographer safety protocols, including body mechanics, patient transfer and movement, positioning, immobilization, environmental safety and accident and incident reporting are emphasized. Laboratory experiences complement the didactic portion. 1225.00

16L Laboratory for Medical Procedures for Radiologic Technologists (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment :Admission to the Radiologic Technology program.
Corequisite: RADTEC-16.
Discussion, application, role-play and timed simulated procedure evaluations of the medical procedures and techniques commonly used in radiology departments. Enema administration, drug administration and urinary catheterization procedures. Infection control procedures using standard precautions including the use of portable equipment. Assessment of patient status for vital signs and blood pressure. Focus on patient care, safety, effective communication, and proper body mechanics for wheelchair/stretcher transfer along with the importance of documentation and informed consent is emphasized. Medical and surgical aseptic technique is studied in depth. 1225.00

20 Radiologic Science and Protection (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Corequisite: Radiologic Technology 20L.
Course establishes a basic knowledge of the fundamental properties of radiation, x-ray production and interaction with matter. The content covers the operation of radiographic equipment and digital imaging systems. The prime technical factors required to produce a radiographic image and influence the production and recording of radiologic images are introduced. Imaging receptors for film/screen, computed radiography and direct-digital radiography systems are compared for methods of image acquisition, processing, delivery, storage, image display, archiving and retrieval. Radiation interaction effects on living systems and the factors affecting biological responses are studied. Emphasis is placed on attenuation and absorption of radiation within the human body, basic radiation measurement and the associated health effects. Principles of radiologic protection and safety for the patient and technologist are reviewed and correlated to state and federal radiation control laws. The use of accessories in radiography is explored. Laboratory experiments are performed to compliment the didactic instruction. 1225.00

20L Laboratory for Radiologic Science and Protection (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Corequisite: Radiologic Technology 20.
Experiments are performed in on-campus radiographic laboratories to illustrate the theories presented in lecture. Through a process of discussion, demonstration, return demonstration, group sharing and demonstration evaluation, students correlate concepts with the actual making of a radiographic image. Laboratory experiments demonstrate the actual production of radiation, facilitating student acquisition of competency and skill in the handling of radiographic equipment. Calculations of exposure factors needed to produce radiographic images are performed for digital radiography systems. Focus is placed on equipment manipulation (to include mobile units), image receptors, ionization and exposure, beam intensity and radiation protection. Radiographic image evaluation and critiques are performed to assist students digital imaging system. 1225.00

25 Anatomy and Radiographic Positioning II (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program.
Prerequisite: Radiologic Technology 10.
Corequisite: Radiologic Technology 25L.
Comprehensive study of radiographic positioning of the vertebral column, bony thorax, gastrointestinal tract, and biliary system. Imaging considerations for trauma, mobile/portable, surgical and age specific approaches for pediatric and geriatric patients. Emphasis on associated anatomy, related introductory pathology, radiographic image evaluation, communication, and patient care and safety. Radiation protection and the evaluation of optimal diagnostic images are stressed. Course provides the knowledge base and cognitive skills necessary to perform standard radiographic procedures. 1225.00

25L Laboratory for Anatomy and Radiographic Positioning II (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology Program.
Prerequisite: Radiologic Technology 10L.
Corequisite: Radiologic Technology 25.
Discussion, application, demonstration, role-play and timed simulated procedure evaluations for positioning of the vertebral column, bony thorax, gastrointestinal and biliary systems, trauma, mobile/surgical, pediatric and geriatric radiography. Emphasis on associated anatomy, radiation protection, patient communication and effective interaction and communication with patient/family. Radiographic images are evaluated for appropriate anatomy, image quality and radiation protection measures according to standard criteria. 1225.00

31 Radiographic Clinical Education I (2)
(CSU)
Hours: 96-108 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology Program.
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. Using competency-based assignments, the student first observes and then performs - under direct supervision -patient care and radiographic procedures. Course emphasis on familiarizing the student with the clinical educational setting, patient-centered clinical practice, professional development, and working relationships with other health care professionals. 1225.00

34 Radiographic Imaging (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Prerequisite: Radiologic Technology 20.
Corequisite: Radiologic Technology 34L.
Comprehensive study of digital imaging systems, including design, image acquisition, display, processing, delivery, and storage. Review of diagnostic radiology equipment components, function, and operation, to include x-ray tube circuitry and radiographic grids. Differences between detectors for cassette-based and cassetteless digital systems response to radiation are explored. In-depth study of radiation protection, health physics, cell radiosensitivity, and radiobiologic effects on humans. 1225.00

34L Laboratory for Radiographic Imaging (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Prerequisite: Radiologic Technology 20L.
Corequisite: Radiologic Technology 34.
Theoretical concepts are correlated with laboratory results in a series of experiments conducted in on-campus laboratories. Through a process of discussion, demonstration, return demonstration, group sharing, and evaluation, students apply radiation theory to the production of quality digital images. Digital imaging using computed radiography cassettes demonstrate the range of possible exposure latitude and association with patient dose considerations. The use and misuse of grids and quality control tests are performed and evaluated. Beam restriction (collimation), centering sensitivity, acquisition errors, and post-processing capabilities of digital imaging are also explored. Image evaluation and critiques assist students in developing the required skills when utilizing digital imaging systems. 1225.00

40 Radiographic Clinical Education II (8)
(CSU)
Hours: 384-432 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program.
Prerequisite: Radiologic Technology 31.
Clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Using structured competency-based assignments concepts of team practice, patient-centered clinical practice and professional development are discussed, examined, evaluated, and reinforced. Course emphasis on patient assessment, competent performance of radiologic images, and well-being of the patient pre-, during, and post-procedure. Students perform under direct or indirect supervision as appropriate following the procedures in the Radiology Technology Student Handbook. 1225.00

50 Radiographic Clinical Education III (6)
(CSU)
Hours: 288-324 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
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 imaging, and total quality management.
1225.00

55 Radiographic Equipment and Clinical Application (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Course establishes a knowledge base in fluoroscopic 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. 1225.00

61 Radiographic Clinical Education IV (8)
(CSU)
Hours: 384-432 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing.
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, competency-based assignments in the 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 imaging, and total quality management.
1225.00

66 Anatomy and Radiographic Positioning III (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing.
Corequisite: Radiologic Technology 66L.
Comprehensive study of radiographic positioning of the calvarium, facial area, sinuses, and temporal bone provides the knowledge base necessary to perform standard imaging procedures. An introduction to CT and other modalities is also included. Laboratory experience complements the didactic portion. 1225.00

66L Laboratory for Anatomy and Radiographic Positioning III (1)
(CSU)
Hours: 48-54 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing.
Corequisite: Radiologic Technology 66.
Laboratory practice in the production of radiographic images of the calvarium, facial area, sinuses, and temporal bone on simulated patients. Emphasis on relevant anatomy, radiation protection, and effective patient interaction in the production of quality radiographic images and their evaluation. 1225.00

70 Radiographic Clinical Education V (11)
(CSU)
Hours: 528-594 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing.
Guided practice in the application of radiologic technology to patients in a hospital environment, with increasingly independent performance by the student practitioner. Clinical experiences reinforce theory, perfect skills, and strengthen student-patient interactions, providing for the production of quality diagnostic images and patient well-being prior to, during, and following the procedure. Students move between clinical
sites to experience different equipment and procedures. Evening shifts are required.
1225.00

77 Radiographic Pathology (3)
(replaces Radiographic Technology 76)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing.
Introduction to theories of disease causation and the pathophysiologic 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. 1225.00

81 Radiographic Clinical Education VI (5)
(CSU)
Hours: 240-270 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program.
Prerequisite: Radiologic Technology 70.
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 to assess their skills for employability. 1225.00

85 Radiographic Review and Exam Preparation (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Admission to the Radiologic Technology program and successful completion of the fifth semester of the Radiologic Technology program.
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. 1225.00

470 Venipuncture for Imaging Professionals (1.0)
(Degree-applicable)
Hours: 24-27 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Student must be a 2nd year radiography student or a graduate of a JRCERT-approved radiography program, and possess a current health care provider CPR card.
Corequisite: Radiologic Technology 470L.
Basic concepts of the pharmacology associated with venipuncture. Procedural techniques, anatomy and physiology of venipuncture sites; use of instruments and related equipment, and administration of diagnostic contrast agents and/or intravenous medication. Emphasis on appropriate delivery of patient care during the procedure and documentation requirements. 1225.00

470L Venipuncture Laboratory for Imaging Professionals (.5)
(Degree-applicable)
Hours: 24-27 laboratory.
Grading: Letter grade only.
Limitation on Enrollment: Student must be a 2nd year radiography student or a graduate of a JRCERT-approved radiography program, and possess a current health care provider CPR card.
Corequisite: Radiologic Technology 470.
Application of skills and reinforcement of theory in the basic concepts of pharmacology and venipuncture. Demonstration of the anatomy and physiology of venipuncture sites, venipuncture instrumentation, I.V. solutions, and use of related equipment. Students first execute simulated demonstrations, then perform a minimum of 10 successful venipuncture sticks on individuals. Patient care aspects of venipuncture are emphasized. 1225.00

READING (READ)

1 Advanced Reading (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 1 as determined by the Chaffey assessment process, or completion of Reading 550.
Systematic program to enrich vocabulary, increase reading speed, and develop collegiate-level skills in literal and critical comprehension and analysis. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

500 Beginning Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Pass/No Pass grade only.
Prerequisite: Eligibility for Reading 500 as determined by the Chaffey assessment process.
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. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

510 Introduction to Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 510 as determined by the Chaffey assessment process, or completion of Reading 500.
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. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

520 Intermediate Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 520 as determined by the Chaffey assessment process, or completion of Reading 510.
Introductory reading and text-based 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. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

530 Interactive Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 530 as determined by the Chaffey assessment process, or completion of Reading 520.
Focus on reading comprehension, literary terminology, and vocabulary development, using literature as a basis. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

550 Critical Reading (3)
(Non-degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Reading 550 as determined by the Chaffey assessment process, or completion of Reading 530.
Using predominantly non-fiction texts, students gain the critical reading skills required for textual analysis. Topics include developing comprehension, expanding vocabulary, and acquiring critical reading skills. Ten hours of supplemental learning in a Success Center that supports this course is required. 1520.00

REAL ESTATE (RE)

10 Real Estate Principles (3) [Cx]
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Real Estate 10.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Real Estate 10.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Real Estate 10.
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)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Real Estate 10.
Advisory: Current real estate license may substitute for Real Estate 10.
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 salesperson's license. 0511.00

86 Real Estate Property Management (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Real Estate 10.
Introduction to management of real estate property. Identification and analysis of functions, responsibilities, legal rights, liabilities, and leasing instruments of property management. Course is an elective for the California sales or broker's license.
0511.00

92A-H Special Topics: Real Estate (.5-6)
(CSU)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Real Estate 70.
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) certificate-residential/certificate-general appraisal requirements. 0511.00

475 Real Estate Escrow I (3)
(Degree-applicable)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of 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)

500 Introduction to Science (1)
(Non-degree-applicable)
Hours: 48-54 laboratory.
Grading: Pass/No Pass grade only.
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)

(ALSO SEE ANTHROPOLOGY, GERONTOLOGY, HISTORY, PHILOSOPHY, POLITICAL SCIENCE, PSYCHOLOGY AND SOCIOLOGY)

10 Statistics for Social Science (4)
(CSU; UC credit limitations)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 or higher as determined by the Chaffey assessment process, or completion of Mathematics 425.
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). (C-ID SOCI 125) 2201.00

13 Introduction to Social Work (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Comprehensive exploration of the scope of social work. Historical overview of social welfare as an institutional response to social needs. Analysis of current trends and future possibilities. 2104.00

17 Human Sexuality (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of one or more behavioral science courses.
Interdisciplinary introduction to human sexuality, with an emphasis on sexual values, sexual communication, and sexual relationships. Includes physiological, cross-cultural, sociological, and psychological information, as well as an evaluation of sex research. Lectures are supplemented by class discussion, video presentations, and demonstrations. 2201.00

24 Introduction to Ethnic Studies (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of the American experience of ethnic and racial relations, and introduction to fundamental theories of racism and ethnocentrism. Exploration of the issues confronted by minority groups in the United States and the interrelationships of those minority groups with each other and the dominant American culture. Emphasis is given to Native, African, Hispanic, and Asian-American cultural experiences.
2203.00

SOCIOLOGY (SOC)

(ALSO SEE SOCIAL SCIENCE)

10 Introduction to Sociology (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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. (C-ID SOCI 110) 2208.00

11 Popular Culture (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Sociology 10.
Analyzes the role of popular culture as a site of contemporary social practices and cultural politics. Considers the institutional organization and production of popular culture, its meanings and symbols, and its role in shaping and reflecting social attitudes, interactions, and behaviors. 2208.00

14 Sociology of Gender (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Sociology 10.
Roles and status of women and men in society. Topics include historical constructs and practices; sex and gender stratification; cross-cultural variances; impact of political and economic changes on societal expectations, family dynamics, education and laws; socialization processes; media influences; and sex and gender debates. (C-ID SOCI 140) 2208.00

15 Ethnic and Race Relations: U.S. and Global Perspectives (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Sociology 10.
Latino-American, Asian-American, and Native American. Scrutiny of historical, socioeconomic, and gender influence on inter-group relations. Examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. Significance of contemporary multiculturalism, and its relation to racism, ethnocentrism, and sexism. 2208.00

16 Marriage, Family and Relationships (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
Socio-historical, 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, variation in relationships, changes in the definition of relationships over time, and abusive relationships. Emphasis on the application of theories, research, and social factors. (C-ID SOCI 130) 2208.00

18 Sociology of Aging (3)
(Also available as Gerontology 18)
(CSU; UC credit limitations)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 450 or English as a Second Language 450.
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

25 Introduction to Chicano/Latino Studies in the United States (3)
(formerly Social Science 25)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of Chicano/Latino people in the United States, examining race, ethnicity, gender and sexuality, social class, history, politics, institutional discrimination, culture, migration and globalization, literature, and the arts. 2203.00

26 Introduction to Latin American Societies (3)
(formerly Social Science 26)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of the Latin American societies in Mexico, Central and South America, and the Caribbean. Examination of the patterns of social, economic, political, and cultural change in modern Latin America, and the multidimensional legacies of conquest. Analysis of U.S.-Latin American relations and symbiotic influences. Study of cultural diversity, race, and gender as reflected in religion, art, literature, music, and film. Scrutiny of the influence of race, gender, class division, and social conditions as stimuli for cultural change, social movements, revolutions, civil wars, dictatorships, and democracy. Application of sociological perspectives to the study of Latin American societies. 2203.00

70 Social Problems (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Sociology 10.
An examination of contemporary social problems with emphasis on how issues come to be defined as social problems, the causes and consequences of social problems, as well as an evaluation of solutions. (C-ID SOCI 115) 2208.00

80 Introduction to Research Methods in Sociology (4)
(CSU; UC)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Prerequisite: Sociology 10 and Social Science 10.
Survey of research methods from a sociological perspective to understand and explain how social forces affect groups within a society. Includes attention to the nature of sociological theory, hypotheses, variables, and ethics of research. Sociological research dealing with quantitative data such as surveys and experiments; qualitative data such as participant observation, in-depth interviews, case studies, and ethnography; secondary analysis such as comparative historical research, census analysis, and content analysis. Designed for the sociology major and others who require familiarity with sociological research techniques. Emphasis on student participation in conducting research and analyzing data from a variety of methodological approaches. (C-ID SOCI 120) 2208.00

92A-H Special Topics: Sociology (.5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
Special-interest lecture course for students who wish further exploration in specific areas of sociology. Topics are determined by the individual 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 corequisites and/or prerequisites based on the content of the course. 2208.00

SPANISH (SPAN)

1 Elementary Spanish (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
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. Ten hours of supplemental learning 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

1SS Elementary Spanish for Spanish Speakers (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Advisory: Ability to speak and comprehend basic Spanish.
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. 1105.00

2 Elementary Spanish (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 1 or one year of high school Spanish.
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. Ten hours of supplemental learning in a Success Center that supports this course is required. Spanish 2 is not recommended for heritage (native) speakers of Spanish. 1105.00

2SS Elementary Spanish for Spanish Speakers (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 1SS.
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 on Hispanic culture. Course is conducted in Spanish. 1105.00

3 Intermediate Spanish (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 2 or two years of high school Spanish.
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. Ten hours of supplemental learning in a Success Center that supports this course is required. 1105.00

4 Intermediate Spanish (4)
(CSU; UC)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 2SS or 3.
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. Ten hours of supplemental learning in a Success Center that supports this course is required. 1105.00

8 Survey of Hispanic Literature: 1700-Present (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 4 or 1SS.
Chronological survey, conducted in Spanish, of the history and development of Spanish and Spanish-American literature, from 1700 to the present. Prepares students for upper-division language courses through a comprehensive study of the Spanish language. Reading selections introduce aspects of the life and culture of the Spanish-speaking peoples. 1105.00

13 Survey of Mexican Literature (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Survey of Mexican literature (in translation) of the twentieth and twenty-first centuries, with a background in earlier works providing insight into these great works of literature. Close reading - with particular attention to culturally influenced writing styles and literary techniques - guides the inexperienced reader toward greater understanding and appreciation of the literature of Mexico. 1105.00

14 Latin American Literature in Translation (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 1A.
Reading and discussion of major works of Latin American literature in translation from different historical periods. Selections will be made from different genres: novel, drama, poetry and the essay. Students will learn to identify literary movements and recognize historical, cultural and artistic influences in each work. 1105.00

15 Elementary Spanish Conversation (2)
(CSU)
Hours: 32-36 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 1.
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. 1105.00

16 Spanish Composition (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Spanish 2SS or 3.
Introduction to the basics of expository writing in the Spanish language. Focus on paragraph development using appropriate grammar, punctuation, tense, style, and complex sentences, with ultimate goal of writing an essay in Spanish using sources. 1105.00

92A-H Special Topics: Spanish (,5-6)
(CSU; UC credit limitations)
Hours: 16-18 lecture hours per unit of credit.
Grading: Letter grade only.
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

98A,B,C Independent Study: Spanish Literature (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
Designed for the capable, well-motivated student. Student explores and develops a literary project. Student-instructor agreement as to the nature and extent of the project must be reached before the student enrolls. May be taken three times, regardless of the unit combination. 1105.00

STATISTICS (STAT)

10 Elementary Statistics (4)
(CSU; UC credit limitations)
Hours: 64-72 lecture.
Grading: Letter grade only.
Prerequisite: Eligibility for Mathematics 25 or higher as determined by the Chaffey assessment process, or completion of Mathematics 425.
Introduction to descriptive and inferential statistics with problem sets and examples from a variety of disciplines. 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; hypotheses testing; analysis of variance; chi square analysis; and linear regression and correlation. A specific graphing utility is required; see instructor before acquiring. May be offered as an Honors course. 1701.00

THEATRE ARTS (THEATRE)

1 Introduction to Theatre (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 450 and Reading 550.
Course introduces students to elements of the production process including playwriting, acting, directing, design, and criticism. Students survey different periods, cultures, styles, and genres of theatre through play reading, discussion, films, and the viewing and critiquing of live theatre. Attendance at theatre productions is a required part of the course. 1007.00

2 Theatrical Dance (3)
(Also available as Dance 2)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study of physical movement as it relates to the body on stage, including movements commonly used in musical theatre, jazz, and modern dance techniques. This course is for the theatre and/or dance major, or any performer or student interested in developing awareness and understanding the importance of control, coordination, balance, strength, and conscious development of movement habits. 1007.00

4 Theatre History: Ancient to 1700 (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 450 and Reading 550.
Study of theatre history from its origins through the 17th century. Emphasis on historical, philosophical, and sociological influences on development of the theatre. Plays are read for analysis of structure, plot, character and historical relevance. 1007.00

5 Theatre History: 1700-Present (3) [Cx]
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of English 450 and Reading 550.
Study of theatre history from the late 17th century through the present. Emphasis on historical, philosophical, and sociological influences on the development of the theatre. Plays are read for analysis of structure, plot, character and historical relevance 1007.00

10 Beginning Acting (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Theory of acting and acting techniques with an introduction to Stanislavski's method of acting. Provides a foundation in acting through a study of improvisation, vocal techniques, historical concepts, and theory through scene and monologue work. Emphasis on character development through the use of voice, movement and script analysis. 1007.00

12 Intermediate Acting (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Prerequisite: Theatre 10.
In depth application of the techniques explored in beginning acting, with emphasis on characterization and scene study. 1007.00

14 Stylized Acting (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Theatre Arts 10.
Advanced acting techniques necessary for drama of various types: stylized, classic and modern. Some work on dialects as needed for specific scenes. 1007.00

18 Seminar in Television Production: Acting Techniques (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Theatre Arts 10 and 12, and/or considerable theatre or film background.
Techniques needed to work before a camera, either motion-picture or television. May be taken four times. 1007.00

20 Directing for the Stage I (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Theatre Arts 12, and Theatre Arts 30, 40, 50, 51 or 56.
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)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Advisory: Completion of Theatre Arts 20, and Theatre Arts 30, 40, 50, 51 or 56.
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)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
The theory and practice of stagecraft including construction techniques, painting properties, rigging and lighting, sound, knowledge of tools and equipment, shop safety, and computer assisted set-lighting and sound design. Course involves participation in all the technical aspects of preparing a scheduled College production. May be taken four times. 1006.00

32 Theatre Design - Lighting (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study and execution of stage lighting with emphasis on equipment, control, and color, and their relationships to design. 1006.00

35 Musical Theatre Performance (3)
(CSU)
Hours: 96-108 studio.
Grading: Letter grade only.
Advisory: Completion of Theatre Arts 10.
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 twice. 1006.00

36 Stage Management (3)
(CSU)
Hours: 48-54 lecture.
Grading: Letter grade only.
Study and practical application of the practices of a stage manager as they pertain to a theatrical production process. Emphasis is placed on the duties, responsibilities and procedures from pre-production to post-production. The course will prepare students interested in stage management positions for the Theatre Arts Department productions. 1006.00

40 Stage Costuming (3)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Students will study costume history, design, and basic construction techniques as an introduction to basic theatrical costuming. Fabrics and their various uses will be investigated. Students will also participate in the stage production as related to costuming. May be taken three times. 1006.00

42 Theatrical Makeup (3)
(CSU; UC)
Hours: 32-36 lecture; 48-54 laboratory.
Grading: Letter grade only.
Introduction to 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. May be taken twice. 1006.00

50 Main Stage Production Workshop I (3)
(CSU; UC)
Hours: 144-162 laboratory.
Grading: Letter grade only.
A continuation of supervised practical experience in the preparation and public performance of a faculty-directed theatrical production. Requires participation in an acting, design, or production role. May be taken four times. 1006.00

51 Main Stage Production Workshop II (3)
(CSU; UC)
Hours: 144-162 laboratory.
Grading: Letter grade only.
Prerequisite: Theatre Arts 50.
A continuation of supervised practical experience in the preparation and public performance of a faculty-directed theatrical production. Requires participation in an acting, design or production role. May be taken four times. 1006.00

56 Children's Theatre (4) [Cx]
(CSU)
Hours: 48-54 lecture; 48-54 laboratory.
Grading: Letter grade only.
Selection and presentation of a play for children at the elementary or junior high level. May be taken four times. 1006.00

60 Seminar: Acting (3)
(CSU; UC)
Hours: 48-54 lecture.
Grading: Letter grade only.
Limitation on Enrollment: Consent of instructor is required prior to registration.
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

98A,B,C Independent Study: Theatre Arts (1, 2, or 3)
(CSU and UC credit limitations)
Grading: Letter grade only.
Limitation on Enrollment: Instructor signature is required for registration.
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 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 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

Student Support Services

Athletics

Playing under the name of The Panthers, the men's and women's teams compete in the Foothill Athletic Conference, the South Coast Conference (aquatics), and the Central West Conference (football).. 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, the South Coast Conference (aquatics), and the Central West Conference (football). Intercollegiate athletic competition is governed by the California Community College Athletic Association (CCCAA).

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 recently renovated Earl Sicosky Gymnasium has a seating capacity of 715. The upper level provides bleachers, a yoga/aerobics room and the George Colbath Fitness Lab. The student locker rooms are located on the west side of the building; team locker rooms are located on the east side. The Sports Center is located directly north of the current gymnasium. This facility seats 1,693 and provides competition-level courts for basketball and volleyball. The plaza area may also be used for campus events. Other athletic facilities on campus include:

- Tennis courts
- Grigsby Field (a 4,200 seat stadium with football field and track)
- Lowder Field (baseball)
- Handball courts
- State-of-the-art softball facility
- Strength and conditioning lab
- Two additional fields for physical education and athletic activities
- Swimming pool (located immediately south of the gymnasium)

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 for students who are receiving CalWORKs. This program is specifically designed to assist students in developing the skills necessary to obtain employment at self-sufficient wages.. 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) 652-6049 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) 652- 6043.

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. Trainers have business and industry experience and excellent credentials. The customized training and development programs are low cost and in many instances, funded by the California Employment Training Panel contract awarded to Chaffey College's Economic and Workforce Development Department. 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) 652- 7642 for further information.

Housing

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

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 61ABC.

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 or accessed online at www.chaffey.edu/stuactiv/student_handbook.pdf.

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, 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 5:00 p.m.: Friday: 8:00 a.m. to 1:00 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 seventeen 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 College District. Clubs and organizations that have been chartered are:

- AMAN/AWOMAN
- Anime Club
- Anthropology Club
- Associated Press Club
- Associated Students of Chaffey College (A.S.C.C.)
- (The) Avid Zoologists Club
- Ceramics Club
- Chaffey Art Organization
- Chaffey College Car Club
- Chaffey College Dental Club
- Chaffey College Engineering Club
- Chaffey College Feminists
- Chaffey College Scrubs
- Chemistry Club
- Child Development Club
- Christians at Chaffey College
- Civics Club
- Design Culture
- Divine Favor
- Electronic Music Club
- Future Teachers Club
- Game Development
- Gay-Straight Alliance
- Glee Club
- Hotel Management and Culinary Club
- I.D.E.A.S @ Chaffey
- Interior Design Club
- Kappa Sigma Nu
- Multicultural Club
- Muslim Student Association (MSA)
- Online to College
- Pen Empire
- Philosophy Club
- Poetry People
- Pre-Med Society
- Puente Club
- Spanish Club
- The Cinema and Television Club
- The Club of Secular Understanding
- Theatre Club
- United We Stand Club
- Untitled (Wignall Museum Student Club)

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 via 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".

The Admissions and Records Office maintains grade reports, student academic records, courses taken, units attempted, units earned, grades, grade points, graduation dates, military credit, non-credit enrollment and other data, and prepares class roll sheets, diplomas, and certificates. Community services academic history is only maintained from Fall 1999 forward. The Admissions and Records Office provides photo ID services during specific business hours. Veterans Services is also located in the Admissions and Records Office.

BOOKSTORES

With locations on the Rancho, Chino and Fontana Campuses, the bookstore offers several programs and services to lower the cost of textbooks for students. Each location has new and used textbooks, electronic books (e-books), textbook rentals, as well as a large selection of snacks, drinks, prepackaged lunch items, apparel, gift items, and office and art supplies. The bookstore offers online textbook ordering and year round buyback of textbooks. Some of the other services available at the bookstore include Omnitrans bus passes, incoming and outgoing fax services, postage stamps, discounted movie and amusement park tickets, laptop repair, ink and e-waste recycling, international student ID cards (ISIC), gift cards and cash back on debit card. Additional details are provided at books.chafffey.edu. The Chaffey College Bookstore is the #1 employer of Chaffey students and a primary scholarship sponsor. All residual proceeds benefit Chaffey College students.

CAREER CENTER

It is extremely important for students to make educated and informed career decisions in this global economy. Professional career counselors are available in the Career Center, located in MACC-203 campus to assist Chaffey College students and members of the community in formulating their career goals by assessing their interests, aptitudes, values and personality type to help them make their career choices. The Career Center also provides workshops regarding interview techniques, resume writing, career networking opportunities and a career resource library. Several career and personality assessments are available online through the Career Center website at www.chaffey.edu/careercenter. The Myers-Briggs Type Indicator personality assessment is also available for a fee. To make a comprehensive career counseling appointment, contact the Career Center at (909) 652-6511.

CHILD DEVELOPMENT CENTER

The Chaffey College Child Development Center located at the Rancho Cucamonga Campus provides low cost, high quality child care services for children.

The Center is licensed by the State of California, Title 22, and provides subsidized childcare services through the State Department of Education, Child Development Divisions, Title V funding. Parents who are eligible for free or reduced child care services will pay fees according to a sliding fee scale provided by the State Department of Education. The maximum group size in the preschool program is 24 children and the adult/child ratio is 1:8. The maximum group size in the toddler program is 12 children. The adult/child ratio is 1:4. The Center has an open door policy which encourages all parents to participate in the Center classrooms.

The Child Development Center welcomes all children regardless of sex, race, religion, ethnicity, national origin or ability. The curriculum is based on interest and individual needs of the children and provides a flexible framework to support the growth of each child. Child care services are offered to students, staff, faculty and community families. The Center is opened Monday through Friday 7:00am to 5:00pm.

The Child Development Center's mission is:

- To provide high quality, developmentally-appropriate child care and educational experiences to children
- To support Chaffey College students in their educational and vocational goals
- To provide training and employment to individuals seeking careers working with children and families

Through the apprentice program, the Chaffey College Child Development Center offers employment opportunities to students enrolled in child development classes. The purpose of the apprentice program is to help students gain work experience and obtain a child development permit required for employment in state and federally funded programs. Employment applications are available online at www.chaffey.edu/childctr/index.shtml or at the Child Development Center. Employment applications are accepted throughout the semester.

Students enrolled 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) 652-6865.

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 valuable resources for students' questions and concerns.

For information regarding services available relating to career planning, see the heading "Global Career Center."

The Chaffey College Chino and Fontana Campuses are also 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.

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 those students. 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 support services includes, but is not limited to:

- Individual educational planning
- Assistive Technology Center
- Academic/vocational counseling
- On-campus transportation
- Adapted parking spaces
- Campus orientation
- Priority registration
- Course substitution assistance
- Adaptive equipment
- Print enlargement
- Alternative media
- Test-taking facilitation
- Reader and 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 Office as soon as the need is known, as specific requirements and lengthy acquisition timelines apply. Students are strongly encouraged to also meet with their instructors to determine accessibility of the course material.

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
- Self-Advocacy
- Basic Academic Skills
- Assistive Technology
- Study Skills

The DPS Office is currently located in Campus Center West (CCE -14) at the Rancho Cucamonga Campus. The hours are:

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

DPS counselors also are available at the Chino and Fontana campuses. Appointments can be made at any location by calling (909) 652-6379. The toll free number for the California Relay Service is 1-800-735-2929. For more information, visit the DPS website at www.chaffey.edu/dps.

In addition to the above facilities and services, Chaffey College offers a 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 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.

DPS also offers an instructional program in basic life skills for individuals with developmental disabilities who are employed at Diversified Industries, a supported work environment located in Montclair. For further information regarding this program, please contact the DPS Office at (909) 652-6379 or Diversified Industries at (909) 982-4090, ext. 21.

EXTENDED OPPORTUNITY PROGRAMS AND SERVICES (EOPS)

The Extended Opportunity Programs and Services (EOPS) office is located in MACC 205. 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) 652-6349.

FOOD SERVICES

The Chaffey Dining Commons on the Rancho campus in the MACC Building is a top notch operation offering a variety of high quality menu options, name brands, and a welcoming environment. Additionally, the bookstore on each Chaffey campus offers a variety of snacks, beverages, sandwiches, hot and healthy food items, as well as coffee and/or smoothies. Food services are also available on the Rancho campus at the Panther Express (located near the HS Building) and the Panther Cub Café (located in the Sports Center). Food Service gift cards are available for purchase at any of these locations.

LEARNING AND EDUCATIONAL DEVELOPMENT

The Learning and Educational Development (LED) program is assists 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- 7407 for further information, location, hours of operation, and appointments.

LIBRARY/CYBRARY

The Library on the Rancho Cucamonga Campus and the Cybrary on the Chino and Fontana Campuses provide services and resources to maintain effective learning programs and to empower the diverse student population to persist toward successful goal achievement. We provide 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 and Cybraries provide 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 (at the Rancho Library only)
- A book request service whereby students can request items in the circulating collections at the Rancho Library to be sent to either Cybrary for pickup
- An instructional video collection (at the Rancho Library only) that has been digitized and is accessible at Chaffey networked terminals in Rancho Cucamonga, Chino, and Fontana.
- A reserve book collection
- An online reserve collection
- Photocopiers
- Access 24 hours a day, 7 days a week to online databases

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

You may contact the Library on the Rancho Cucamonga campus at (909) 652-6800, the Chino Campus Cybrary at (909)652-8115 and the Fontana Campus Cybrary at (909) 652-7450. You may also check the website at www.chaffey.edu/library for current hours.

STUDENT EMPLOYMENT OFFICE

The Student Employment Office provides job 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 and local 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. The Career Center is also available to assist with resumé preparation and interviewing techniques.

2. **Cooperative Education**
   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 the classroom and the workplace. For more information, contact (909) 652-6190.

3. **Personnel Services**
   The Student Employment Office 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 will also assist in providing employment verifications and in addressing any personnel concerns that might arise.

The Student Employment Office is located on the Rancho Cucamonga Campus in the Career Center. Students may contact the Student Employment Office at (909) 652-6511 with any questions 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.

Pursuant to section 76355 of the Education Code, students who can provide documentation of active membership in a religious organization that relies exclusively on prayer for healing may request to have the Health Fee waived. Applications for waiver are available in the Student Health Services office. Students may have their health fee waived if they are approved for a Board of Governors Fee Waiver. 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 the MACC-202 at the Rancho Cucamonga Campus. Usual clinic hours are:

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

For more information or to schedule appointments, call (909) 652-6331.

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 are designed to help students with particular subject area courses and skills. Multidisciplinary Centers 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.

LANGUAGE SUCCESS CENTER
BEB Building, 1st Floor
(909) 652-6907
(ESL and Modern Languages)
(909) 652-6820 (Reading and Writing)

MATH SUCCESS CENTER
Math Building, Room 121• (909) 652-6452

MULTIDISCIPLINARY SUCCESS CENTER
Library • (909) 652-6932

CHINO SUCCESS CENTER
CHMB-145
(909) 652-8150

FONTANA SUCCESS CENTER
FNFC- 122
(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 material, 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 Mondays and Thursdays 7:30am-7:00pm, Tuesdays and Wednesdays, 7:30am-4:30pm and Fridays 7:30am-2:00pm. More information can be obtained by calling (909) 652-6233 or visiting the Transfer Center on Chaffey's website www.chaffey.edu.

VETERANS RESOURCE CENTER
Chaffey College is grateful for the contributions made by members of the United States armed services, both at home and abroad. The Veterans Resource Center provides information on programs and services like Veterans Education Benefits, the local VA office, degree and certificate requirements, transfer options, linkage to community resources, a veterans club and more. The center is focused on camaraderie, academic success, and health and well being.

The center is staffed by veterans serving other veterans. The atmosphere is welcoming and offers a relaxing environment for veterans and their families. The center is located in the AD Building Room 125 on the Rancho Cucamonga campus. More information can be obtained by calling (909) 652-6235 or visiting us on the web at www.chaffey.edu/vets.

Policies and Regulations

Academic Freedom

The District is committed to academic freedom, but recognizes that academic freedom does not allow sexual harassment or any other form of unlawful harassment or discrimination. The lecture, content, and discourse that are an intrinsic part of the course content shall, in no event, constitute sexual harassment or other form of unlawful harassment or discrimination. It is recognized that an essential function of education is a probing of received opinions and an exploration of ideas that may cause some students discomfort. It is further recognized that academic freedom ensures the faculty's right to teach and the student's right to learn. Finally, nothing in this policy shall be interpreted to prohibit bona fide academic requirements for a specific program, course or activity.

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 available in the Student Handbook and can be obtained in the Student Activities Office in Campus Center East (CCE) on the Rancho Campus or can be accessed online at www.chaffey.edu/student_handbook.

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 Student Activities Office in Campus Center East (CCE) on the Rancho or by visiting our website at www.chaffey.edu/student_handbook.

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 computer systems for education, academic development, and other approved purposes. When using Chaffey College network and computer systems, all users are required to abide by the policy established by the Governing Board and the associate procedures and to use the system in an ethical and lawful manner.

Chaffey College does not currently block access to the Internet to students without a student ID card. Chaffey College reserves the right to employ filters and/or software to limit access to undesirable sites and/or unsolicited materials.

Declaración de Oportunidad Equitativa

No-discriminación y Prohibición de Acoso
El distrito escolar del colegio comunitario Chaffey está afirmativamente comprometido a proporcionar igualdad de oportunidades educativas y laborales. Este compromiso se encuentra en nuestras políticas educativas, en políticas y prácticas de personal y en el trato de empleados, estudiantes y público en general. El Distrito y toda persona que represente al Distrito deberá proporcionar igualdad de oportunidades de empleo y oportunidades educativas independientemente de raza, color, nacionalidad, ascendencia, religión, credo, sexo, edad (más de 40), discapacidad física (incluyendo el VIH y el SIDA) o discapacidad mental, estado civil, condición médica (incluyendo el cáncer y características genéticas), orientación sexual, o rango militar como veteranos de la época de Vietnam, o la percepción de que una persona tenga una o más de las características anteriores.

De conformidad con los Reglamentos del título IX, el distrito ofrece igualdad de oportunidades académicas, profesionales y extracurriculares independientemente de sexo/ género de la persona. El Coordinador del Título IX, Eric Bishop, puede ser contactado al teléfono (909) 652-6291, correo electrónico eric.bishop@chaffey.edu o en la siguiente dirección: 5885 Haven Avenue, Rancho Cucamonga, CA 91737. El distrito, autorizado bajo la ley federal para inscribir a estudiantes extranjeros e inmigrantes y, de conformidad con los reglamentos del título 5, afirma que la falta de conocimientos del idioma Inglés no será un obstáculo para la admisión y participación en los programas de este distrito escolar.

Las personas en busca de información y/o respuestas a presuntos actos de discriminación ilícita, represalias o acoso deben ponerse en contacto con nuestra oficial encargada de supervisar la implementación de estas regulaciones, Lisa Bailey, Vicepresidenta de Servicios Administrativos del colegio Chaffey, al teléfono (909) 652-6532, correo electrónico lisa.bailey@chaffey.edu, o en la siguiente dirección: 5885 Haven Avenue, Rancho Cucamonga, CA 91737.

Política de Prevención de Acoso Sexual
Es política del distrito escolar del colegio comunitario Chaffey proveer para todos, los estudiantes y empleados, una educación, empleo y medio ambiente libre de todas las formas de explotación, acoso, intimidación o asedio sexuales no deseados, solicitudes de favores sexuales, o otra conducta física, verbal, visual o comunicaciones de carácter sexual prohibidas por el Acuerdo para Empleos y Vivienda Justa de California, el Código de Educación de California y las reglas, normas, estatutos y leyes federales y estatales que prohíben el acoso sexual y represalias.

Este distrito escolar se opone enérgicamente al acoso sexual y expresamente prohíbe el acoso sexual de sus estudiantes y empleados por catedráticos, directivos, personal, estudiantes o

miembros del público en general. El colegio Chaffey tomará las medidas apropiadas para prevenir, corregir y, si es necesario, disciplinar cualquier comportamiento inadecuado.

Cualquier acoso sexual debe ser inmediatamente comunicado a nuestro oficial encargado de supervisar la implementación de estas regulaciones, Lisa Bailey, Vicepresidenta de Servicios Administrativos del colegio Chaffey, al teléfono (909) 652-6532, correo electrónico lisa.bailey@chaffey.edu, o en la siguiente dirección: 5885 Haven Avenue, Rancho Cucamonga, CA 91737, o a cualquier decano, director o gerente quien de forma inmediata deberá referirlo al oficial encargado o designado. Deben tomarse todas las medidas necesarias para asegurar la confidencialidad.

Libertad Académica
Este distrito escolar está comprometido a fomentar la libertad académica, pero reconoce que la libertad académica no permite acoso sexual o cualquier otra forma de discriminación o acoso ilegal. La cátedra, su contenido y su discurso, que son una parte intrínseca del contenido del curso, no podrán en ningún caso promover acoso sexual u otra forma de discriminación o acoso ilegal. Se reconoce que una función esencial de la educación promueve la libertad de opinion y la exploración de ideas que pueden causar molestia a algunos estudiantes. Se reconoce también que la libertad académica garantiza el derecho de enseñar de la cátedra y el derecho de aprender del estudiante. Por último, nada en esta póliza será interpretado a prohibir la buena fe de requisitos académicos para un programa específico, curso o actividad.

Acuerdo Americano para Discapacitados de 1990
El Acuerdo Americano para Discapacitados (ADA) de 1990 prohíbe la discriminación contra la gente con discapacidades en el empleo, servicios públicos e incluso transporte público y privado, alojamientos públicos, y servicios de telecomunicaciones.

Los servicios de apoyo para estudiantes con discapacidades son proporcionados por el departamento de Programas de Discapacidad y Servicios. Si necesita información sobre servicios para estudiantes con discapacidades póngase en contacto con nuestra oficina al teléfono (909) 652-6379 o TDD/TTY (909) 466-2829. También puede llamar gratuitamente al Servicio de Relevo de California a los números 1-800-735-2929 o 1-877-735-2929 para usuarios TDD/TTY. Los empleados (catedráticos, no-catedráticos, o asistente de estudiantes) que requieren alojamiento deberán ponerse en contacto con la Vicepresidenta de Servicios Administrativos, Lisa Bailey, al teléfono (909) 652-6532, o al correo electrónico lisa.bailey@chaffey.edu.

Sección 504: Ley de Rehabilitación
De acuerdo con la Sección 504 de la Ley de Rehabilitación, el colegio Chaffey cumple con la regulación que protege que "ninguna persona con discapacidad" será excluida de la participación en programas y servicios ofrecidos por el Colegio "únicamente por razones de discapacidad." Amy Nevarez, Decana Interina de Orientación y Matricula, y Guillermo Miller sirven como coordinadores de la ADA 504/508 y pueden proporcionar información y contestar preguntas en cuanto al acceso para estudiantes con discapacidades. Ellos pueden ser contactados en la siguiente dirección: 5885 Haven Avenue, Rancho Cucamonga, CA 91737; o por teléfono: Amy Nevarez (909) 652-6020, correo electrónico amy.nevarez@chaffey.edu; Guillermo Miller (909) 652-6390, correo electrónico william.miller@chaffey.edu.

Sección 504/508: Procedimiento de Queja
Si un estudiante tiene una queja bajo las provisiones de la Sección 504 del la Ley de Rehabilitación, el estudiante deberá primero contactar al coordinador de Chaffey del ADA 504/508 al teléfono (909) 652-6379, o al correo electrónico dps.staff@chaffey.edu. El coordinador de la ADA 504/508 se pondrá en contacto con todas las personas/partidos implicados e intentara encontrar una solución. Si la queja no puede ser resuelta dentro de los siguientes diez días laborables, el reclamante puede entonces presentar una queja formal con Lisa Bailey, Vicepresidenta de Servicios Administrativos. al teléfono (909) 652-6532, o al correo electrónico lisa.bailey@chaffey.edu.

Disciplinary and Grievance Appeal Procedures

The student grievance policy and procedure guidelines and appeal hearings information are found in the Chaffey College Student Handbook which is available in the Student Activities Office in Campus Center East (CCE) on the Rancho campus or by visiting our website at www.chaffey.edu/student_handbook.

Open Courses

It is the policy of this district that, unless specifically exempted by statute, every course, course section or class, the average daily attendance of which is to be reported for state aid, wherever offered and maintained by the district, shall be fully opened to enrollment and participation by any person who has been admitted to the College and who meets such prerequisites as may be established (Title 5, section 55003).

Courses and/or course sections designated for firefighters, law enforcement, prisoners, and students participating in cohort instruction may have restricted enrollment (Title 5, section 58051).

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.

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.

Statement of Equal Opportunity

Non-Discrimination and Prohibition of Harassment Policy
Chaffey Community College District is committed to providing affirmatively, equal educational opportunity and equal employment opportunity. This commitment extends to educational policies, personnel policies and practices, and to the treatment of employees, students, and the general public. The District and each individual

who represents the District shall provide equal access to employment and educational opportunities without regard to race, color, national origin, ancestry, religion, creed, sex, age (over 40), physical disability (including HIV and AIDS) or mental disability, marital status, medical condition (including cancer and genetic characteristics), sexual orientation, or military status as a Vietnam era veteran, or the perception that a person has one or more of the foregoing characteristics.

In accordance with Title IX regulations, the District offers equal academic, occupational, and extracurricular opportunities regardless of the sex/gender of the individual. The Title IX coordinator, Eric Bishop, may be contacted at (909) 652-6291, email eric.bishop@chaffey.edu, or 5885 Haven Avenue, Rancho Cucamonga 91737. The District, authorized under federal law to enroll non-immigrant and alien students, and, in accordance with Title 5 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 seeks information and/or resolution of alleged acts of unlawful discrimination, retaliation, or harassment are directed to contact the District's Compliance Officer, Lisa Bailey, Vice President of Administrative Services, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; telephone (909) 652-6532, email lisa.bailey@chaffey.edu.

Sexual Harassment Policy
It is the policy of the Chaffey Community College District to provide for all students and employees, and educational, employment, and business environment free of all forms of harassment, exploitation, intimidation, or unwelcome sexual advances, requests for sexual favors, or 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, staff, students or members of the general public. The College will take whatever appropriate action to prevent, correct, and, if necessary, discipline inappropriate behavior.

Sexual harassment shall be immediately reported to the District's Compliance Officer, Lisa Bailey, Vice President of Administrative Services, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; telephone (909) 652-6532, email lisa.bailey@chaffey.edu 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 disabilities are provided through Disability Programs and Services. Anyone needing information about services for students with disabilities should contact this office at (909) 652-6379 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 Vice President of Administrative Services, Lisa Bailey, at (909) 652-6532, email lisa.bailey@chaffey.edu.

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." Amy Nevarez, the Interim Dean of Counseling and Matriculation and William Miller serve as 504/508/ADA Coordinators and may provide information and answer questions regarding access for students with disabilities. They may be reached at Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; telephone Amy Nevarez, the Interim Dean of Counseling and Matriculation at (909) 652-6020, email amy.nevarez@chaffey.edu or William Miller at (909) 652-6390, email william.miller@chaffey.edu.

Section 504/508 Complaint Procedure
If a student has a complaint under the provisions of Section 504 of the Rehabilitation Act, the complaining party should first discuss the complaint with the individual(s) involved or with the Chaffey College 504/508 and/or the ADA Coordinator. The 504/508, ADA Coordinators will contact all parties concerned, if appropriate, and attempt to reach resolution. Contact: (909) 652-6379, or dps.staff@ chaffey.edu. If the complaint cannot be resolved within ten working days, the complainant may then proceed to file a formal complaint with the en la offana de relursos humanos, Lisa Bailey, Vice President of Administrative Services at (909) 652-6532, email lisa.bailey@chaffey.edu.

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 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://srtk.cccco.edu/index.asp.

Traffic and Parking Regulations

Any motor vehicle classified as such under California State law and parked on the Rancho Cucamonga, Chino, 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.
Parking decals may be purchased at the Rancho Cucamonga, Chino, 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.

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

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 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.

Use of Campus Facilities

RENTAL OF CAMPUS FACILITIES

Rental of campus facilities provides for the maximum use of the 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.

POLICY OF FREE SPEECH: TIME, PLACE, AND MANNER

The purpose of Chaffey College's policy of Free Speech: Time, Place, and Manner is to support the freedom of assembly and freedom of expression as guaranteed by the Constitution of the United States. Fundamental to these guarantees are the rights of free speech and peaceful assembly. It is also a core education value. Students and other members of the college community shall be free to express their views or to support causes by orderly means that do not disrupt the regular and essential operations of the college. In addition, the college requires members of the community to conduct their expressive activities in a manner that promotes and maintains freedom from intimidation, exploitation, or harassment and does not threaten health or safety. (Education Code Section 76120. Chaffey Procedure 5.6 Speech: Time, Place, and Manner.)

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!

COLLECTION AND RAISING OF FUNDS

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

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

Reality: What's That?

Faculty Lecturer of the Year 2011-2012

Verajean Dunwoody

"Does it EVER occur to you that you can't do something?" asked Vera's friend, Krista Jarrard once, in a moment of frustration. "No, it never really does…" answered Vera after some thought.

Strong women in her early life, including her mother, Donna Jean, her grandmother, Vera Pauline and her aunts, Carla and Tona, molded Vera's view of reality. They instilled in her the notion that anything was possible through learning, hard work, dedication, and determination (and being blonde didn't hurt the cause either!)

In 1974, at the age of 17, Vera enrolled at CSUSB as a psychology major, and became the first person in her family to attend college. She enrolled in a statistics and research class offered by a new CSUSB faculty member, Dr. Kathy Pezdek, and her academic course was set. Dr. Pezdek gave Vera the encouragement to further develop her analytical skills. Her first research publication came as an undergraduate under the guidance of Dr. Pezdek as second author. Since Dr. Pezdek's specialty was in Cognitive Psychology and Vera's major interest was Social Psychology, she was encouraged to seek mentorship under Dr. Gloria Cowan. Through Dr. Cowan's guidance, Vera was able to start her career research path in Social Psychology with an emphasis in gender studies. Vera received her BA in Psychology in 1978 and her Masters degree in Experimental Psychology in 1979 from CSUSB graduating with honors.

With the encouragement of these two strong women, Dr. Pezdek and Dr. Cowan, Vera applied to Chaffey College in 1980 as a one-year sabbatical replacement (yes, we used to have those positions…) for Professors Ken Koenigshofer and Stanley Waldrop. In those days, Vera had plans to work for the Rand Corporation or the US government as a researcher, but she fell in love with the classroom. Teaching was amazing! This experience was so incredible that she applied for a fulltime position at Chaffey and has been teaching here continuously since 1981 as it became her true calling. As she likes to say, it is really the only adult job she has ever had! During her time at Chaffey, she attended Claremont Graduate University, Ph.D. program in Psychology (working with Dr. Barbara Gutek). And harkening back those early days of Home Ec with Mrs. Hall, Vera followed her interests in fashion design and earned a degree in Fashion Design from FIDM in Los Angeles…and yes, it's true…she danced on Soul Train from 1987 –1992.

Lessons learned? Do what you love, follow your passions, do the unexpected be a lifelong learner, and life never gets boring or old!

She has been on too many committees to count, held many positions that no longer exist, given/attended countless seminars, taught over 25 different preps in Psychology, Social Science, and Fashion Design with an estimated 20,000+ students attending her classes over the last 31 years. You may have been one of her students, and several have gone on to do pretty well for themselves…. Laura Hope, Jim Fillpot, Shirley Emilio, Gail Keith-Gibson, and Damon Acosta.

Vera's passions outside Chaffey include anything Italian, especially the Grand Canal in Venice. She revels in great vintage finds, although has had more than one rude awakening from the realization that the things she wore in high school are now great "vintage" finds! Vera loves reading Brazilian lyricist and novelist, Paulo Coelho, a great cup of espresso and the artwork of Frida Kahlo.

So many people have served as her mentors and friends in life and at Chaffey. While there are certainly too many to name here, she would like to send special thanks and acknowledgments to all those persons aforementioned, as well as Bea Rose, Carol Sayles, Chris Flores, Eva Rose, Marie Boyd, Joy Haerens, Ardon Alger, Orville Clarke, Kelly Ford, Mamta Agarwal, past and present colleagues in the CSUSB & Chaffey psychology departments, her creative colleagues in VPA, Martin Fung, Erik Pipins and, of course, her always supportive and creative three sisters, Donarae, Shireen and LeeAnne. You have all served to make me a better instructor, a better person and profoundly shaped my view of reality.

"We don't see things as they are, we see them as we are." - Anaïs Nin

College Personnel

Governing Board

Paul J. Gomez
President

Kathleen Brugger
Vice President

Katie Roberts
Immediate Past President

Lee C. McDougal
Clerk

Gary L. George
Member

Carlos Huizar
Student Trustee/ASCC President

Administration

Henry D. Shannon
Superintendent/President
B.A., Harris-Stowe State University
M.A., Ph.D., Washington University, St. Louis

Lisa Bailey
Vice President, Administrative Services
B.A., Loyola-Marymount University
M.A., California State University, Los Angeles

Eric Bishop
Dean, Fontana Campus
Dean, PE/Athletics
B.A., M.A, University of La Verne
Ed.D., University of LaVerne

Sidney Burks
Dean, Business and Applied Technology
B.A., San Diego State College
M.A., San Diego State University

Leonard Crow
Interim Dean, Student Services and Discipline
B.S., California State Polytechnic University, San Louis Obispo
M.S., California State Polytechnic University, Pomona
Ph.D., Argosy University

Michael Dinielli
Dean, Language Arts
Dean, Visual and Performing Arts
B.A., University of Connecticut
M.A., California State University, Long Beach

Sherrie Guerrero
Associate Superintendent, Instruction and Student Services
A.A., San Bernardino Valley College
B.A., California State University, San Bernardino
M.A., California State University, Fullerton
Ed.D., University of Southern California

Laura Hope
Dean, Instructional Support
B.A., M.A., California State University, San Bernardino

Teresa Hull
Dean, Chino Campus
Dean, Health Sciences
B.S., University of Santa Clara
M.Ed., Indiana State University
Ed.D., University of La Verne

Hermelinda (Amy) Nevarez
Interim Dean, Counseling & Matriculation
B.A., California State University, Long Beach
M.S., California State University, San Bernardino

Ciriaco "Cid" Pinedo
Associate Superintendent, Business Services and Economic Development
B.A., St. John's Seminary College

Corene Schwartz
Dean, Social and Behavioral Sciences
B.S., University of Nebraska-Lincoln
M.Ed., University of North Dakota
Ed.D., Montana State University

Theodore Younglove
Dean, Mathemathics and Science
B.S., University of California, Riverside
M.S., University of California, Riverside

Management

Patricia Bopko
Director, Financial Aid
A.A., Chaffey College
B.A., California State University, San Bernardino
M.A., University of Redlands

Patrick Cabildo
Internal Auditor
B.S., California State University, San Bernardino

Margaret Cartwright
Director, Marketing and Public Relations
A.A., Riverside Community College
B.A., California State Polytechnic University, Pomona
M.A., California State University, Fullerton

Jared Ceja
Directory, Auxiliary Services
A.A., Citrus College
B.A., University of California, Santa Barbara
M.B.A., University of Redlands

Bruce Cook
Director, Maintenance and Central Plant
B.S., University of Arizona

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 LaVerne

Kathleen Dutton
Director, Workforce Development
B.A., M.S., California State University, San Bernardino

Kimberly Erickson
Director, Accounting/Purchasing Services
A.A., Mt. San Antonio College, Walnut
B.S., University of Redlands

James Fillpot
Interim Dean, Institutional Research and Resource Development
B.A., M.A., California State University, San Bernardino

Michael Fink
Director, Technical Services
B.A., M.B.A., California Baptist University

Susan Hardie
Interim Director, Human Resources and Risk Management

Kim Mascarenas
Administrator, Payroll
B.S., California State Polytechnic University, Pomona

Birgit Monks
Director, Child Development Center
B.A., M.A., Pacific Oaks College

Andronik Nazarian
Director, Alumni Relations
B.A., California State University, San Bernardino

Katherine Peek
Director, Student Health Services
B.S.N., Azusa Pacific University
M.S., Ph.D., California Coast University

David Ramirez
Chief of Police/Director, Public Safety
B.S., University of La Verne
J.D., University of La Verne College of Law

Jaime Recinos
Supervisor, Bookstore
A.A., Rancho Santiago Community College

Melanie Siddiqi
Executive Director, Administrative Services
A.A., Chaffey College
B.A., M.B.A., University of La Verne

Susan Stewart
Director, Student Activities
B.A., M.A., San Diego State University

Rebecca Trawick
Director, Museum Gallery
B.S., University of Minnesota

Anita Undercoffer
Interim Executive Director, Budgeting Services
A.S., Chaffey College
B.A., M.B.A., California State University, San Bernardino

Faculty

Agarwal, Mamta
Associate Professor, Chemistry
B.S., Government Raza College, India
M.S., Agra University, India

Alexander, Monica F.
Professor, Child Development
B.A., University of California, Los Angeles
M.A., Claremont Graduate School

Alger, Ardon H.
Professor, Photography
B.A., Chapman College
M.F.A., Claremont Graduate School

Alvarez, Jo Anna
Associate 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., M.B.A., University of Phoenix

Araiza, William L.
Assistant Professor, Reference Librarian
A.A., Riverside Community College
B.A., California State University, San Bernardino
M.L.S., San Jose State University

Aranda, Patrick
Professor, Music
B.A., California State University, Los Angeles
M.M., California State University, Fullerton

Arciniega, Rachel
Professor, Nursing
A.S., Chaffey College
B.S.N., M.S.N., California State University, Dominguez Hills

Arner, Timothy D.
Professor, Mathematics
B.A., University of California, Santa Barbara
M.A., California State University, San Bernardino

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
Associate Professor, Gerontology
B.S., M.S., University of LaVerne

Baiz, Robert
Professor, Physical Education
B.A., California State University, Fullerton
M.A., Azusa Pacific University

Baker, Wanda S.
Professor, Computer Information Systems
B.S., University of Redlands
M.S., University of Phoenix

Bartell-Lippert, Susan
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
Professor, Aeronautics
A.A., Chaffey College
B.S., Embry-Riddle Aeronautical University, Florida

Best, Cecilia T.
Professor, Language Success Center
B.A., Wright State University, Ohio
M.A., California State University, San Bernardino

Boboye, Jackie
Professor, Counseling
B.A., M.A., California State University, San Bernardino

Boyd, Marie
Professor, Reference Librarian
B.A., Merrimack College
M.S., University of Southern California
Ph.D., Argosy University

Breegle, Lynn
Professor, Pharmacy Technician
A.S., Citrus Community College
B.A., University of La Verne

Brewer-Calvillo, Judy
Professor, Child Development
B.A., California State University, Los Angeles
M.S., University of La Verne

Brouwer, Jeffrey
Professor, Mathematics
B.A., California State University, San Marcos
M.A., University of California, Santa Barbara

Brown, Baron
Professor, Administration of Justice
B.S., California State University, Dominguez Hills
M.P.A., University of La Verne

Brusselle, Thierry
Professor, Business and Business Management
B.S., M.B.A., California State Polytechnic University, Pomona

Burk-Herrick, Angela
Associate Professor, Biological Science
B.A., University of California, Santa Cruz
Ph.D., University of California, Riverside

Burruel, Misty
Assistant Professor, Art
A.A., Victor Valley College
B.A., California State University, San Bernardino
M.F.A., Claremont Graduate University

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 State University, Albany

Carlton, Robert G.
Professor, History
B.A., University of Santa Clara
M.A., Claremont Graduate School

Carter, Monica L.
Professor, Political Science
B.A., California State University, Dominguez Hills
M.A., Claremont Graduate School

Cheatle, Medina
Professor, Physics
B.A., University of California, Los Angeles
M.S., San Jose State University

Chen, Abel
Professor, Business Administration/Business Law
B.A., California State University, Northridge
J.D., Whittier College School of Law

Clarke, Orville, Jr.
Professor, Art History
B.A., University of California, Los Angeles
M.A., California State University, Fullerton

Clay, Sandra
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
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
Professor, Biological Science
B.S., M.S., California State University, Fullerton

Cotton, Sarah
Associate Professor, Biological Science
B.S., University of California, Santa Barbara
M.S., California State Polytechnic University, Pomona

Cox, Beverly
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

Creel, Gregory J.
Professor, Language Success Center
B.A., M.A., California State Polytechnic University, Pomona

Cruz, Asiris
Associate Professor, Chicano History
B.A., M.A., Ph.D., University of California, Riverside

Cuevas, Maria
Associate Professor, Counseling, EOPS
B.A., California State Polytechnic University, Pomona
M.S., California State University, San Bernardino

Decker, Catherine
Professor, English
B.A., LaSalle University
M.A., Ph.D., University of Rochester, New York

Delgado, Ruth
Assistant Professor, Counseling
B.A., Pitzer College, Claremont
M.A., University of La Verne

DeRose, Nicole
Associate Professor, Biological Science
B.A., M.S., California State University, San Bernardino

Diaz, Ricardo
Professor, Counseling
B.A., California State University, Northridge
M.S., California State University, Los Angeles

Dickerson, Carol Y.
Associate Professor, Accounting
B.S., California State Polytechnic University, Pomona
M.A., University of California, Los Angeles
Ph.D., Claremont Graduate University

Dominguez, Diana
Assistant Professor, Mathematics
B.S., M.Ed., M.S., University of California, Riverside

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
Professor, Nursing
A.S., Rio Hondo College
B.S.N., University of Phoenix
M.S.N., University of Phoenix

Egli, Stuart
Associate Professor, Engineering Technology/Computer-Aided Drafting and Design (CADD)
B.S., University of California, Irvine

Eisberg, Joann
Professor, Astronomy
A.B., Harvard University
M.Phil., Cambridge University
Ph.D., Harvard University

El-Said, Christa
Associate Professor, Theatre Arts
A.A., Fresno City College
B.A., California State University, Fresno
M.F.A., San Diego State University

Elsdon, 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"
Professor, Mathematics
B.S., Leningrad Polytechnic Institute
Ph.D., Moscow University of People's Friendship

Falcioni, Ryan
Associate Professor, Philosophy
B.A., University of California, Riverside
M.A., Biola University

Farrand, Catherine "Nicole"
Associate Professor, Art
B.A., University of California, Davis
M.F.A., Claremont Graduate University

Fay, John
Professor, Mathematics
B.S., M.S., Ph.D., University of California, Riverside

Fisher, Leona
Assistant Professor, English
B.A., M.A., Brigham Young University
Ph.D., University of California, Riverside

Fitzpatrick, Maria
Associate Professor, Psychology
B.A., Claremont McKenna College
M.A., Claremont Graduate University

Fong, Michael R.
Professor, Anthropology
B.A., University of California, Berkeley
M.A., California State University, Hayward

Ford, Kelly
Assistant Professor, Theatre Arts
A.A., Fullerton College
B.A., California State University, Fullerton
M.F.A., California State University, Long Beach

Freeman, Sandra
Associate Professor, Nursing
B.S.N., Biola University
M.S.N., California State University, Dominguez Hills

Fuller, Bonita L.
Professor, Disability Programs and Services
B.A., Westmont College, Santa Barbara
M.S., California State University, Fullerton

Gilbert, Cheryl
Associate Professor, Vocational Nursing
B.S.N., University of La Verne

Gomez, Sergio
Professor, Sociology
B.A., M.A., California State University, Fullerton

Greene, Timothy A.
Professor, History
B.A., University of California, Irvine
M.A., California State University, Fullerton
Ph.D., University of California, Irvine

Hadaway, Robert
Professor, Physical Education
B.S., M.Ed., Azusa Pacific University

Haddad, Kathleen
Professor, Photography
B.A., California State University, Northridge
M.F.A., California State University, Fullerton

Haerens, Joy
Professor, Business and Office Technologies
A.A., B.A., M.A., Henderson State University, Arkansas

Hanna, Rachel
Associate Professor, Spanish
B.A., Indiana University
M.A., University of California, Los Angeles

Hardie-Townsend, Sandra
Professor, Child Development
B.A., University of California, Irvine
M.A., California State University, Los Angeles

Harlow, Jeff
Professor, Physical Education
B.S., M.Ed., Azusa Pacific University

Hayward, Timi J.
Associate Professor, Fire Technology
A.A., Pasadena City College

Hegeman, Tracy C.
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
Professor, Physical Education
B.A., M.A., California State University, Chico

Herman, Susan
Professor, Nursing
B.S.N., Lewis University
M.S.N., C.N.S., Azusa Pacific University

Hines-Tinsley, Candice
Associate Professor, Nutrition and Food
B.S., M.A., California State University, Long Beach

Hodge, Cheryl R.
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

Hultgren, Larry G.
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
Associate 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

Jabalera, Karina
Assistant Professor, Counselor
B.A., University of California, Santa Cruz
M.S., University of La Verne

Jacobo, Daniel
Professor, Broadcasting
B.A., University of California, Riverside
M.F.A., University of California, Los Angeles

Jacobson, Erik
Professor, Theatre Arts
B.A., University of California, Santa Cruz
M.A., California State University, Los Angeles

Jenkins, Michele
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.
Professor, Mathematics
B.A., University of Oregon
M.A., Claremont Graduate School

Karp, David
Professor, Business Administration/Business Law
B.S., Illinois State University
M.S., University of Wisconsin, Madison
J.D., Loyola Law School

Kern, Daniel
Associate Professor, Philosophy
B.A., University of Montana
M.Div., Regent College
M.A., Indiana University
Ph.D., Marquette University

Kerr, James J.
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
MPH: CNS, BSN: MSN, California State University, Long Beach

Khaw-Posthuma, Bonnie
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, Pomona

King, Barbara
Associate Professor, Philosophy
A.A., Chaffey College
B.S., Pitzer College
M.S., Claremont Graduate University

Konovnitzine, Peter
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

Leontas, Angela
Associate Professor, Mathematics
B.S., California State Polytecnic University, Pomona
M.A., California State University, San Bernardino

Lewis, Mark
Associate Professor, Multimedia/Digital Media
B.A., San Francisco State University
M.F.A., California Institute of the Arts

Limón, Mercedes
Associate Professor, Spanish
B.A., M.A., California State University, Los Angeles
Ph.D., University of California, Los Angeles

Little, Jack
Associate Professor, Aeronautics
A.S., Chaffey College
B.S., Embry-Riddle Aeronautical University

Lively, Christine
Associate Professor, American Sign Language
B.A., M.A., Gallaudet University

Loomis, Daniel
Professor, History
B.A., California State University, San Bernardino
M.A., California State University, Fullerton

MacDonald, Heather A.
Professor, Nursing
B.S., California State University, Fullerton
B.S.N., Loma Linda University
M.S.N., California State University, Long Beach

Machado, John
Associate Professor, Art History
B.A., San Diego State University
M.A., University of Austin, Texas

Marcotte, Linda
Professor, Child Development
B.S., M.S., University of La Verne

Marcus, Shelley
Associate Professor, Reference Librarian
B.A., University of Rochester
M.A., Rutgers University
M.A., Boston University
M.L.S., San Jose State University

McCall, Arlene L.
Professor, Physical Education
B.S., California State University, Los Angeles
M.S., Washington State University, Pullman

McMurran, 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
Associate Professor, Studio Art
B.F.A., California Institute of Arts
M.F.A., University of California, Irvine

Molina, Monica
Professor, Counseling
B.A., California State Polytechnic University, Pomona
M.S., California State University, San Bernardino

Moser, Jeff
Professor, Counseling, Athletics
B.S., California State Polytechnic University, Pomona
M.S., California State University, San Bernardino

Navarette, D. Lynn
Professor, Sociology
B.A., California State Polytechnic University, Pomona
M.A., California State University, Fullerton

Navarro, Carmen
Associate Professor, Communication Studies
B.A., M.A., California State University, Los Angeles

Nazar, Robert
Professor, English
B.A., M.A., California State University, Fullerton

Nobile, Vincent
Professor, History
B.A., California State University, San Bernardino
Ph.D., University of California, Irvine

Oakdale, Joyce
Professor, Chemistry
B.S., New York State University
B.S., Northeastern Illinois University
Ph.D., Loyola University, Illinois

Oduwole, Toks
Professor, Counseling, EOPS
B.A., M.S., University of LaVerne

Olivera-LaVallee, Melanie
Professor, Reading
B.A., M.A., University of LaVerne

Osburn, J. "Bruce"
Associate Professor, Automotive Technology
A.S., A.A., Chaffey College
B.A., California State University, San Bernardino

Osgood, Joanne
Professor, Business and Office Technologies
B.S., University of Pittsburgh
M.A., State University of New York

Padgett, Lisa
Professor, Mathematics
B.A., University of California, Riverside
M.A., California State University, San Bernardino

Paplanus, Susan
Professor, Nursing
B.S.N., University of Texas
M.S.N., California State University, Long Beach

Parker, Cynthia M.
Professor, Economics
B.A., M.B.A., California State University, Fullerton

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, Charmaine
Associate Professor, English as a Second Language
B.A., California State University, Stanislaus
M.A., California State Polytechnic University, Pomona

Piper, Candice
Associate Professor, Vocational Nursing
A.S.N., Chaffey College

Pratt, Laurie
Associate Professor, Communnication Studies
B.A., Azusa Pacific University
M.A., California State University, Fullerton

Preble, Kipp
Professor, Communication Studies
B.A., M.A., California State University, Northridge

Rivas, Henry
Professor, Correctional Science
B.A., M.A., California State University, Los Angeles

Roberts, Philip
Associate Professor, Physical Education
B.S., Kansas State University
M.S., Northwest Missouri State University

Roebuck, Alan
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
Professor, Fontana Success Center
B.A., M.A., Pepperdine University, Malibu

Rundquist, Robert
Associate Professor, Multidisciplinary Success Center
B.A., University of California, Berkeley
M.A., University of Southern California

Sadowski, Angela
Professor, Psychology
B.A., M.A., California State University, Los Angeles

Sanchez, Diana
Assistant Professor, Counseling
B.A., University of California, Los Angeles
M.S., California State University, San Bernardino

Seol, Sara
Professor, Nursing Skills Lab
B.S.N., M.S.N., California State University, Dominguez Hills

Serrano, Maria
Professor, Counseling
A.S., Pasadena City College
B.A., M.S., California State University, Los Angeles

Siedschlag, Steven B.
Professor, Computer Information Systems, Networking

Snyder, Paula
Professor, Sociology
B.A., University of California, Riverside
M.A., California State University, San Bernardino
Ph.D., Howard University, Washington D.C.

Song, Julie H.
Assistant Professor, Sociology
B.A., M.A., University of California, Irvine

Spears, Bonnie
Professor, English
B.A., Purdue University
M.A., Western Illinois University

Starr, Susan
Professor, Counseling
B.A., Westmont College
M.A., Azusa Pacific College

Stratton, Sean
Professor, English
B.A., M.A., California State University, Northridge

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
Associate 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
Professor, Business Administration
B.A., University of Oregon
M.B.A., University of Phoenix

Thompson, Teresa
Associate Professor, Accounting
B.S., University of California, Riverside

Tirado, Victoria
Professor, Spanish
B.A., M.A., California State University, Sacramento

Tjandra, Sariwan
Professor, Chemistry
B.A., M.S., Southern Illinois University
Ph.D., University of California, Riverside

Utsler, Melissa A.
Associate 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
Associate Professor, Chino Success Center
A.A., Riverside Community College
B.A., M.A., California State University, Fullerton

Walker, Cindy M.
Professor, Language Success Center
B.A., California State University, Northridge
M.A., California State University, San Bernardino

Wall, Jacqueline
Professor, Computer Information Systems
B.A., DePaul University
M.B.A., University of Phoenix

Wardak, Mohammad
Associate Professor, Mathematics
A.A., Chaffey College
B.A., M.A., California State University, San Bernardino

Warger, Jane
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
Associate Professor, Reading
B.S., Central Connecticut State College
M.A., Virginia Polytechnic Institute and State University

Whitney, Wendy
Associate Professor, Counseling
A.A., College of the Sequoias
B.A., University of California, Berkeley
M.S., University of La Verne

Williams, Charles
Assistant Professor, English
B.A., M.A., California State University, San Bernardino

Williamson, Teresa
Professor, Business and Office Technologies
B.A., American Intercontinental University

Wilson, Katherine M.
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
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
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

Nevarez-Hernandez, Guadalupe
B.S., California State University, Los Angeles
M.S., University of La Verne

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

Aanstad, Lloyd A.
Aeronautics

Abbott, Anthony
Counselor

Adams, Herbert M., Jr.
Basic Skills, Learning Disabilities

Adkins, Lester
Chemistry

Agos, Louise
Dean, Business and Applied Technology

Alexander, Dana S.
Physics, Mathematics

Alexander, J. Michael
Communication Studies

Alfaro, Felix L.
Electronics

Algozer, Sharon A.
Interior Design

Anderson, James
Broadcasting

Arner, Rodney D.
Mathematics

Aurouze, Gary W.
Philosophy

Bajcer, Libby
Industrial Sewing

Barreca, James D.
English

Bartell, Donald E.
History, Social Science

Bartell, Mary N.
Counseling

Beardwood, George B.
Mathematics, Surveying

Beeks, Richard E.
Biology, Botany

Benjamin, Beverly
Child Development

Berger, Gordon N.
Vocal Music

Bixler, David
Biological Science, Geography

Blair, John W.
English

Blakeslee, Florence
Music

Blakeslee, S. Earle
Music

Blanchard, William B.
Mathematics

Boetel, Wilma
Nursing, Biological Sciences

Booth, Charles J.
Director

Boring, Eugene B., Jr.
Biological Sciences

Boul, Mary
Nursing

Bowers, Miriam H.
Librarian

Braxton, David
Computer Information Systems

Briot, Francios
French

Brindell, Kathleen
History

Brookins, Dana L.
English

Brown, Margaret
Biological Sciences

Calhoun, Clarence C.
Dean of Instruction

Calhoun, Kenneth G.
Biological Sciences

Cargill, Charles W.
Anthropology

Carlson, Robert A.
Autobody Repair

Carrick, William G.
Disability Programs & Services

Chapman, Elwood N.
Business Education

Childs, Henry E.
Biology

Clark, Pearl E.
Dean of Students

Clements, Richard J.
English

Colbath, George C.
Physical Education

Contino, Sam
Automotive Technology

Cook, June
Business and Office Technologies

Corse, Pauline C.
English

Davidson, Volena Jones
English

Davis, Deborah
Child Development

Davis, Homer W.
Communication Arts

Davis, Robert L.
History

Dawson, Katherine
Nursing

Dawson, Sandra A.
Vocational Nursing

deDobay, Thomas
Music

Des Lauriers, Dale A.
Biological Sciences

des Lauriers, James R.
Biological Sciences

DeVillers, Linda
Psychology

Dickey, Marlin L.
Geology

Downie, Virginia
Communication Studies

Dysart, Russell D.
Geology, Mineralogy

Elber, Sylvia
Music

Eskew, Benjamin E.
English

Extale, John Gilbert
Business

Felsch, Fred O.
Aeronautics, Student Advisor

Fernandez, Priscilla
Reference Librarian

Fincher, Donald E., Sr.
Radiologic Technology

Finnie, Thomas S.
Electronics

Fisk, Kent
Automotive Technology

Fleck, Robert J.
Art

Flores, Christine V.
Counseling, EOPS

Flory, Vera E.
English

Flum, Arthur E.
Mathematics

Frank, Marie G.
Home Economics

Frost, John S.
Electronics

Fuller, Douglas
Court Reporting

Gable, William
Physical Education

Gatignol, Gilberte F.
French

Gaugh, Leslie S.
Automotive Technology

Geiger, C. Fred
Chemistry

Geisel, Joseph W.
Data Processing

Gentile, Louis J.
Business

Gibbens, Loretta
English, English as a Second Language

Gil, Gustavo
Music

Gingrich, Jacqueline
Reading

Glenn, Elmer F.
Mathematics

Gonzalez, Crispin, Jr.
Art

Graham, Marian
Dental Assisting

Greenlaw, Helen M.
Physical Education

Greever, Margaret Q.
Dean, School of Physical, Life, and Health Sciences

Gregory, Donald J.
Sociology

Grimm, Lewis L.
Physics, Engineering

Grise, Hendrik
Art

Groneweg, William C.
Dean of Admissions and Records

Gurich, Louise
Court Reporting

Hafiz, M. David
Dean, Admissions, Records, and Counseling

Haney, Gloria
English

Harmon, Wesley L.
Counseling, Psychology

Haug, Richard L.
Computer Science

Haven, David F.
Biological Sciences

Hemenway, Francis P.
Interior Design, Home Economics

Hernandez, Gene M.
Autobody Repair

Hernandez, Joe D.
Counseling

Hicks, Charles
English

Higbee, R. Eugene
Spanish, English

Higgins, Julianne
Nursing

Himaya, Divina C.
Philosophy

Hindman, Barbara
Nursing

Hinrichsen, Kenneth C.
President

Holley, Helen
Health Services Specialist

Hollenbeck, Charles L.
Physics

Hollist, Lynn O.
Dean, Community Services

Horsch, L.J.
Social Science

Howard, Elaine
Office Technology

Howard, Gilbert A.
Real Estate

Hubert, Wayne
Dean, Language Arts

Huenergardt, Myrna
Health Services

Hyams, Maureen
Vocational Nursing

Iaeger, 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

Karet, Julia
ESL

Keenan, Catherine
Chemistry

Kellogg, Stephen J.
Biological Sciences

Ketchum, Donald J.
Data Processing

Killen, Richard R.
English

Kimbel, Kyle
Home Economics

Koenigshofer, Kenneth A.
Psychology

Koyle, Ronald
Drafting

Kuhlmann, Bobbie L.
Accounting

Lambert, Bonnie
Accounting

Latham, Robert
Political Science

Lawlor, Joseph P.
Director, Instructional Services

Lightner, Catherine
Assoc. Degree Nursing

Lober, Robert M.
Astronomy, Mathematics

Lockwood, L. Gordon
Radiologic Technology

Lowman, Judy Ann
Geology

Luebbers, Emma O.
Business

Lyman, Karen
Gerontology

Linn-Watson, TerriAnn
Radiologic Technology

Madden, Peggy A.
English

Mahoney, Andree
Art

Malone, Michael
English

Marino, Penny B.
Fashion Merchandising and Design

Martin, Gerald E.
English, German

Martin, Woodford
Computer Information Systems

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

McClure, Carol
Biological Science

McGee, John R., Jr.
Correctional Science

McPherson, Kenneth W.
Cooperative Education

Menzel, Stephen W.
Vice President, Administrative Services

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

Montgomery, Mary Ellen
Business and Office Technologies

Mossman, Shirley Nash
Interior Design

Mundy, Linda
Dental Assisting

Myers, Edward E.
Anthropology, Biology, Physiology

Myers, Milton C.
Counseling

Myers, Pauline
Counseling

Neece, Cheryl
Reading

Nehlsen, Carol
Business and Office Technologies

Newton, Ralph J. E.
Business Education

Ngo, Boysie
Computer Information Systems

Noble, Erna Smith
Dental Assisting

Norman, Rosamond
English

Normand, Thomas
Counseling

Okura, Irene
Disability Programs and Services

Oliva, Victor R. Jr.
Counseling

Olivera, Cathy D.
Disability Programs and Services

Olivera, Robert
Dean, PE/Athletics

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

Pelzer, Inge
Executive Assistant to the Superintendent/President

Peters, Thomas
Mathematics

Pierce, John W.
Drafting, Engineering

Pinkerton, Frank
Assoc. Dean, Library/Learning Resources
Dean, PE/Athletics

Pitts, Billie P.
Business Education

Pompura, Sylvia
Nursing

Porter, Ralph A.
Dean, Educational Services

Punter, Sam C.
Administration of Justice

Purkiss, William
Communication Studies

Raithel, Janice C.
Art

Ratliff, Gena Vee
Business

Reeder, George A.
Dance

Requa, Marylee
Sociology

Reynolds, Joseph E.
French, English

Richardson, Evelyn O.
Nursing

Roberts, Myron
English

Robinson, Mary V.
Business Education

Robinson, W. Dario
Lithography

Rodriguez, Juan A.
English as a Second Language

Romero, Gloria D.
English

Romero, Gloria
Director, High School Relations

Rose, Bea
Philosophy

Rose, Florence
Psychology, Sociology

Ross, Harley
Correctional Science

Russel, Peter
Biological Science

Sayles, Carol L.
Dean, School of Social and Behavioral Sciences

Schesser, Frankie L.
Business

Schesser, Robert D.
Business

Schildberg, Jeane
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

Silliman, Rachel
English as a Second Language

Simpson, Jean B.
Business

Simpson, Paul
Autobody Repair

Smith, Millicent A.
Business Education

Smith, Phyllis M.
Librarian

Smith, Robert
Art, Photography

Smith, Sharlene
Disability Programs and Services

Snyder, Olof E.
Dean of Instruction

Snyder, Shirley
English

Spring, Gardiner W.
President

Standlea, Leslie H.
Counseling

Stanford, Mabel
Public Information

Stanford, William E.
Music

Stark, Charles H.
Aeronautics

Stark, Elizabeth A.
Counseling

Stark, Vesta L.
Dental Assisting

Starr, Phillip C.
Economics

Sterba, JoAnn W.
Consumer Studies

Stetkevich, Orest
Athletics, Disability Progrmas and Services

Stewart, Marie Frank
Home Economics

Strane, Ralph
Theatre Arts, Fine Arts

Sumpter, James B.
Welding Technology

Swihart, Donald D.
Chemistry

Talton, Marcha
Associate Degree Nursing

Teitsworth, June
Vice President, Student Services

Theurer, Gail L.
English, German

Theurer, Howard
Counseling

Toister, Robert
Mathematics

Tolstoy, Peter
Biological Sciences, Counseling

Tom, Wesley W.
Mathematics

Torres, Lillian S.
Nursing

Tschirgi, Roger
Counseling

Tyler, Marian M.
Educational Resources

Ulf, Gretchen Lizer
Speech

Underwood, Martha M.
Art

Vizio, Margaret
English

Wadsworth, Leo A.
Director

Waldrop, Mary Lou
Home Economics

Walker, Jeanne C.
English

Walker, Lawrence H.
Machine Tool Technology

Walker, Thomas M.
English

Warburton, T. Stanley
President

Weaver, Jesse H., Jr.
Speech Communication

Webb, Ray O.
Mathematics, Physics, Engineering

Weiss, Irving S.
Real Estate

Welsh, Erma
Counseling

White, Charles C.
Mathematics

White, Jack L.
Physical Science

Wilding, Byron
Art

Williams, Charlene L.
Disabled Students Programs and Services, Counseling

Wilson, Floyd J.
Anatomy, Zoology

Winters, Dana S.
Assistant Dean, Instructional Services

Wiser, Harry D.
President

Withey, Hettie
Social Science

Wright, Donald J.
English

Wright, Elizabeth
Home Economics

Woods, Ann
Educational Resources

Zimmermann, Muriel
Dean, Physical, Life, and Health Sciences

Zust, George
Machine Tool Technology

PHONE DIRECTORY

(All numbers are area code 909)

RANCHO CUCAMONGA CAMPUS NUMBERS:

Main....652-6000
Admissions and Records....652-6600
Assessment/Orientation Appointments 652-6200
Bookstore....652-6577
CalWORKs....652-6049
Cashier....652-6600
Child Development Center....652-6875
Counseling....652-6200
Extended Opportunity Progs & Svcs 652-6349
Financial Aid....652-6199
Language Success Center
ESL and Modern Language....652-6907
Reading and Writing....652-6820
Mathematics Success Center....652-6452
Multidisciplinary/Reading Center....652-6932
Student Health Services....652-6331
Writing Center....652-6820

CHINO CAMPUS NUMBERS:

Main....652-8000
Administration....652-8010
Admissions and Records/Cashier....652-8001
Assessment/Orientation Appts.....652-8001
Bookstore....652-8170
CalWORKs....652-7797
Community Center....652-8200
Contract Ed/Customized Training....652-7791
Counseling....652-8001
Extended Opportunity Progs & Svcs. ...652-6349
Financial Aid....652-8140
Library/Cybrary....652-8115
Multidisciplinary Success Center....652-8150
Veterans Services....652-8001
Workforce Preparation....652-7795

FONTANA CAMPUS NUMBERS:

Main....652-7400
Admissions and Records/Cashier....652-7400
Assessment/Orientation Appts.....652-7400
Bookstore....652-7400
CalWORKs....652-7485
Counseling....652-7400
Extended Opportunity Prog. & Svcs. 652-7413
Financial Aid....652-7417
Multidisciplinary Success Center....652-7408

DEPARTMENTS

Articulation/Tech Prep....652-6510
Breeze, The (Student Newspaper)....652-6934
Campus Police (non-emergency)....652-6632
(Emergency – on/off campus)....652-6911
Career Center....652-6511
Community Education....652-6045/6046
Cooperative Education....652-6190
Disability Programs & Services...652-6379/6380
Distance Education....652-6975
Foundation Office....652-6545
Health Services....652-6331
High School Tech Prep....652-6510
Honors Program....652-6263
International Student Office....652-6195
Job Placement, Student Employment..652- 6511
Learning Development Center....652-7675
Library....652-6800
Lost and Found....652-6634
Museum, Wignall Museum of Contemporary Art....652-6490
Scholarship Information....652-6545/6589
Student Activities....652-6589
Student Government....652-6594
Tech Prep/Articulation....652-6510
Theatre Box Office....652-6067
Transfer Center....652-6233
Veterans Services....652-6611

SUBJECT AREA/SCHOOL NUMBERS:

Accounting & Financial Services....652-6830
Administration of Justice....652- 6253
Aeronautics....See Aviation Maintenance Technology
American Sign Language....652-6903
Anthropology....652-6253
Arabic....652-6903
Art....652-6066
Astronomy....652-6404
Automotive Collision Repair Tech....652-6830
Automotive Technology....652-6830
Aviation Maintenance Technology....652-6830
Biology....652-6404
Broadcasting....652-6066
Business/Business Management....652-6830
Business & Applied Tech, School of....652-6830
Business and Office Technologies....652-6830
Chemistry....652-6404
Child Development & Education....652-6253
Chinese....652-6903
Cinema....652-6066
Communication Studies....652-6066
Computer Information Systems....652-6830
Computer Information Systems (CISCO)....652-7660
Computer Science....652-6830
Consumer Studies....652-6830
Cooperative Education/Work Experience....652-6190
Correctional Science....652-6253
Dance....652-6066
Dental Assisting....652-6675/6672
Drafting....652-6404
Earth Science....652-6403
Economics....652-6253
Education....652-6253
Electricity....See Industrial Electrical Technology
Emergency Medical Technician....652-6830
Engineering/Engineering Technology ...652-6403
English....652-6902
English as a Second Language....652-6903
Fashion (Design and Merchandising)...652-8010
Fine Arts....652-6066
Fire Technology....652-6830
French....652-6903
Geography....652-6404
Geology....652-6403
Gerontology....652-6675/6672
Guidance....652-6217
Health Sciences, School of....652-6695
History....652-6253
Hotel and Food Service Management...652-8203
Humanities....652-6253
Industrial Electrical Technology....652-7657
Interior Design....652-8010
Journalism....652-6902
Language Arts, School of....652-6904
Mathematics....652-6403
Mathematics & Science, School of....652-6402
Music....652-6066
Nursing Assistant....652-6675/6672
Nursing (ADN)....652-6671/6672
Nursing (VN, ACT)....652-8215/6672
Nutrition & Food....652-8019
Pharmacy Technician....652-6675/6672
Philosophy....652-6253
Photography....652-6066
Physical Education
(Activity, Adaptive, Lecture, Team)....652-6290
Physics....652-6404
Physical Science....652-6404
Political Science....652-6253
Psychology....652-6253
Radiologic Technology....652-7606/6672
Reading....652-6903
Real Estate....652-6830
Social & Behavioral Sciences, School of....652-6253
Social Science....652-6253
Sociology....652-6253
Spanish....652-6903
Statistics....652-6403
Tech Prep....652-6510
Theatre Arts....652-6066
Visual & Performing Arts, School of 652-6066

Fall Semester 2012

August 13 – December 14

89 service days

Class Schedule Available on the website	June 4
Application Period	
CCCApply (online)	Begins April 2
Registration Notification for Continuing Students	June 21
Registration Period	
Priority Registration	July 5
Continuing Students	July 6 – 26
New & Returning Students	July 30 – August 10
Payment Deadline	(For specific details, refer to the payment table and drop process for non-payment in the *Schedule of Classes*.)
Convocation	August 8
Institutional Flex Days. No classes held	August 9, 10
INSTRUCTION BEGINS	**August 13**
Late Registration	August 13 – 20
ADD CODES required throughout the late registration period	
Deadline to ADD full-term classes	August 20
Refund Deadline for Full-Term Classes	August 24
Deadline to DROP full-term classes without a "W" grade	August 28
Census submission for full-term classes due from faculty	August 29
Labor Day Holiday	September 3
Deadline to DROP full-term classes with a "W" grade	October 29
Veterans Day Holiday	November 12
Deadline to apply for credit by exam, graduation, certificates	November 16
Deadline to ADD open-entry/exit classes	November 16
Thanksgiving Holiday	November 22 – 25
FINAL EXAMINATIONS	December 8 – 14
INSTRUCTION ENDS	**December 14**
Winter Recess, College Closed	December 24 – January 1
Grades available online	January 2

Registration for *Fast Track* Classes

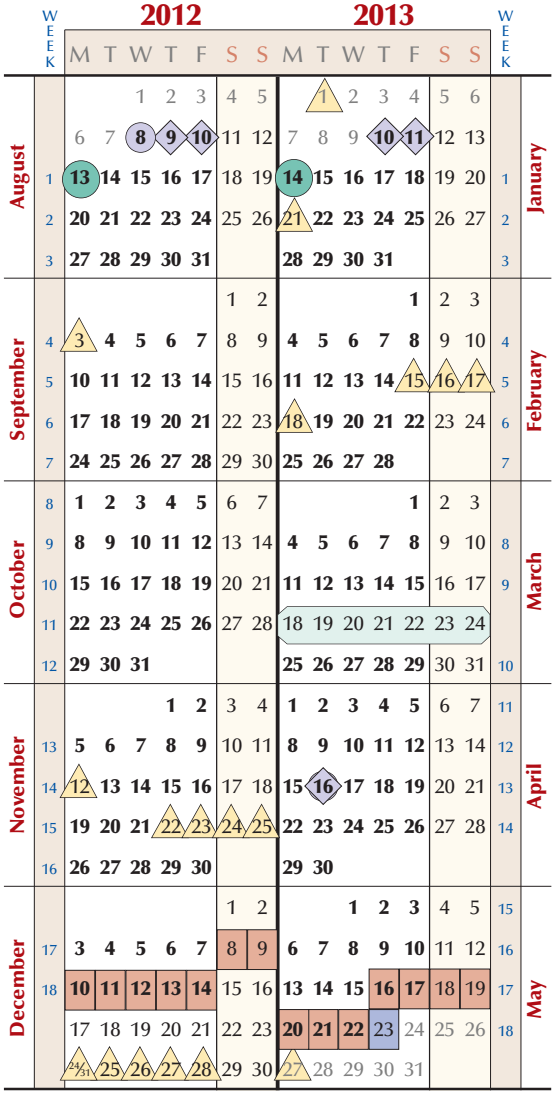
Refer to the *Fast Track* section in the Schedule of Classes for the complete list of *Fast Track* offerings.

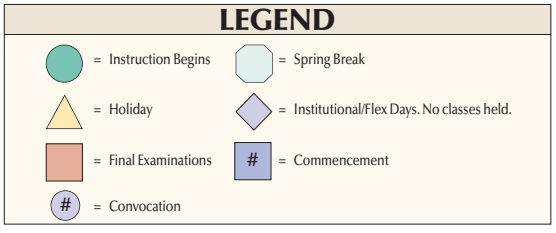
TRACK 1 CLASSES (8/13/12 – 10/8/12)

Registration (Refer to your assigned registration date)	July 5 – August 10
Late Registration	August 13 – 16
ADD CODES required throughout the late registration period	
Deadline to ADD Track 1 classes	August 16
Deadline to DROP Track 1 classes without a "W" grade	August 20
Deadline to DROP Track 1 classes with a "W" grade	September 17

TRACK 2 CLASSES (10/10/12 – 12/6/12)

Registration	September 24 – October 9
Late Registration	October 10 – 15
ADD CODES required throughout the late registration period	
Deadline to ADD Track 2 classes	October 15
Deadline to DROP Track 2 classes without a "W" grade	October 17
Deadline to DROP Track 2 classes with a "W" grade	November 14





NOTE: Weekend classes meet following Friday holidays and before Monday holidays unless specifically designated as a holiday on this calendar.

* **Deadline for refunds** varies for Fast Track classes. Check your Registration Receipt or Class Schedule on MyChaffeyVIEW for this information.

IMPORTANT SAFETY EVENTS

The Great California Shakeout Earthquake Drill	October 18, 2012
Active Shooter Drill	April 3, 2013

Revised 1-18-12

Chaffey College 2012–2013 Academic Calendar

Spring Semester 2013 — January 14 – May 22

87 service days

Class Schedule Available on the website	June 4
Application Period	
CCCApply (online)	Begins October 15
Registration Notification for Continuing Students	October 22
Closed for Thanksgiving Holiday	November 22 – 25
Registration Period	
Priority Registration	November 13
Continuing Students	November 14 – December 14
New & Returning Students	December 17– 21 and January 2 – 11
Closed for Winter Recess	December 24 – January 1
Payment Deadline	(For specific details, refer to the payment table and drop process for non-payment in the *Schedule of Classes*.)
Institutional Flex Days. No classes held	January 10, 11
INSTRUCTION BEGINS	**January 14**
Late Registration	January 14 – 22
ADD CODES required throughout the late registration period	
Martin Luther King, Jr. Holiday	January 21
Deadline to ADD full-term classes	January 22
Refund Deadline for Full-Term Classes	January 28
Deadline to DROP full-term classes without a "W" grade	January 29
Census submission for full-term classes due from faculty	January 30
Lincoln Holiday	February 15
Washington Holiday	February 18
Deadline to apply for graduation and certificates for ceremony participants	March 1
Spring Break	March 18 – 24
Deadline to DROP full-term classes with a "W" grade	April 10
Institutional Flex Day. Faculty Lecture. No classes held	April 16
Deadline to apply for credit by exam, graduation and certificates for non-ceremony participants	April 19
Deadline to ADD open-entry/exit classes	April 19
FINAL EXAMINATIONS	May 16 – 22
INSTRUCTION ENDS	**May 22**
Commencement	May 23
Memorial Day Holiday	May 27
Grades available online	June 3

Registration for *Fast Track* Classes

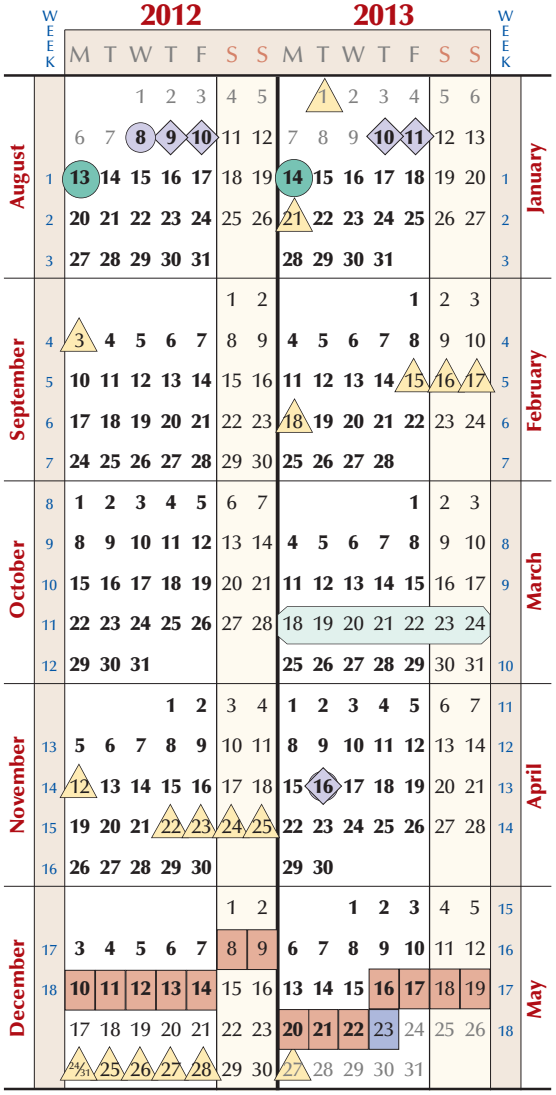
Refer to the *Fast Track* section in the Schedule of Classes for the complete list of *Fast Track* offerings.

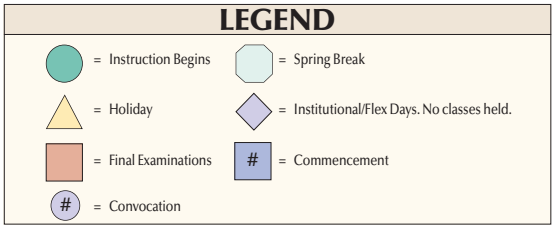
TRACK 1 CLASSES (1/14/13 – 3/6/13)

Registration (Refer to your assigned registration date)	November 13 – January 11
Late Registration	January 14 – 17
ADD CODES required throughout the late registration period	
Deadline to ADD Track 1 classes	January 17
Deadline to DROP Track 1 classes without a "W" grade	January 22
Deadline to DROP Track 1 classes with a "W" grade	February 20

TRACK 2 CLASSES (3/25/13 – 5/15/13)

Registration	March 11 – 22
Late Registration	March 25 – 28
ADD CODES required throughout the late registration period	
Deadline to ADD Track 2 classes	March 28
Deadline to DROP Track 2 classes without a "W" grade	April 1
Deadline to DROP Track 2 classes with a "W" grade	April 30





NOTE: Weekend classes meet following Friday holidays and before Monday holidays unless specifically designated as a holiday on this calendar.

* **Deadline for refunds** varies for Fast Track classes. Check your Registration Receipt or Class Schedule on MyChaffeyVIEW for this information.

IMPORTANT SAFETY EVENTS

The Great California Shakeout Earthquake Drill	October 18, 2012
Active Shooter Drill	April 3, 2013

Revised 1-18-12

INDEX

District Map