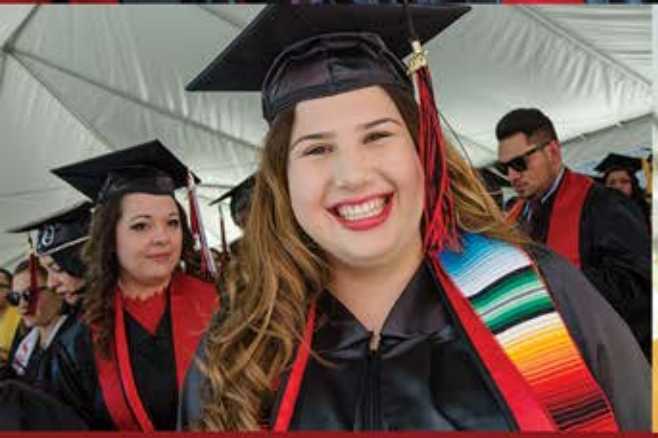
Chaffey College

CATALOG 2018-2019



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2018-2019 CATALOG
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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 joseph.cascio@chaffey.edu.

On the Cover – On May 18, 2017, Chaffey College hosted its 100th Commencement Ceremony at the Citizens Business Bank Arena in Ontario, California. This commencement marked Chaffey's largest graduating class with 2,385 students, receiving over 5,000 awards.

Photos Credit: *Chaffey College, Marketing and Public Relations*

Chaffey College

1883 - 2019

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CONTENTS

Chaffey College

VISION

Chaffey College:
Improving lives through education.

MISSION

Chaffey College inspires hope and success by improving lives and our community in a dynamic, supportive, and engaging environment of educational excellence where our diverse students learn and benefit from foundation, career, and transfer programs.

FROM THE PRESIDENT

Welcome to Chaffey College, one of the Top 10 community colleges in the nation! The last two years have been filled with success at Chaffey College. Chaffey College was named among the Top 10 community colleges in the nation by the prestigious Aspen Institute in 2017 and the college is eligible for the Aspen Prize again in 2019. In 2016, Chaffey College had its accreditation reaffirmed for seven years by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges. Furthermore, the graduating class for 2018 is expected to be the largest in the college's history. In fact, the graduating classes from 2012-2018 have been the largest in Chaffey College history, and we are working hard to continue this success.

We are pleased that you have selected Chaffey College as your college. Our institution offers endless opportunities and programs, including over 190 degrees and certificates. We provide affordable, accessible educational programs and services to meet the needs of our community. Chaffey College has a nearly $600 million annual impact on the economy in the Inland Empire. Many of our students, upon completing their college education, remain or return to the community and find employment, thereby stimulating the local economy.

Over the past 14 years, Chaffey College facilities have been transformed. The passage of Measure L provided $230 million for new facilities and upgrades to enhance the learning environment for students. Furthermore, Chaffey College faculty and staff take great pride in both their teaching and service. They are experts in their fields and are passionate about student success. So, whether you are a student at one of our campuses or enrolled in online classes, I encourage you to utilize both the teaching expertise of our faculty and the comprehensive services and support available to you to enhance your academic success.

If you are enrolling this academic year, we wish you congratulations on becoming one of the scholars who will benefit from the instruction and support that Chaffey College provides. A post-secondary education is the key to a better future.

Again, welcome to our new students and welcome back to those who are continuing their education. Chaffey College strives to be a leader in making all students, faculty, and staff feel valued and part of our campus community. I look forward to seeing you around Chaffey College.

Henry D. Shannon

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

Chaffey College Senior Management

Meridith Randall
Associate Superintendent,
Instruction and Institutional Effectiveness

Lisa Bailey
Associate Superintendent,
Business Services and Economic Development

Eric Bishop
Vice President,
Student Services

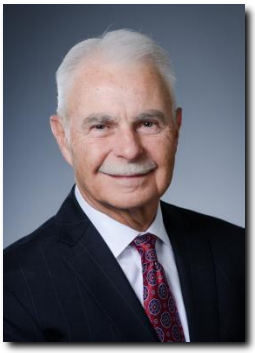
Melanie Siddiqi
Vice President,
Administrative Affairs

Chaffey College Governing Board
2018-2019

The Chaffey College Governing Board is composed of five members elected by the community and a student member elected by the student body. For Governing Board meeting dates and official proceedings, visit www.chaffey.edu/governingboard.

Kathleen Brugger
President

Gloria Negrete McLeod
Vice President



Gary C. Ovitt
Clerk

Lee C. McDougal
Member

Katherine Roberts
Immediate Past President

Moises Rosales
Student Trustee / CCSG President

Schools and Services of the College

Office of Instruction and Institutional Effectiveness

Meridith Randall, *Associate Superintendent*

Adult Education and High School Partnerships
Articulation
College Catalog / Schedule of Classes
Curriculum
Distance Education
Summer School

Kinesiology, Nutrition, and Athletics / Success Centers and Libraries

Robert Rundquist, *Interim Dean*

Nutrition and Food
Kinesiology Activity, Lecture and Team
Library/Cybrary
Success Centers
- Language Success Center
- Math Success Center
- Multidisciplinary Success Centers (Rancho, Chino, and Fontana)

Supplemental Instruction
Turning Point

School of Business and Applied Technology / Economic Development

Joy Haerens, *Dean*

Accounting
Accounting and Financial Services
Automotive Technology
Aviation Maintenance Technology
Business
Business: Legal Studies
Business: Management
Business: Marketing
Business and Office Technologies (BUSOT)
BUSOT: Medical Coding and Billing
CISCO
Computer Information Systems and Related areas of specialization
Computer Science
CTE Career Transitions
Emergency Medical Technician
Faculty Success Center
Fire Technology
Industrial Electrical Technology
Industrial Maintenance
InTech Center
Professional Development
Real Estate

School of Hospitality, Fashion, Interior & Culinary Arts

Teresa Hull, *Dean*

Culinary Arts
Fashion Design
Fashion Merchandising
Hospitality Management
Interior Design

School of Health Sciences

Sherrie Loewen, *Dean*

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

School of Language Arts

Anthony DiSalvo, *Dean*

American Sign Language
Arabic
Chinese
Communication Studies
English
English as a Second Language
Foundational Skills
French
Journalism (Student Newspaper & Chaffey Review)
Spanish

School of Mathematics and Science

Ted Younglove, *Dean*

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

School of Social and Behavioral Sciences

Cory Schwartz, *Dean*

Anthropology
Child Development and Education
Child Development Center
Criminal Justice
Economics
Education
History
Homeland National Security
Honors Program
Humanities
Philosophy
Political Science
Psychology
Social Science
Sociology

School of Visual and Performing arts

Jason Chevalier, *Dean*

Art
Art History
Broadcasting
Cinema
Cooperative Education
Dance
Digital Media
Faculty Advising
Music
Photography
Theatre Arts
Wignall Museum of Contemporary Art

Office of Student Services

Eric Bishop, *Vice President*

Admissions and Records
Cashier's Office
Financial Aid
Transfer Center

Counseling and Student Success and Support Programs

Amy Nevarez, *Dean*

ADA Facilities
AMAN/AWOMAN - Umoja
Assessment Center and Test Proctoring
Counseling
Disability Programs and Services
Diversified Industries
EOPS/CARE
GPS Centers
Guidance
Independent Scholars
Learning and Educational Development (LED)
Opening Doors to Excellence
Puente Project
Senior Early Assessment

Student Life

Christopher Brunelle, *Dean*

Student Activities and Clubs
Student Government
Student Grievance
Student Discipline
Student Health Services

Chino Campus

Teresa Hull, *Dean*

School of Hospitality, Fashion, Interior & Culinary Arts

Fontana Campus

Yolanda Friday, *Dean*

Upward Bound

Office of Business Services and Economic Development

Lisa Bailey, *Associate Superintendent*

Career Development

Alisha Serrano, *Interim Director*

CalWORKs
Career Center
Cooperative Education
Student Employment Office

CORE COMPETENCIES

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

COMMUNICATION

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

- Comprehend, analyze, and respond appropriately to oral, written, and visual information.
- Effectively communicate/express both qualitative and quantitative information through oral, written, visual, and other appropriate modes of communication/expression.
- Ask questions and utilize appropriate resources to continually expand comprehension and oral, written, and visual communication skills.

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. Compute and analyze multiple representations of quantitative information, including graphical, formulaic, numerical, verbal, and visual.
- Apply scientific processes to solve problems and measure and observe natural phenomena.
- Select sources of information based on analysis and evaluation of accuracy, credibility, relevance, and reasonableness of information.
- Analyze and assess assumptions, biases, and multiple perspectives to develop a well-informed, valid argument.

COMMUNITY / GLOBAL AWARENESS AND RESPONSIBILITY

Students will demonstrate knowledge of and strategies to consider significant social, cultural, environmental and aesthetic perspectives. Examples will include, but are not limited to, the following:

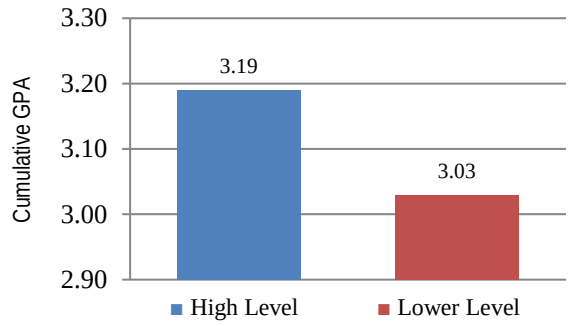
- Identify and apply the social and ethical responsibilities of the individual in society.
- Demonstrate social and ethical responsibility within a community.
- Demonstrate commitment to active citizenship by recognizing and evaluating important social, ecological, economical, and political issues.
- 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 challenging and appropriate personal, educational, and career goals and persist in pursuing these goals; develop effective strategies for both individual and group work; and choose pathways that develop personal, academic, social, and financial responsibility. Examples will include, but are not limited to, the following:

- Demonstrate professional and ethical responsibilities of the individual.
- Demonstrate the ability to use technology to assess, evaluate, and present information.
- Set short and long-term goals, seeking and utilizing various personal, academic, psychological, and social services in pursuit of these goals.
- Seek and utilize feedback to assess learning and progress toward goals.
- Demonstrate resilience by viewing challenges and obstacles as opportunities for growth.

CORE COMPETENCY ASSESSMENT



Here is an example of some of the core competency assessment the college gathered from recent graduates. This competency focuses on the valuation of others' rights and feeling informed about cultural diversity. In a recent study, the college's researchers found that graduating students possessing a high level of global awareness also earned a significantly higher cumulative GPA than did students possessing a lower level of global awareness. Students at Chaffey College are given a core competency assessment at three different points: during initial assessment, at 30 units, and at degree/certificate completion. Those results are used to assist the college in determining the degree to which students have achieved mastery of the core competencies listed on this page.

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 Valley Unified School District, the Fontana Unified School District, and the Upland Unified School District.

THE COLLEGE

INSTITUTIONAL ACCREDITATION

ACCJC ACCREDITING COMMISSION FOR COMMUNITY AND JUNIOR COLLEGES WESTERN ASSOCIATION OF SCHOOLS AND COLLEGES

Chaffey College is a two-year public community college and is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, CA 94949, (415) 506-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at: www.accjc.org. Chaffey College was last accredited by the ACCJC in February 2017. 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 California State Approving Agency for Veterans Education for Veterans Benefits.

PROGRAMMATIC ACCREDITATION

Chaffey College has career technical programs in the Schools of Business and Applied Technology and Health Sciences that undergo external evaluation and are accredited by industry-specific agencies. Each program is noted below, along with the associated accrediting body's name and contact information.

Associate Degree Nursing (ADN) Program

The ADN program is accredited by the State of California Board of Registered Nursing (BRN), a division of the California Department of Consumer Affairs and the Accreditation Commission for Education in Nursing, Inc. (ACEN).

Board of Registered Nursing (BRN)
P.O. Box 944210
Sacramento, CA 94244-2100
(916) 322-3350
www.rn.ca.gov
www.rn.ca.gov/education/rnprograms.shtml#adn

Accreditation Commission for Education in Nursing, Inc.
3343 Peachtree Road NE, Suite 850,
Atlanta, CA 30326
Phone: (404) 975-5000
www.acenursing.org

Aviation Maintenance Technology

The Aviation Maintenance Technology program is approved by the Federal Aeronautics Administration, which is a division of the United States Department of Transportation.

U.S. Department of Transportation
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591
1-866-TELL-FAA (1-866-835-5322)
www.faa.gov
http://av-info.faa.gov/MaintenanceSchool.asp

Certified Nursing Assistant

The Certified Nursing Assistant program is approved by the California State Department of Health.

State Department of Health
PO Box 997377, MS 0500
Sacramento, CA 95899-7377
(916) 558-1784
www.cdph.ca.gov/Programs/CHCQ/LCP
http://archive.cdph.ca.gov/services/training/Documents/SCH-JULY2016.pdf

Dental Assisting Program

The Dental Assisting program is accredited by the American Dental Association, Commission on Dental Accreditation and by the Board of Dental Examiners, a division of the California Department of Consumer Affairs.

American Dental Association
Commission on Dental Accreditation
211 Chicago Avenue
Chicago, IL 60611-2678
(800) 621-8099
www.ada.org/en/coda
www.ada.org/en/coda/find-a-program/search-dental-programs

Board of Dental Examiners
2005 Evergreen Street, Suite 205
Sacramento, CA 95815
(916) 263-2300
www.dbc.ca.gov
www.dbc.ca.gov/applicants/rda/courses.shtml

Emergency Medical Technician (EMT) Program

The EMT program is accredited locally through the California Emergency Medical Services Authority through the County of San Bernardino.

Inland Counties Emergency Medical Agency (ICEMA)
1425 South "D" Street
San Bernardino, CA 92415-0060
(909) 388-5823
www.sbcounty.gov/icema
www.sbcounty.gov/icema/main/emt_trng_prgms.aspx

Radiologic Technology (Rad Tech) Program

The Rad Tech program is accredited by the California Department of Public Health, Radiologic Health Branch, and the Joint Review Committee on Education in Radiologic Technology.

California Department of Public Health (CDPH)
Radiologic Health Branch (RHB)
P.O. Box 997414, MS 7610
Sacramento, CA 95899
(916) 558-1784
www.cdph.ca.gov/programs/Pages/RadiologicHealthBranch.aspx

Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
(312) 704-5300
www.jrcert.org

Vocational Nursing (VN) Program

The VN program is accredited by the State of California Board of Vocational Nursing and Psychiatric Technicians (BVNPT), a division of the California Department of Consumer Affairs.

Board of Vocational Nursing and Psychiatric Technicians (BVNPT)
2535 Capitol Oaks Drive, Suite 205
Sacramento, CA 95833
(916) 263-7800
www.bvnpt.ca.gov
www.bvnpt.ca.gov/education/schools/vn_schools.shtml

INSTITUTIONALLY-SET STANDARDS

To address Accrediting Commission for Community and Junior Colleges (ACCJC) Accreditation Standards, Chaffey College has developed an inclusive shared governance process to review and set institutional standards. Chaffey's College Planning Council (CPC) includes representation from committees that are most closely connected to the District's planning process (e.g., Program and Services Review, Outcomes and Assessment, and Curriculum Committees), as well as the District's executive team, instructional and student services deans, Chaffey College Student Government (CCSG), and the executive boards of both the Faculty and Classified Senates.

One of the main responsibilities of CPC is to evaluate institutional effectiveness, specifically the development and ongoing assessment of institutionally set standards. Starting with ACCJC and California Community College Institutional Effectiveness Partnership Initiative (IEPI) identified metrics, CPC engages in an annual review of externally mandated and internally valued performance outcome measures, establishing short-term (annual) and long-term (3 to 5 year) goals. The development of institutionally set standards occurs through a rigorous review of evidence that includes but is not limited to: an examination of empirical data; review of 3 to 5 year trends; identification of internal and external factors that directly or indirectly impact performance outcomes; and inclusion of feedback and professional judgment from content experts. Institutional standards are set, assessed, and modified as needed on an annual basis. Performance outcomes on institutionally set standards are disseminated annually to the Chaffey College Governing Board, District decision-making groups, and constituencies, and are made available to the public.

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 representing 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 the student 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 students' diverse identities and experiences 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 associate superintendents, 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, 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 and English. Tutoring is provided primarily through the five college Success Centers which also serve as the college's primary resource for supplemental learning and assistance.

DEGREES AND CERTIFICATES

Students who successfully complete program requirements are awarded Associate in Arts degrees, Associate in Science degrees, Certificates of Achievement, and/or Certificates of Career Preparation.

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 calendars for this catalog 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 fulltime and part-time students. Daytime classes are scheduled between 6:30am to 4:30pm. Evening classes usually begin at 5:30pm or 7:00pm Monday through Friday. Some classes are also offered on Saturdays and Sundays. Field trips are scheduled outside the normal class meeting time and may include weekends.

FACULTY

Student success is the focus of faculty at Chaffey College. The faculty comprises dynamic and committed professionals who have completed the rigorous requirements mandated by the State of California. All faculty must demonstrate subject matter competency, the ability to teach that subject matter, and a commitment to remain current in their discipline. The college recruits faculty who are sensitive to and prepared to work with a diverse student population.

Chaffey faculty reflect the diversity of the student population, representing a wide variety of ethnicities, cultures, and belief systems. They include scientists, writers, technical experts, vocational specialists, and scholars. Faculty are deeply committed to teaching excellence in both the vocational and academic programs. They use their expertise in business, social science, natural science, the humanities, and the arts to prepare students for vocations, university transfer, or associates' degrees.

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, Campus Store, 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. For example, the college's Turning Point program offers degree and certificate opportunities to incarcerated students at the California Institution for Women (CIW) and California Institution for Men (CIM) in Chino, and many classes are also offered at local high school and adult school facilities. The District offers a strong program of community-based education that is delivered primarily through the Chaffey College Campuses in Chino and Fontana. Using those 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, a Campus Store, 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 Hospitality Management, Interior Design, and Fashion Design and Merchandising programs. Chino is also the home of the Robert Pile Information Technology Center which houses 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 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 Campus Store. 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: CISCO, Fashion Design/Merchandising, Hospitality Management, Culinary Arts, Industrial Electrical Technology, Interior Design, and Vocational Nursing. 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. The Center hosts the Centers of Excellence which support the community colleges by providing customized data on high growth, emerging, and economically-critical industries and occupations and their related workforce 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 offers entry-level training for various industries as defined by current labor market trends. 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 has classrooms and provides access to admissions, cashiering, and financial aid. Students can also receive academic counseling and limited transfer services at the Fontana Lewis Center. The Fontana Academic Center has classrooms, science labs, a library resource center, a student lounge, and a full-service Campus Store. This Center also provides CalWORKS, DPS, and EOPS Counseling. The Fontana Center building also has classrooms as well as a multidisciplinary success Center where students can receive tutoring and instructional assistance. This facility also offers a Guiding Panthers to Success (GPS) Center, Assessment Testing, and Orientation. 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. The Foundation, with support of its board members, is instrumental in forging partnerships between the college and the communities it serves. The Foundation also raises funds through private foundation grants to support college programs. Anyone interested in learning how to support the Foundation's mission and Chaffey College's students, or any students interested in scholarship opportunities, 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. All former students are considered Chaffey College Alumni and 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 Dual 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. Additional application guidelines apply for international students. For more information, visit: www.chaffey.edu/international/requirements.shtml.

WHO MUST APPLY

Applicants who will attend Chaffey College for the first time (new students) or former students who have not attended for two or more regular semesters (returning students) must complete an application for admission. Graduating high school seniors who have been enrolled through high school dual enrollment must submit a new application upon graduation from high school.

Residency Requirements

As a California Community College, Chaffey College is bound by certain legal requirements related to residency. New and returning students to Chaffey College are classified for the purpose of determining California resident or nonresident status. The classifications are as follows:

California Resident

Regulations state that in order to be considered a California resident for tuition purposes, students must have legal residence in the state for a period of one year immediately preceding the day before the start of the term the applicant expects to attend (Residence Determination Date) [EC 68017]. Students may be required to present evidence of physical presence in California for at least one year and proof of intent to make California their permanent home. Persons over 18 years of age who have legal residence in California for a period of one year immediately prior to the Residence Determination Date may attend as residents.

Nonresident

A nonresident is a student who has not established residence in the state for one year as of the residence determination date (the day before the first day of instruction). Students who provide information on the admission application that is inconsistent with California residency requirements indicated above must complete a Residency Questionnaire. Once the questionnaire has been reviewed, additional documentation may be required in order to make a final determination.

Reclassification

Students who have previously attended Chaffey College as a nonresident and wish to change their status must complete the Residency Questionnaire. Additional documentation will be required to prove physical presence and intent as indicated above, plus documentation to prove financial independence.

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 registered nursing and vocational nursing programs
4. Students needing to show completion of course prerequisites
5. Students who have earned an associate's degree or higher for exemption from assessment, orientation, and counseling

Official high school transcripts must be submitted for:

1. Students who plan to apply for the registered nursing, and vocational nursing programs (GED or high school proficiency scores may be submitted in lieu of transcripts)
2. All high school dual enrollment 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 is a one-stop-shop that provides students with a single point of entry for accessing important resources and information. From within the portal, students have easy access to MyChaffeyVIEW, Moodle, Library services, college announcements and messages, the college 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 https://my.chaffey.edu.

CHAFFEY STUDENT EMAIL

All Chaffey students will be provided with a student email account upon initial registration. All communication to students from Chaffey College, including wait list notifications, will now be directed to their new panther.chaffey.edu email account. Student email should be checked often; deadlines will not be extended due to failure to read email.

ORIENTATION, ASSESSMENT, COUNSELING

All new and returning students are required to participate in orientation and assessment, and must complete an educational plan in order to receive a preferred registration date. These services include writing and mathematics testing, and a presentation on college programs and services. With the assistance of a counselor, students develop an educational plan that includes required classes 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 or visit our website at www.chaffey.edu/counseling 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 Chaffey'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, Disability Programs and Services (DPS), Independent Scholars, and Extended Opportunities Programs and Services (EOPS). Students who complete the entire SEA sequence (orientation, assessment, and counseling) and live in the Chaffey College district boundaries are eligible for early 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 and payment of fees 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.

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

REGISTRATION

The Student Success Act of 2012 (SB 1456) put into place new state regulatory changes that affect all California Community College students. Chaffey College has implemented the following changes regarding student registration:

Unit Capacity – Any Chaffey College student who exceeds 100 units (excluding 500 level courses) will lose registration priority status.

Enrollment – All Chaffey College students must complete the following to retain registration priority:
- Orientation – completed the college orientation
- The Chaffey College Assessment process – includes taking the following placement tests:
  - Math and English; OR
  - English as a Second Language (ESL)
- Education Plan – approved by a counselor
- Maintain Good Academic Standing (cumulative GPA 2.0 or better)
  - Financial Aid Students – Effective Fall 2015, Students' Board of Governor's fee waiver eligibility is impacted if you do not meet academic and progress standards for two consecutive terms.

Registration Date Assignment
Registration priority is assigned in the following order (Title 5, Section 58108):
1. Students who have completed orientation, assessment, and an education plan, and are enrolled in and receiving services from an eligible priority group as defined by Education Code 66025 and Title 5 58108.
2. Continuing, returning, and new students who have completed orientation, assessment and an education plan; continuing students must also be in good standing.
3. Student who have completed more than 100 units.
4. Students who have not completed orientation, assessment, OR an education plan, and/or are not in good academic standing.

For more information regarding the California Community College regulations for student success visit the California Community College Chancellor's website at www.californiacommunitycolleges.cccco.edu or the Chaffey College website at www.chaffey.edu/student-success.
An informational video is also available at http://www.youtube.com/watch?v=vjuxhzeG8VQ

Registration dates will be available on the MyChaffey portal approximately two weeks prior to the start of the registration period. Students may register online on or after their assigned registration date and time. Students who do not have access to a computer may use the student computers in the Admissions and Records Office on any campus. High school students participating in the High School Dual Enrollment Program and students with petitions must register in person.

ALTERNATE CHOICE OF CLASSES
It is recommended that students prepare an alternate list of classes to fit their schedule in the event their first choice of classes is not available. Classes are filled on a first-come basis. A list of open classes is available throughout the registration period. The open class list is available on Chaffey's website at www.chaffey.edu/openclass.

CLOSED CLASSES AND WAIT LISTS
Wait lists open as soon as a class becomes full. When a seat becomes available, notification of permission to register will be sent to the student's Chaffey email account, based on wait list ranking. Students are allowed three days to complete registration. Failure to enroll before the deadline provided in the email will result in removal from the waitlist. Wait lists are limited to 20 students. A student must attend the first class meeting to be considered for admission to a closed class.

The deadline to add classes from the wait list cannot be extended. Wait list status can be monitored through the 'Manage My Waitlist' link in the MyChaffey portal by selecting MyChaffeyVIEW from the launch pad.

UNITS
Students may register for a maximum of 18 units during fall/spring terms and 7 units during summer terms using online registration. Any units exceeding the maximum must be approved by a Counselor and added in person in the Admissions and Records Office.

LATE REGISTRATION
Add Codes are required to register for any open or closed class beginning the first day of instruction for each semester or summer term. The following students must register in person in the Admissions and Records Office:
- High School students
- Students with special petitions or corequisite waivers
- Students with financial or other restrictions
- Students who are auditing

The late registration period is published in the schedule of classes. Classes can no longer be added after the late registration deadline has passed. Open entry/open exit 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 information 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 have an official transcript on file in the Admissions and Records 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 registration 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 and Records 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 below).

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, official 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 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, official transcripts must be on file.
   b) To challenge a math course, you must attach a copy of your Chaffey College assessment test results to the challenge form. Official high school transcripts must be on file with the Admissions and Records Office.
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 five (5) 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 prerequisite 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.

Prerequisite Challenges for Higher-level Modern Language Courses:
Students may petition to enter a higher level language course in Arabic, Chinese, French, or Spanish by completing a prerequisite challenge language diagnostic in the Assessment Center. After completing the diagnostic, students will be able to enroll in the course if space permits (and if during a valid registration period) until the diagnostic is evaluated and a decision is made regarding the prerequisite challenge. To make an appointment for the prerequisite challenge language diagnostic, contact the Assessment Center at (909) 652-6224/6239.

Students may petition to enter a higher level American Sign Language (ASL) course by completing a face-to-face diagnostic with ASL faculty. To schedule an appointment for the prerequisite challenge ASL diagnostic, contact the ASL department at (909) 652-6902.

LIMITATIONS 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.

ADVISORIES
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 Comprehensive 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. For information on additional services provided by the Counseling Department, please refer to the Student Support Services section or visit our website at www.chaffey.edu/counseling.

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, counseling on selection of major and educational pathway, an educational plan, and follow-up services.

New and returning students are required to complete orientation, assessment, and complete an abbreviated education plan in order to receive a preferred registration date. High School Dual Enrollment students must complete assessment, and a high school counseling group (HS SEP) before they may register for classes.

ASSESSMENT OF FOUNDATION SKILLS
Assessment testing is required for placement into English, ESL, and mathematics 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, and mathematics 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.shtml.

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 introduces students to college services and educational programs and provides information on college policies, enrollment procedures, and important deadlines. The college offers online and group orientations. Students are able to access the online orientation via the MyChaffey portal by utilizing the "new student registration steps" tab. The link is available under item 3. 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 Guidance courses.

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 unlawful discrimination if they feel the assessment, orientation, counseling or any other matriculation procedure is being applied in a discriminatory manner.

Matriculation requirements also include certain student responsibilities. Upon admission to the college, students must express a broad educational goal and provide transcripts from previous college work. They are encouraged to complete assessment and orientation prior to registering for classes and must develop both an Abbreviated and a Comprehensive Student Education Plan (SEP) with a counselor within their first six months at Chaffey College. Students are responsible for attending class, completing 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 Dual Enrollment program 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 to provide all students with 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 the MyChaffey portal, in person, or by mail. Fees may also be paid via the NBS Tuition Payment Plan. For more information on the tuition payment plan, please visit the website at www.mycollegepaymentplan.com/chaffey. All fees are due at the time of registration, including Enrollment fees, Health fees, College Services fee (optional), Technology fee (optional), Materials fees, Transportation fees, and if applicable, nonresident fees. Fees may be paid via cash, check, money order, VISA, Master-Card, American Express, 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. Visit www.chaffey.edu/cashier for current fees.

AUDIT FEE
The cost to audit a course is $15.00 per unit. See page 32 for more information.

ENROLLMENT FEE (Tuition)
$46.00 per unit for California residents.

NONRESIDENT ENROLLMENT FEE
Nonresident 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. Nonresident Enrollment Fee (U.S. Citizen and Non-U.S. Citizen) is $314 per unit ($258 per unit, plus $10 capital outlay charge, plus $46 per unit enrollment fee).

HEALTH SERVICES FEE
$17.00 Fall and Spring; $14.00 Summer (Non CCP Grant students). This fee funds the Student Health Services Program. Certain laboratory tests and medications may require an additional fee. Usual clinic hours are 8:00am to 4:00pm, Monday through Friday. Some 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 Services Fee waived. Applications for waiver are available in the Student Health Services office. California College Promise Grant (CCP Grant) eligible students will be responsible for all or a portion of the Health Services Fee as listed on the payment chart at www.chaffey.edu/cashier.

COLLEGE SERVICES FEE (Optional)
$8.00 Fall and Spring; $5.00 Summer. This fee funds Chaffey College Student Government (CCSG) 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 Campus Store
- Opportunity drawings and giveaways
- Emergency book grants
- Campus improvements
- Departmental grants

PARKING (required on the Chino, Fontana, and Rancho Cucamonga Campuses)

- Auto Parking:
  $50.00 Fall and Spring Non CCP Grant
  $30.00 Fall and Spring CCP Grant
  $25.00 Summer
- Motorcycle Parking: $20.00
- Daily Permits: $4.00

TECHNOLOGY FEE
Effective with the Fall 2014 semester, Chaffey College implemented a technology fee to help support the cost of providing student access to college technology. This fee is optional and will be used, for example, to help ensure that student computer labs are equipped with current hardware and software and to provide high-speed wireless access and connectivity to the internet. The technology fee is $8.00 per term in the fall and spring and $5.00 in the summer and will only be used for student-related technology. Students who choose not to support this fee must contact the Cashier's Office at cashier.staff@chaffey.edu on or before the refund deadline for the applicable term.

TRANSPORTATION FEE
A transportation fee will be in effect fall 2017 through summer 2027. The fee is $9 for students registered in six (6) or more units and $8 for students registered in less than six (6) units in the fall and spring semesters. During the summer, the fee is $6 for students registered in six (6) or more units and $5 for students registered in less than six (6) units. Students enrolled in non-credit classes totaling zero (0) total units may opt-in to pay the rate of less than six (6) units in order to use the services. Note: The summer is no longer free to students enrolled in the previous spring semester.

This fee allows the student to ride all of Omnitrans' fixed route bus and rail services at no charge during the semester by using their current Chaffey Student ID card. Service is also available during the break following each academic term if the fee was paid and eligibility was maintained in the previous term. It also allows any eligible student who is also qualified to use Omnitrans' Access para-transit service to purchase Access one-way tickets at a twenty percent (20%) discount.

To be eligible for these services, students must possess their own current, valid Chaffey ID card, must be registered and remain registered in classes for the duration of the current academic term, and must have paid the transportation fee for the current academic term. Students who withdraw from classes during a term are no longer eligible for the services at the point of withdrawal.

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

- Replacement of diploma / 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.

DROP PROCESS FOR NON-PAYMENT
Before the semester begins, payment is due in full within 10 days (including weekends and holidays) from the date of registration. If payment is not received, all classes will be dropped.

During the last 10 days of registration, all fees are due in full prior to the start of the term. Classes will be dropped the day before the first day of instruction if fees are not paid. Once classes have been dropped for non-payment, the action cannot be reversed.

PAST DUE FEES
Beginning the first day of instruction for the term, fees are due in full at time of registration. Payments not received the same day will result in a financial hold on the student account. Payment is due at time of registration for any class that begins after the first day of instruction for the term, including Fast-Track and late-start classes.

Financial Holds
Financial holds will prevent access to grades, transcripts, diplomas, and registration privileges (Title 5, Section 59410).

REFUND POLICY

Automatic Refund Process

Refunds will be processed automatically for the following:

- Credit amounts of $20 or more
- Classes canceled by the college
- CCP Grant reimbursements (No refund request required)

Automatic refunds will be processed within 45 business days after the last day to add full term classes (check the Schedule of Classes for specific dates). Refunds payments made by cash, check or money order will be issued in the form of a check and mailed to the current address on file. To ensure prompt delivery, address information should be checked often for accuracy and updated as soon as possible when changes are needed. If payment was made with a credit card, the refund amount will be credited back to the card.

Eligibility Requirement for Refunds

Refunds will be issued for all classes that are dropped by the published refund deadline. The refund deadline date can be found on the registration receipt available on the MyChaffey portal. To be eligible for refund, classes must be dropped during the first two weeks of instruction for full-term classes, and/or by the 10 percent point of the length of the course for a short-term course [Title 5, Section 58508(a)]. The following fees are subject to refund: enrollment, health, materials, college service, and nonresident tuition. (California Code of Regulations, Title 5, Section 58508).

Specific refund dates can be found on the Registration Receipt available through the MyChaffey portal.

Refund for Parking Permits

Parking permits must be returned to the Cashier's Office on or before the appropriate refund deadline date for the current semester to be eligible for refund.

Refund for Canceled Classes

Refunds will be issued automatically for all cancelled classes. A refund request is not required.

Financial Aid CCP Grant Re-Bill/Reimbursement

Students who paid for classes prior to receiving a CCP Grant will receive a refund 45 business days from the day the CCP Grant is processed. The CCP Grant 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 must be requested by the student via email:

- Refund requests for a credit amount less than $20 must be received by the Cashier's Office on or before 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 (registration receipt is available on the MyChaffey portal)

The refund process will begin once all required information is received. Refunds will be processed 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, MasterCard, American Express, or Discover. Unpaid balances will be referred to the Franchise Tax Board for collection. For more information visit www.chaffey.edu/cashier/cotop_faq.shtml

College Costs

If you would like to know more about calculating the costs associated with attending community college, please use the following links to determine expenses:

- http://collegecost.ed.gov/catc
- www.icanaffordcollege.com (click "College Costs")
- www.chaffey.edu/finaid (click "Cost of Education")

Financial Aid

Chaffey College School Code required on the Free Application for Federal Student Aid (FAFSA): 001163

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. Awards may come from one or more or any combination of grants, scholarships or federal work study. 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

All students are encouraged to apply for all forms of Federal and State financial aid programs offered at Chaffey College. Eligibility for Financial Aid is determined by completing the FAFSA application online at www.fafsa.gov. Be sure to include Chaffey College's school code 001163. A FAFSA must be completed for each academic year and one FAFSA serves throughout that entire academic year (summer, fall & spring).

October 1 – FAFSA/DREAM ACT Available to Complete

Students can now submit the Free Application for Federal Student Aid (FAFSA) or the California Dream Act Application (CADAA) beginning on October 1, 2018, for the 2019-2020 Award Year rather than beginning on Jan. 1, 2019. Students (and parents, if dependent) will be able to use prior-prior year income data (2017 tax year). Be sure to list Chaffey College school code 001163 on the FAFSA or 00116300 on the Dream application so that we receive your application information.

The FAFSA should be completed beginning October 1 and no later than March 2 to meet priority filing date for the following academic year and assure your application is processed in timely manner in preparation for fall and spring terms.

Students can still apply after this date. Be aware that some awards are offered on a first-come, first-serve basis. Students must reapply each year to continue receiving funding.

Late Applicants

If you miss the Financial Aid Priority Deadline for the term in which you wish to enroll, you still are strongly encouraged to apply for financial aid. Your application will be accepted and processed; however, it may not be processed in time for you to use your financial aid to pay for your fees and books. If this is the case, you may need to pay your fees and purchase your books; then if it is determined that you qualify for financial aid, you will be reimbursed later in the term.

Process of Determining Financial Aid Eligibility

Once the financial aid application is completed, the results will be sent to Chaffey College. Students must have a Chaffey College Admissions application on file in order for the application to be received. You will receive an email notification indicating if awards are available or if additional documentation is needed. You may check this information through MyChaffeyPortal at MyChaffeyView, then click on Financial Aid Self Service and view the checklist.

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
- Not be in default on a prior student loan
- Not owe a repayment or overpayment of a federal grant
- Have a valid Social Security Number (SSN) for federal aid. Parents of dependent students are not required to have a valid SSN.
- SSN must be included on the Admissions application
- Have a high school diploma, GED or equivalent
- Demonstrate financial need
- Be registered for Selective Service if required
- Maintain Satisfactory Academic Progress Policy requirements as defined by the Chaffey College Financial Aid Office
- Have "financial need" as determined in part by submitting the FAFSA

Payment of Financial Aid

Financial Aid payments will be made to eligible students with complete financial aid files that have Pell awarded, are enrolled in courses that apply toward a degree, certificate or transfer program and meet Satisfactory Academic Progress per criteria established by the Chaffey College Financial Aid Office.

Payment is based on the number of full-term units at the time of calculation (calculations are made approximately 5-8 days before disbursement). Late start classes must begin for units to be included in the first disbursement; otherwise they will be included on subsequent disbursements. Payment will be adjusted according to enrollment status.

Awards are based on full-time enrollment status; however, students are not necessarily required to enroll in full-time units to receive aid. If students are enrolled in less than fulltime for the semester, disbursement will be adjusted in accordance with the enrollment status.

The maximum financial aid amount is allocated for enrollment as a full-time student (12 or more credits) and there are specific payment allocations for enrollment as a part-time student: three-fourths of the maximum financial aid amount for nine through 11.5 credits; one-half of the maximum amount for six through 8.5 credits; and less than half time for 0.5 to 5.5 credits, amount will be prorated; not all students are eligible at less than half time enrollment. Your financial aid award amount may be adjusted based on your enrollment status.

*All Disbursements are contingent upon funding. Cal Grant disbursements are contingent upon funding from the State. Cal Grant and FSEOG funds will be released in one payment per semester. All financial aid grant funds are disbursed electronically via BankMobile (Formerly Higher One). All students have choices for receiving their financial aid refunds: Electronic Deposit to Another Account or Electronic Deposit to a BankMobile Account. Students must make a selection in order to avoid a delay in their disbursement. Once eligibility is confirmed, students will receive their financial aid funds based on the method they choose to receive their funds. Visit www.refundselection.com to learn more about how disbursements are made.

FUNDING SOURCES

The FAFSA will determine eligibility for federal and state waivers, grants and work-study. The Dream application will determine eligibility for the California College Promise Grant CCPG and Cal Grant.

California College Promise Grant (CCPG) Formerly BOG Fee Waiver

The California College Promise Grant (CCPG) is available for eligible California residents. The CCPG continues to waive mandatory enrollment cost per unit (.5 to maximum unit load) and a portion of the parking fee. CCPG eligible students will be responsible for all or a portion of the Student Health fees. 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.

This is financial aid that does not have to be repaid. The CCPG is valid for the entire academic year beginning with summer and ending with the following spring semester. To apply, complete 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 on MyChaffeyView via the MyChaffey Portal. If you are not a California resident, you may be eligible to apply for a tuition exemption through the AB 540 Non-Resident Fee Waiver. See Admissions and Records for additional information or view our consumer guide online.

Students who qualify for the AB 540 Non-Resident Tuition Exemption may be eligible for Cal Grant and CCPG online at https://dream.csac.ca.gov Please visit the Financial Aid office website at http://www.chaffey.edu/finaid/dream_act.shtml for more information regarding the Dream Act Application or visit the Dream Act website at www.csac.ca.gov/dream_act.asp

Eligibility Requirements for California Dream Act

The California Dream Act allows undocumented and non resident documented students who meet AB540/AB2000 criteria to apply for and receive private scholarships funded through public universities, state-administered financial aid, university grants, community college fee waivers, and Cal Grants.

AB 540 criteria:

- Must have attended a California high school for three (3) or more years AND
- Must have or will graduate from a California high school or have attained a GED or received a passing mark on the California High School Proficiency Exam (CHSPE) AND
- If undocumented, the filing of an AB 540 affidavit with the college or university stating that they have applied for a lawful immigration status or will apply as soon as they are eligible to do so. Complete and submit the affidavit to the Admission & Records Office at any one of our three campuses.

AB 2000 criteria:

Must have attended a California high school or graduated early from a California high school with the equivalent of three (3) or more years of credits; if the student graduates early, they must have attended a California elementary or secondary school for a cumulative total of three (3) or more years.

California College Promise Grant (CCPG) Policy

Under the new State regulations, once you've qualified for the CCPG Fee Waiver, it is important to ensure that you are meeting the academic and progress standards in order to avoid losing the fee waiver.

Students must:

- Maintain a cumulative GPA of 2.0
- Successfully complete at least 50% of all units attempted.

Beginning Fall of 2016, students will lose eligibility for the Board of Governors Fee Waiver (BOGW) if they are on academic probation for two consecutive primary terms (fall and spring semesters are primary terms). Loss of eligibility will become effective at the first registration opportunity after such determination is made.

Students with extenuating circumstances will have the opportunity to appeal the loss of the CCP Grant.

Students with extenuating circumstances will have the opportunity to appeal the loss of the CCPG.

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. These grants may be used for tuition, fees, books, transportation, and living expenses. Initial awards are estimated based on the results of the FAFSA. Estimates will change if any criteria used to determine your eligibility, such as major, degree status, satisfactory academic progress, income or family information changes. Actual payment will not be determined until your file is completed and enrollment status is verified. 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.

Students are only eligible to receive a Pell Grant for 6 years (12 full-time semesters). This includes all semesters the Pell Grant has been received during a student's educational lifetime. Students can view their current Pell Grant usage online at www.nslds.ed.gov using the FSA ID to access grant history.

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).

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. Student s 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-serve 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 submit the FAFSA or California Dream Act Application and your verified Cal Grant GPA 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 or California Dream Act Application and your verified Cal Grant GPA by September 2nd.

Cal Grant B provides low-income students with a living allowance and assistance with tuition and fees.

Cal Grant C assists students with tuition and training costs for technical, occupational, vocational or career training programs. 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.

Full Time Student Success Grant (FTSSG)
The Full Time Student Success Grant (FTSSG) is a new financial aid program funded through the California Budget Act, 2015. All California community college full time students who received a Cal grant B and Cal grant C will be awarded the FTSSG. The maximum award amount is $600 ($300 per term). If you are eligible, you will receive a revised award notification to view your awards on MyChaffey Portal.

Chafee Grant
The California Chafee Grant Program awards up to $5,000 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 Chafee Grant awards in accordance with the regulatory statutes of the program. For more information visit https://chafee.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. It is free money that does not need to be paid back. Available scholarships are listed year-round on the Financial Aid website (www.chaffey.edu/scholarships). Students may also contact Student Activities and the Chaffey College Foundation office for other available scholarship opportunities.

Satisfactory Academic Progress (SAP)
Students who receive financial aid at Chaffey College must maintain the standards for Satisfactory Academic Progress. All students receiving any form of financial aid must meet the standards of progress outlined below.

Satisfactory progress requirements are:
- Students are required to complete at least 67% of the number of units that they have attempted at Chaffey College, and
- Students must maintain at least a cumulative 2.0 Grade point average (GPA) or higher and
- Students are allowed a maximum of 72 total units attempted when receiving financial aid.

Federal regulations set the maximum time frame in which students must complete their educational program as 150% of the published program length at Chaffey College (i.e., if the published length of a program is 60 units, then the student must complete his or her program by the time he or she reaches 90 attempted units; transfer credits are included).

Become familiar with Chaffey College Satisfactory Academic Progress Policy by visiting: www.chaffey.edu/finaid/sap_policy.pdf

Important Facts
In the event that a financial aid applicant at Chaffey College enrolls in coursework and then completely withdraws from all coursework may be subject to repayment of Federal Financial Aid funds. In this case, a student will be billed for the amount of aid that must be repaid, and holds will be placed on your record until the overpayment is resolved.

Federal regulations require that Financial Aid Office performs a calculation to determine how much financial aid a student has earned. This calculation is called a "Return to Title IV" calculation. (Title IV refers to Federal Financial Aid programs.) The Financial Aid Office uses a federal formula to determine how much aid a student earned based on his/her last day of attendance.

Federal Law also requires that students who received federal Title IV aid and drop classes will be required to pay back some of the aid received. Information regarding reduced enrollment as required by regulations is available at www.chaffey.edu/financialaid.

High School Dual Enrollment

High school students may enroll at Chaffey College through dual enrollment to pursue advanced scholastic or vocational education (Education Code 48800(a)). 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. Registration dates will be assigned based on date of receipt of completed packet. Home schooled programs for grades 11-12 must meet State guidelines for special admit students in order to apply for admission. The signature of a school affiliate is required on the High School Certification Form. Home schooled students who are not able to obtain a school affiliate signature must achieve a placement recommendation in English 475 or higher and Math 410 or higher on the Chaffey College assessment test. If the preceding scores are not achieved, the student may repeat the assessment test the following semester.

The student's Chaffey ID number, and a link to the High School Registration Packet will be included in their registration 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 the principal/designee may complete Part A of the form listing the recommended courses, which cannot be remedial in nature (courses numbered 500-599). Enrollment in KINACT courses are restricted to adult students who are no longer enrolled in high school. However, high school students may continue to enroll in KINLEC courses such as KINLEC 15 – "Diet and Fitness" with the permission of the high school counselor or designee. Selected seniors may be eligible to enroll in KINTM courses. All high school students participating in the High School Dual Enrollment 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 and Records Office, along with official high school transcripts. Students should fulfill all High School Dual Enrollment requirements at least two weeks prior to the assigned registration date to avoid 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 in fall/spring term and six units in summer, selected from the recommended courses on the High School Certification Form.

Enrollment, health, technology, 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, transportation fee) 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, transportation, technology, and college service fees. High school students classified as nonresidents of California (for tuition purposes) and/or the United States must also pay out-of-state tuition fees.

All high school students participating in dual enrollment must attend the first day of class. For more information on high school dual enrollment, visit our web site at www.chaffey.edu/admissions/high_school.shtml and select the High School Partnership link. For information on assessment, orientation and counseling, contact the Counseling Department at (909) 652-6200 or visit our website at www.chaffey.edu/counseling.

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/admissions, click the High School Students link, and select "How to Appeal".

HIGH SCHOOL PARTNERSHIP PROGRAM

High School Partnership offers Chaffey College District high school students the opportunity to take dual enrollment courses at their high school sites. For more information please contact the High School Partnership Department at (909) 652-6103.

CTE CAREER TRANSITIONS

High School / ROP Articulation Agreements

High School/ROP students who attend Career Technical Education (CTE) courses articulated with Chaffey College may be able to earn advanced placement or college credit. For additional information contact your CTE counselor or the Career Transitions Office at (909) 652-6831.

Student Classifications and Programs

AIR FORCE RESERVE OFFICER TRAINING CORPS

Air Force Reserve Officer Training Corps (AFROTC) is a nationwide program that allows students to pursue commissions (become officers) in the United States Air Force (USAF) while simultaneously attending college. AFROTC consists of four years of Aerospace Studies classes (Foundations of the USAF, Evolution of USAF and Space Power, Air Force Leadership Studies, and National Security Affairs/Preparation for Active Duty), and a corresponding Leadership Laboratory for each year (where students apply leadership skills, demonstrate command and effective communication, develop physical fitness, and practice military customs and courtesies). College students enrolled in the AFROTC program (known as "cadets") who successfully complete both AFROTC training and college degree requirements will graduate and simultaneously commission as Second Lieutenants in the Active Duty Air Force.

Classes are offered at California State University, San Bernardino; however, UCR students may enroll using our cross-town agreement. For more information on AFROTC course descriptions, please review http://catalog.csusb.edu. For more information on the AFROTC program, call (909) 537-5440 or visit http://afrotc.csusb.edu.

Umoja

"Connect to Succeed" is the philosophy of the Umoja Project. UMOJA 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 Leadership development, mentoring and counseling and Umoja Practices, students from a wide variety of backgrounds are connected to strategies and activities that promote achievement, self-esteem and cultural understanding. Umoja is specifically designed to assist African-American students and all students are welcome to join. For more information, contact Dr. Donna Colondres at (909) 652-6226 or Tiffany Coleman at (909) 652-6505.

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 within the Career Development department. Students may contact the Cooperative Education Office at (909) 652-6097 to schedule an appointment.

FACULTY ADVISOR PROGRAM

Faculty Advisors are professors who help students explore opportunities related to academic majors, university transfer, and career goals within the professor's expertise. Students may contact faculty advisors directly by phone or email and may request information as often as needed.

For more information, call (909) 652-6971, visit www.chaffey.edu/faculty_advisor, or e-mail facultyadvisor@chaffey.edu.

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 which 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.

INDEPENDENT SCHOLARS PROGRAM

The Independent Scholars Program is a Counseling support program aimed at providing unique and personalized educational services to current and former Foster Youth (this includes Chaffey College students who are currently in Foster Care as well as those who are emancipated Foster Youth and who are 24 years of age or younger). Program participants are eligible to receive priority registration, assistance in purchasing books and supplies, individual counseling support, mentoring, referrals to community and campus resources, and much more. For more information, students may call (909) 652-6548 or e-mail: ischolar@chaffey.edu.

INTERNATIONAL STUDENTS

Chaffey College welcomes students from all over the world. Approximately 200 students from 40 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 intlstudents@chaffey.edu.

A variety of services are provided to international students such as guidance and assistance to maintain F-1 (student visa) status, information and assistance regarding change of status processes, academic guidance, housing/homestay referrals, career development, social and cultural activities and many other services geared to meet the specific needs of international students attending Chaffey College. A medical insurance mandate requires all international students to purchase a medical plan. Failure to obtain medical insurance will result in delays or holds for class registration and/or the release of official records.

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.

MONTCLAIR TO COLLEGE

Formerly known as Online to College, Montclair to College (MTC) is a scholarship and counseling program for graduates of Montclair High School that attend Chaffey College. The MTC scholarship covers up to two years of Chaffey College enrollment fees and textbooks for eligible students. Students must maintain continuous and uninterrupted enrollment at Chaffey College for two years, maintain at least a 2.0 GPA, complete the FAFSA or Dream Act Application annually, meet with the MTC counselor twice per semester, and participate in MTC events. For more information about the program, please contact (909) 652-6504.

OPENING DOORS TO EXCELLENCE

Chaffey College offers a comprehensive program to assist students experiencing academic difficulty. *Opening Doors* assists students on second level probation.

Opening Doors offers 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 or visit www.chaffey.edu/opening_doors.

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 475 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 Padilla at (909) 652-6208.

STUDY ABROAD

Chaffey College is a member of the Southern California Foothills Consortium for Study Abroad, a cooperative venture among the community college districts of Antelope Valley College, Barstow Community College, Citrus College, College of the Canyons, College of the Desert, Crafton Hills College, Mira Costa College, Mt. San Antonio College, Mt. San Jacinto College, Rio Hondo College, San Bernardino Valley College, and Victor Valley College, in partnership with the American Institute for Foreign Study (AIFS). This partnership allows students to make normal progress toward their undergraduate degrees while utilizing foreign resources and cross-cultural experiences. Currently the program offers students an opportunity to study in London, England (fall), Costa Rica (winter) and Barcelona, Spain (spring). Contact the International Student Center for more information at (909) 652-6195.

TURNING POINT

The Chaffey College Turning Point program offers degree and certificate opportunities to incarcerated students at the California Institution for Women (CIW) and the California Institution for Men (CIM) in Chino. Supported by grants from the California Community College Chancellor's Office and the Opportunity Institute, the pioneering program serves as a national model for inmate education and was featured prominently in the 2015 "Degrees of Freedom: Expanding College Opportunities for Currently and Formerly Incarcerated Californians" report written jointly by the Stanford and Berkeley law schools through funding from the Ford Foundation.

Chaffey College has offered an associate degree program at CIW since 2005. Originally supported through the college's Extended Opportunity Program and Services (EOPS), students receive a comprehensive educational experience comparable to any other Chaffey College student. In addition to courses taught by top faculty from a variety of disciplines, students are supported by regular counseling services, a dedicated Success Center space staffed by inmate tutors and college personnel, and innovative co-curricular learning experiences comparable to those that take place on the college's Chino, Fontana, and Rancho campuses. Approximately 100 students are currently enrolled in Chaffey classes at CIW, working toward completion of the Professional Office Skills certificate or a Business degree.

In summer 2016, Chaffey College expanded its inmate education offerings when it started a certificate program at CIM. Designed similarly to the successful program at CIW, the men's program currently offers the Professional Office Skills certificate with degree programs planned for the near future. Like CIW, Turning Point students at CIM receive the scope of services at the core of any Chaffey College student experience (counseling, academic tutoring, and other educational resources). Approximately 30 students enrolled in the first Chaffey courses at CIM, with plans to create additional cohorts to serve the growing demand for college participation now emerging within the institution's population.

The inmate education programs at Chaffey College are only possible by the shared commitment and effective working relationships that exist with the college's correctional partners. Inspired by a joint mission to transform lives, reduce recidivism, and improve the community, the Turning Point program is a great example of how Chaffey College creates innovative programs to serve all students within its District boundaries.

UPWARD BOUND

Project Upward Bound is a federally funded program that prepares high school students of today to become the college students of tomorrow. Upward Bound serves high school students from low income families and/or students in which neither parent holds a bachelor's (4- year) degree. The goal of Upward Bound is to increase the rate of students who complete high school, enroll in college, and graduate with college degrees.

Services for participating students include college information, college visits, cultural trips, test preparation, tutoring, and academic advising.

Currently, the program serves enrolled students at A.B. Miller High School and Fontana High School in the Fontana Unified School District. For eligibility and service information, visit www.chaffey.edu/ub or call (909) 652-7445.

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 the Veterans Resource Center 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 in the Veterans Resource Center for a Veteran's Program Check. Official transcripts of all previous college work must be evaluated prior to this meeting.

Student Veterans may request priority registration; students wishing to collect benefits must first meet with the School Certifying Official (SCO) in the Veterans Resource Center to begin the process. Students not wishing to collect benefits may also request priority registration through the SCO. For more information, please visit www.chaffey.edu/vets.

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 2017, Spring 2018, or Summer 2018 terms. See the section on Graduation Requirements on page 38 for more information. 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 or Studio (including open-entry)	1	48-54
Independent Study	1	16-18
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 may be able to enroll in both classes at the same time, or have the option to enroll in the 2nd session class later if seats are available.

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 multiple distance education modalities and offers several certificates that can be obtained via distance education. Distance education courses are taught by 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: hybrid and online. In online classes, students receive instruction 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 classes 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 are ready for a distance education class, contact the Chaffey College Distance Education Office at (909) 652-6975; via e-mail at OnlineEd@chaffey.edu or visit the Distance Education (DE) 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. Achievements are recorded on students' official transcript.

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.

HONORS AT GRADUATION
Students who have earned an associate's 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.

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 or which is listed on the Credit by Examination table on the following pages 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.

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

b) Applications for credit by examination are available in the Admissions and Records Office at any of our three campus locations.
c) There is a $25 fee for credit by examination testing.
d) Units earned through credit by examination shall not be counted toward the 12-unit residency requirement for graduation.

It is the policy of Chaffey College that only unit credit is granted upon successful completion of the 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.

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. Students who would like external exam credits to be applied to their institutional unit calculations should consult with a counselor.

Advanced Placement (AP) Examinations
The AP Examination Table on pages 26-27 provides the title of the AP Examination, minimum required score, course equivalency (if applicable), institutional unit credit awarded, and the general education subject area and unit credits recognized toward the Chaffey College general education pattern. Course equivalencies and units awarded are internal to Chaffey College only and do 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 28 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.

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 CLEP Table on pages 29-31 indicates the CLEP examination, minimum required score, and 3 semester units awarded for Chaffey General Education categories and CSU GE-Breadth areas.

Credit for external exams at CSUs and UCs varies by campus, but minimum acceptance standards are updated and published periodically. For CSUs and CSU GE-Breadth applicability, see "Systemwide Credit for External Examinations" (as of this printing, Memo ASA-2017-13 at www.calstate.edu/AcadAff/CodedMemos). For UCs, see "Exam Credit" (as of this printing, accessible online at http://admission.universityofcalifornia.edu/counselors/exam-credit). For IGETC, see the most recent "IGETC Standards" document (as of this printing, accessible online at http://icas-ca.org/standards-policies-and-procedures-manual).

CHAFFEY COLLEGE COURSES ELIGIBLE FOR CREDIT BY EXAMINATION [Cx]

The courses listed below 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 (see information on the preceding page). 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.

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Course Number	Course Title	Units
ACCTG-480	Applied Accounting I	3
ART-62A	Illustration I	3
ART-63	Introduction to Graphic Design	4
ART-82	Introduction to Digital Media	4
ARTH-3	Survey of Western Art From Prehistory Through the Middle Ages	3
ARTH-5	Survey of Western Art from Renaissance To Contemporary	3
ARTH-7	Arts of Africa, Oceania, and Indigenous North America	3
ARTH-9	Art of the Ancient Americas	3
ARTH-19	Contemporary Art: 1945-Present	3
AUTOTEC-10	Service and Repair	4
AUTOTEC-15	Automotive Electricity and Electronics	2
AUTOTEC-416	Basic Automotive Air Conditioning Systems	2
AUTOTEC-417	Brakes	4
AUTOTEC-418	Suspension and Steering Systems	4
AUTOTEC-422	Fuel, Ignition, and Emission Control Systems	5
AUTOTEC-423	Engine Management Systems and Drivability	4
AUTOTEC-427	Engine Operation and Service	5
AUTOTEC-429	Advanced Automotive Electrical Systems	4
AUTOTEC-432	Manual and Automatic Transmissions, Transaxles, and Dr Trains	5
BIOL-424	Anatomy and Physiology	3
BRDCAST-60	Beginning Single Camera Production	3
BUS-10	Introduction to Business	3
BUSMGT-13	Supply Chain Management	3
BUSMGT-14	Transportation Management	3
BUSMGT-42	Human Resource Management	3
BUSMGT-45	Small Business Ownership and Management	3
BUSMGT-48	Quality Management Principles	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
BUSMKT-40	Marketing Principles	3
BUSOT-40A	Beginning Computer Keyboarding	3
BUSOT-40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT-50	Filing and Records Management	3
BUSOT-60A	Microsoft Office Word - Specialist	3
BUSOT-60B	Microsoft Office Word - Expert	3
BUSOT-61	Microsoft Office PowerPoint	1.5
BUSOT-62	Microsoft Office Outlook	1.5
BUSOT-63	MS Office Excel - Comprehensive	3
BUSOT-64	Microsoft Office Access - Comprehensive	3
BUSOT-410	MS Publisher Comprehensive	3

Course Number	Course Title	Units
BUSOT-460	Proofreading: Text-Editing Skills	3
BUSOT-475	Medical Office Procedures	3
CDE-1	Principles & Practices in Early Childhood Education	3
CDE-2	Child Growth and Development	3
CDE-6	Teaching in a Diverse Society	3
CHIN-18	Chinese Civilization and Culture	3
CIS-1	Introduction to Computer Information Systems	3
CIS-4	Fundamentals of Microsoft Windows	1.5
CIS-15	Microsoft Access Database Design and Development	3
CIS-50	Introduction to Computer Networks	3
CIS-68	Internet Technologies	1.5
CISPROG-1	Introduction to Computer Programming	3
CJ-1	Introduction to the Criminal Justice System	3
CJ-2	Concepts of Criminal Law	3
CJ-4	Community and the Justice System	3
CJ-5	Legal Aspects of Evidence	3
CJ-51	Introduction to Corrections	3
CJ-53	Correctional Law	3
CJ-54	Public Relations and Corrections	3
CJ-56	Correctional Interviewing and Counseling	3
CJ-57	Probation and Parole	3
COMPSCI-1	Programming Concepts and Methodology I	3
CUL-15	Sanitation, Safety, and Equipment Management	3
DENTAL-400	Dental Assisting Core Sciences	6
DENTAL-410	Dental Assisting Pre-Clinical Sciences	6
DENTAL-420	Radiography for Dental Assistants	6
DENTAL-430	Clinical Practice	6
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-78	Advanced Mechanical Design Applications	4
ECON-1	Introduction to Economics	3
ECON-4	Principles of Microeconomics	3
ED-400	Introduction to Education and Teaching	3
EGTECH-10	Introduction to Engineering Design/ Graphics	4
EGTECH-12	Principles of Engineering	4
EMT-405	Emergency Medical Responder Services	3
EMT-411	Emergency Medical Technician	7
FASHD-20	History of Fashion	3
FASHD-40	Beginning Clothing Construction	2
FASHD-61	Pattern Drafting I	3

CHAFFEY COLLEGE COURSES ELIGIBLE FOR CREDIT BY EXAMINATION [Cx]

Course Number	Course Title	Units
FASHD-65	Fashion Illustration	2
FASHM-10	Introduction to the Fashion Industry	3
FASHM-60	Textiles	3
FIRETEC-1	Principles of Emergency Services	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
FIRETEC-7	Strategies and Tactics	3
FIRETEC-9	Principles of Fire and Emergency Services Safety and Survival	3
FIRETEC-10	Wildland Fire Control	3
FIRETEC-11	Legal Aspects of Emergency Services Safety and Survival	3
FIRETEC-12	Occupational Safety and Health for Emergency Services	3
FIRETEC-421	Fire Inspector 1B - Fire and Life Safety	2
FIRETEC-422	Fire Inspector 1C - Field Inspection and Gases	1.5
FIRETEC-423	Fire Inspector 1D - Field Inspection- California Specific	1
GERO-463	Social Work Designee/Assistant Training	3
ID-10	Introduction to Interior Design	3
IET-401A	Introduction to Electricity	2.5
IET-401B	Industrial Basic Controls	2.5
IET-403A	Electrical Motors and Controls I	2.5
IET-411	Programmable Logic Controllers	3
IETELMT-430	Hydraulic Fundamentals	2
INDMM-400	Intro to Construction Safety, Trade Math , Rigging, and Tools	3
INDMM-401	Basic Communication and Employability Skills, and Core Testing	2.5
INDMM-402	Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills	3.5
INDMM-403	Trade Math and Drawings, Material Handling, and Mobile Equipment	2.5
INDMM-600	Intro to Construction Safety, Trade Math , Rigging, and Tools	0
KINLEC-14	Lifeguard Training	3
MATH-60	Calculus for Business	4
MATH-61	Pre-Calculus	4
MATH-65A	Calculus I	4
MATH-65B	Calculus II	4
MATH-75	Calculus III	5
MATH-81	Linear Algebra	4
MATH-85	Differential Equations	4
MUSIC-2A	Music History and Literature	3
MUSIC-2B	Music History and Literature	3
MUSIC-4	Music Appreciation	3
MUSIC-5	Music Theory and Musicianship I	4
MUSIC-6	Music Theory and Musicianship II	4
MUSIC-7	Music Theory and Musicianship III	4
MUSIC-8	Music Theory and Musicianship IV	4
MUSIC-21	History of Jazz	3
MUSIC-40	Beginning Guitar	1
NF-11	Food Service Management Supervision	3
NURADN-3	Transition in Nursing	1.5
NURADN-3L	Transition in Nursing Laboratory	0.5
NURADN-6	Clinical Nursing Skills	1.5
NURADN-14	Nursing Process 1	4
NURADN-14L	Nursing Process 1 Laboratory	3.5
NURADN-26	Maternal-Newborn Nursing	2
NURADN-26L	Maternal-Newborn Nursing Laboratory	1.5
NURADN-27	Nursing Process 2	4
NURADN-27L	Nursing Process 2 Laboratory	3
NURADN-34	Nursing Process III	4
NURADN-34L	Nursing Process III Laboratory	3
NURADN-38	Family-Child Nursing	2
NURADN-38L	Family-Child Nursing Laboratory	1.5
NURADN-45	Nursing Process 4	4
NURADN-48	Mental Health and Psychiatric Nursing	2
NURADN-48L	Mental Health and Psychiatric Nursing Laboratory	1
NURADN-50	Professional Issues in Nursing	1
NURADN-403	Pathophysiology for Nursing	3
NURADN-404	Basic ECG and Dysrhythmia Interpretation	2
NURADN-428	Basic Pharmacology	3
NURVN-403	Fundamentals of Nursing	3
NURVN-405	Beginning Medical Surgical Nursing	4
NURVN-409	Intermediate Medical Surgical Nursing	4
NURVN-411	Advanced Medical-Surgical Nursing	7
NURVN-413	Leadership for the Vocational Nurse	3
NURVN-415A	Growth and 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
PHOTO-7	Introduction to Digital Photography	4
PHOTO-9	Digital Imaging	4
PHOTO-10	Beginning Photography	4
PHOTO-11	Intermediate Photography	4
PHOTO-12	Studio Lighting	4
PHOTO-20	Photography for Media	4
PSYCH-1	Introduction to Psychology	3
RE-10	Real Estate Principles	3
SPAN-8	Survey of Hispanic Literature: 1700-Present	3
THEATRE-4	Theatre History: Ancient to 1700	3
THEATRE-5	Theatre History: 1700-Present	3

ADVANCED PLACEMENT (AP) EXAMS: COURSE EQUIVALENCIES AND GENERAL EDUCATION CREDIT

Students may earn credit for College Board Advanced Placement (AP) Exams with scores of 3, 4, or 5. AP credit can be used to meet institutional requirements for Chaffey College (general education and/or major requirements), and transfer requirements for the CSUs, UCs, CSU GE-Breadth, and IGETC. Course credit and units granted at Chaffey College may differ from course credit and units granted by a transfer institution. The actual AP transfer credit awarded is determined by the CSU and UC*.

	Chaffey College Credit			Chaffey College General Education Pattern (AP Scores of 3, 4, or 5)	
AP EXAM	AP Score	Course Equivalency	Unit Credit (Semester)	Subject Area	Minimum GE Credits (Semester)
Art History	3, 4, 5	No equivalent course	6 units	C1: Art *or* C2: Humanities	3 units
Biology	3, 4, 5	BIOL-1	4 units	B: Natural Sciences	4 units
Calculus AB or AB Subscore[1]	3, 4, 5	MATH-65A	4 units	A2: Communication and Analytical Thinking *and* Math Competency	3 units
Calculus BC[1]	3, 4, 5	MATH-65A and MATH-65B	4 units + 4 units	A2: Communication and Analytical Thinking *and* Math Competency	3 units
Chemistry	3, 4, 5	CHEM-24A	5 units	B: Natural Sciences	4 units
Chinese Language and Culture	3, 4, 5	CHIN-1 and CHIN-2	4 units + 4 units	C2: Humanities	3 units
Comparative Government and Politics	3, 4, 5	No equivalent course	3 units	D1: American Institutions	3 units
Computer Science A[2]	3, 4, 5	COMPSCI-1	3 units	N/A	3 units
Computer Science AB[2]	3, 4, 5	No equivalent course	3 units	N/A	3 units
Computer Science Principles	3, 4, 5	No equivalent course	3 units	N/A	3 units
English – Language and Composition	3, 4, 5	ENGL-1A	3 units	A1: English Composition	3 units
English – Literature and Composition	3, 4, 5	ENGL-1A and ENGL-1C	3 units + 3 units	A1: English Composition *or* C2: Humanities	3 units
Environmental Science	3, 4, 5	No equivalent course	4 units	B: Natural Sciences	4 units
European History	3, 4, 5	No equivalent course	3 units	C2: Humanities *or* D2: Behavioral Sciences	3 units
French Language and Culture	3, 4, 5	FR-1 and FR-2	4 units + 4 units	C2: Humanities	3 units
French Literature	3, 4, 5	No equivalent course	4 units	C2: Humanities	3 units
German Language and Culture	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
Human Geography	3, 4, 5	No equivalent course	3 units	D2: Behavioral Sciences	3 units
Italian Language and Culture	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
Japanese Language and Culture	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
Latin[3]	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
Latin – Literature[3]	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units

[1]AP Calculus Exam Limitations: Only one exam may be used for unit credit.
[2]AP Computer Science Exam Limitations: Only one exam may be used for unit credit.
[3]AP Latin Exam Limitations: Maximum 8 semester units toward Chaffey College credit.

*Credit for external exams at CSUs and UCs varies by campus, but minimum acceptance standards are updated and published periodically. For CSUs and CSU GE-Breadth applicability, see "Systemwide Credit for External Examinations" (Memo ASA-2017-13 at www.calstate.edu/AcadAff/CodedMemos). For UCs, see "Exam Credit" (accessible online at http://admission.universityofcalifornia.edu/counselors/exam-credit). For IGETC, see the most recent "IGETC Standards" document (accessible online at http://icas-ca.org/standards-policies-and-procedures-manual).

ADVANCED PLACEMENT (AP) EXAMS: COURSE EQUIVALENCIES AND GENERAL EDUCATION CREDIT

Students may earn credit for College Board Advanced Placement (AP) Exams with scores of 3, 4, or 5. AP credit can be used to meet institutional requirements for Chaffey College (general education and/or major requirements), and transfer requirements for the CSUs, UCs, CSU GE-Breadth, and IGETC. Course credit and units granted at Chaffey College may differ from course credit and units granted by a transfer institution. The actual AP transfer credit awarded is determined by the CSU and UC*.

	Chaffey College Credit			Chaffey College General Education Pattern (AP Scores of 3, 4, or 5)	
AP EXAM	AP Score	Course Equivalency	Unit Credit (Semester)	Subject Area	Minimum GE Credits (Semester)
Latin – Vergil	3, 4, 5	No equivalent course	3 units	C2: Humanities	3 units
Macroeconomics	3, 4, 5	ECON-2	3 units	D1: American Institutions	3 units
Microeconomics	3, 4, 5	ECON-4	3 units	D1: American Institutions	3 units
Music Theory	3, 4, 5	MUSIC-5	4 units	C1: Arts	3 units
Physics 1: Algebra-based[4]	3, 4, 5	PHYS-5 and PHYS-6	3 units + 1 unit	B: Natural Sciences	4 units
Physics 2: Algebra-based[4]	3, 4, 5	PHYS-5 and PHYS-6	3 units + 1 unit	B: Natural Sciences	4 units
Physics B[4]	3, 4, 5	PHYS-5 and PHYS-6	3 units + 1 unit	B: Natural Sciences	4 units
Physics C – Electricity/Magnetism	3, 4, 5	PHYS-46	5 units	B: Natural Sciences	4 units
Physics C – Mechanics	3, 4, 5	PHYS-45	5 units	B: Natural Sciences	4 units
Psychology	4, 5	PSYCH-1	3 units	D2: Behavioral Sciences	3 units
Research	N/A	No equivalent course	0 units	N/A	0 units
Seminar	N/A	No equivalent course	0 units	N/A	0 units
Spanish Language and Culture	3, 4, 5	SPAN-1 and SPAN-2	4 units + 4 units	C2: Humanities	3 units
Spanish Literature and Culture	3, 4, 5	SPAN-3	4 units	C2: Humanities	3 units
Statistics	3, 4, 5	STAT-10	4 units	A2: Communication and Analytical Thinking *and* Math Competency	3 units
Studio Art – 2D	3, 4, 5	No equivalent course	3 units	C1: Arts	3 units
Studio Art – 3D	3, 4, 5	ART-12	4 units	C1: Arts	3 units
Studio Art – Drawing	3, 4, 5	ART-14	3 units	C1: Arts	3 units
U.S. Government and Politics	3, 4, 5	PS-1	3 units	D1: American Institutions	3 units
U.S. History	4, 5	HIST-17 and HIST-18	3 units + 3 units	C2: Humanities *or* D1: American Institutions	3 units
World History	3, 4, 5	No equivalent course	3 units	C2: Humanities *or* D1: American Institutions	3 units

[4]AP Physics Exam Limitations (for Physics 1, 2, and B): Maximum 4 semester units toward Chaffey College credit.

*Credit for external exams at CSUs and UCs varies by campus, but minimum acceptance standards are updated and published periodically. For CSUs and CSU GE-Breadth applicability, see "Systemwide Credit for External Examinations" (Memo ASA-2017-13 at www.calstate.edu/AcadAff/CodedMemos). For UCs, see "Exam Credit" (accessible online at http://admission.universityofcalifornia.edu/counselors/exam-credit). For IGETC, see the most recent "IGETC Standards" document (accessible online at http://icas-ca.org/standards-policies-and-procedures-manual).

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	D6	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

*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 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

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

*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 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

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 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

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 and quality upon receipt of an official transcript 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 20)
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

Add Codes are required to register for any open or closed class beginning the first day of instruction for each semester or summer term. The following students must register in person in the Admissions and Records Office:

- High school students
- Students with special petitions or co-requisite waivers
- Students with financial or other restrictions
- Students who are auditing

The late registration period is published in the schedule of classes. Classes can no longer be added after the late registration deadline has passed. Open entry/open exit 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 the MyChaffey portal within published deadlines. A student may drop or withdraw, or be dropped by an instructor, only before 61% completion of a class. No Class may be dropped/withdrawn after 61% of the class has completed, and the instructor must issue a grade.

A student who drops a class or is dropped by an instructor on or prior to the date census rosters are due, will receive no notation on their academic 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 census rosters are due, and on or before 61% of the course, will receive a W grade for that class. See the Academic Calendar for specific dates.

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 FROM CLASSES. 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 must be processed online or in person in the Admissions and Records Office, and may not be requested by mail, email, or over the phone.

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:

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

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

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

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 (equal to C or better). 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 (equal to C or better). 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 used 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 the official grade is received from the instructor 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.

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 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. Requests to change a grade should be directed to the instructor. To change an F to W, or to request a removal of a W, a petition must be filed through the Admissions and Records Office.

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 Admissions 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. See the schedules 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 significant lapse of time, extenuating circumstances, and legally-mandated training requirements as a condition of continued paid or volunteer employment or changes in industry or licensing standards (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 issued for open-entry classes that extend passed the end of the term 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 attempt at the course. Petitions are available in the Admissions and Records Office. The academic dean over the subject area being petitioned evaluates and approves/denies 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

Only courses involving Intercollegiate Academic or Athletic competition are repeatable. (Title 5, section 55041) These courses are identified as repeatable in their description and may be taken a maximum of four times (repeated three times).

1. 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.

2. When a 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. The grade of record will be taken from the subsequent attempt of the course, even if the grade is lower.

EXCEPTIONS TO REPETITION RESTRICTIONS

Significant Lapse of Time: 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 of no less than 36 months and the district has established a recency prerequisite for a course or program or another institution of higher education to which the student seeks to transfer has established a recency requirement which the student will not be able to satisfy without repeating the course in question. Supporting documentation is required. If approved, the grade from the subsequent attempt will be calculated in the student's GPA.

Extenuating circumstance: A student may petition to 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). Supporting documentation is required.

Legally Mandated requirement: A student may petition to repeat a course in which he or she earned a satisfactory grade as a result of significant changes in industry or licensing standards such that repetition of the course is necessary for employment or licensure. 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. Supporting documentation is required.

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 School Certifying Official in the Veteran's Resource Center 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 attempted 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. Students placed on academic or progress probation will be notified by mail.

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%.

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. Petitions 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, NC, or NP drops below 50%.

APPEAL ACADEMIC DISMISSAL

A student who wishes to appeal academic dismissal status may do so through the Coordinator of the Opening Doors to Excellence program at (909) 652-6201.

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 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 withdrawal 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 subsequent 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 subsequent 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 viewpoints 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

P.R.I.D.E.

Faculty Values

Participate in…

- shared governance, department and school-wide activities
- fostering academic freedom
- the culture of learning and sharing ideas

Respect…

- students and all employee groups at the college
- the dignity and diversity of all students
- the capacity of all students to learn, grow, and succeed

Inspire…

- students to reach their goals
- students to have high academic and professional aspirations
- active learning and critical thinking
- other faculty to excellence and creativity

Develop…

- a culture of success and academic rigor
- the whole student
- a safe, learning-centered environment

Engage in…

- high hope and a growth mindset
- professional growth & lifelong learning
- innovative approaches to teaching

Graduation Requirements

Minimum Requirements for the Associate Degree (Title 5 § 55063)

The minimum requirements for graduation with an associate degree 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 fulfillment of the specific requirements listed below.

I. GENERAL EDUCATION *(minimum 18 units)*

Complete a general education pattern as specified for each degree in the "Programs of Study" section in the Chaffey College catalog. General education course patterns are listed on the pages that follow. Students should consult with a counselor to determine which general education pattern is most appropriate for their educational goals.

II. MAJOR or AREA OF EMPHASIS *(minimum 18 units)*

Complete the courses required for an associate degree program as described in the "Programs of Study" section in the Chaffey College catalog.

III. ELECTIVES *(as needed)*

Complete any additional units necessary to meet the minimum degree unit requirement.

IV. BASIC SKILLS COMPETENCY REQUIREMENTS

A. WRITTEN EXPRESSION
Complete the composition course English 1A.

B. MATHEMATICS
Place into Mathematics 25 or higher as determined by the Chaffey assessment process, or complete one of the intermediate algebra or higher level math or statistics courses listed below:

Computer Science 4
Mathematics 4, 17, 25, 31, 60, 61, 65A, 65B, 75, 81, 85, 420+420B, 450
Social Science 10
Statistics 10

V. SCHOLARSHIP REQUIREMENTS

All degree requirements including General Education must be completed with an overall grade point average of 2.00 (C average) or better. In addition, all courses that count toward the basic skills competency requirements and the Associate Degree major or area of emphasis must be satisfactorily completed with grades of A, B, C, or P.

VI. TOTAL UNITS and RESIDENCE REQUIREMENTS

A minimum of 60 degree-applicable units are required to earn local associate degrees. Associate degrees for transfer (ADTs) require a minimum of 60 CSU-transferable units. A minimum of 12 units must be earned at Chaffey College.

Other Requirements for Graduation

I. APPLICATION FOR GRADUATION

Students must file a formal application for graduation through the Counseling Department (see www.chaffey.edu/counseling). Students may graduate at the end of any semester or Summer session. Refer to the academic calendar for application deadline dates.

II. CONTINUOUS ATTENDANCE / CATALOG RIGHTS

The preceding graduation requirements apply to students during the 2018-2019 school year. Students who enrolled at Chaffey prior to Fall 2018 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 Department.

CHAFFEY COLLEGE GENERAL EDUCATION

2018-2019

All students receiving an associate degree shall complete a pattern of general education coursework. Some associate degrees permit the use of the Chaffey College General Education pattern and other degrees, mostly those that provide transfer preparation, require the California State University General Education – Breadth (CSU GE-Breadth) pattern or the Intersegmental General Education Transfer Curriculum (IGETC) pattern. The specific general education pattern required for each degree is specified in the "Programs of Study" area in the Chaffey College catalog. Students should consult with a counselor to determine which general education pattern is most appropriate for their educational goals.

Students who are qualified to be certified for the CSU GE-Breadth pattern or the IGETC pattern also fulfill the Chaffey College General Education pattern.

While a course might satisfy more than one general education requirement, it may not be counted more than once for these purposes. Except where noted in the "Programs of Study" section, a course may be double-counted and used to satisfy both a general education requirement and a major or area of emphasis requirement.

Completion of the Chaffey College General Education pattern requires a minimum of 18 units as distributed as follows:

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

A1 ENGLISH COMPOSITION *(one course)*
English 1A

A2 COMMUNICATION AND ANALYTICAL THINKING *(one course)*
Communication Studies 2, 4, 6, 8, 72
Computer Information Systems: Programming 1
Computer Science 1, 2, 4
English 1B
Mathematics 4, 17, 25, 31, 60, 61, 65A, 65B, 75, 81, 85, 420+420B, 450
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 10, 12, 14, 15, 16, 18, 20, 44, 62A, 63, 82
Art History 3, 5, 7, 9, 11, 19
Broadcasting 3
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Interior Design 11, 12
Music 2A, 2B, 4, 5, 17, 21, 22, 26, 75, 76, 77, 78
Photography 1, 7, 9, 10, 13
Theatre Arts 1, 4, 5, 10, 12

C2 HUMANITIES *(one course)*
American Sign Language 1, 2, 3, 4
Arabic 1, 2, 3, 4
Chinese 1, 2, 3, 4, 18
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, 40
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 1, 2, 3, 3SS, 4, 4SS, 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)*
Criminal Justice 1
Economics 1, 2, 4
Geography 10
History 12, 16, 17, 18, 20, 21, 25, 37, 50, 51, 70, 71
Political Science 1, 2, 3, 7, 10, 21, 25, 32

D2 BEHAVIORAL SCIENCES *(one course)*
American Sign Language 18
Anthropology 2, 3
Child Development and Education 2, 4, 6
Communication Studies 12, 74, 76, 78
Criminal Justice 58
Geography 1, 3, 11
Gerontology 11, 18, 22, 23
History 4, 19
Political Science 4
Psychology 1, 21, 25, 41, 65
Sociology 10, 14, 15, 16, 18, 25, 26

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION

CERTIFICATION COURSE PATTERN 2018-2019

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.

CSUGE for STEM is a separate CSUGE track for students completing an associate degree for transfer (ADT) that permits the use of CSUGE for STEM. The CSUGE for STEM pattern allows students to defer two lower-division GE courses (six semester units) until after transfer, with one remaining course in each of Areas C and D, totaling 33 semester units for the STEM pattern. Minimum coursework distribution is still required as noted in each area.

Coursework used to fulfill areas A1, A2, A3, and B4 must be completed with a grade of "C-" or better.

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 9 units is required in each area
AREA E 3 units required

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 category. At least one of the physical science or life science courses must have a laboratory.

B1 Physical Science
Astronomy 26, ,27, 35
Chemistry 7, 8, 9, 10, 12SP07, 24A, 24B, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5, 5 & 5L
Geography 2, 4, 4 & 5, 6SP05
Geology 1, 2
Physical Science 10
Physics 5, 5 & 6, 20A, 20B, 30A, 30B, 44SP07, 45, 46, 47

B2 Life Science
Anthropology 1, 1 & 1L
Biology 1, 2, 3, 10, 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 underlined.

B4 Mathematics
Computer Science 4
Mathematics 4, 17, 25, 31, 60, 61, 65A, 65B, 75, 81FA03, 85
Social Science 10
Statistics 10

AREA C ARTS AND HUMANITIES
(Minimum 9 units) Choose at least one course from each category.

C1 Arts
Art 10, 12, 14, 15FA15, 16, 18, 20, 44, 50
Art History 3, 5, 7, 9, 11, 19
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Interior Design 11, 12
Music 2A, 2B, 4, 5, 21, 22SP06, 26
Photography 1, 7, 10
Theatre Arts 1, 4, 5, 10, 12

C2 Humanities
American Sign Language 1FA03, 2, 3, 4
Arabic 1, 2, 3, 4
Chinese 1, 2, 3, 4, 18
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, 4FA03, 7, 12, 16FA03, 20, 21FA11, 25, 37, 40SP06
Humanities 5, 6, 20
Philosophy 70, 71, 72, 73, 77, 78, 79, 80, 81, 82
Spanish 1, 2, 3, 3SS, 4, 4SS, 8, 13, 14

AREA D SOCIAL SCIENCES
(Minimum 9 units) Choose courses from at least two disciplines.

Criminal Justice 1FA03, 55FA11, 58FA11
American Sign Language 18
Anthropology 2, 3
Child Development 2, 4, 6
Communication Studies 12, 74, 76, 78
Economics 1, 2, 4, 7, 8
Geography 1, 3, 10, 11SP06
Gerontology 11, 18, 22, 23
History 1, 2, 4FA03, 5, 6, 7, 9, 10, 12, 16, 17, 18, 19, 20, 21FA11, 37, 40SP06, 50, 51, 70, 71
Political Science 1, 2, 3FA12, 4, 7, 10, 21FA12, 25, 32FA12
Psychology 1, 20, 21, 25, 65
Sociology 10, 14, 15SP05, 16SP07, 18, 25, 26, 30, 32, 33, 70, 80FA15

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

Biology 14
Child Development 2FA05
Gerontology 22
Guidance 3
Kinesiology Lecture 15
Nutrition and Food 5, 15, 22
Psychology 5, 25
Social Science 17
Sociology 16

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, and AMERICAN IDEALS

May be completed prior to transfer. At the discretion of each CSU, these courses may also count for CSUGE certification. ***See a counselor for details.***

US 1: Historical Development of American Institutions & Ideals
History 17 or 18

US 2: U.S. Constitution and Government
Political Science 1 (also satisfies US 3)

US 3: California State and Local Government
History 37 or Political Science 1 (also satisfies US 2)

NOTE: Superscripts indicate the first term and year a course may be used to meet general education pattern requirements. For example, FA03 indicates that the course must be completed Fall 2003 or later.

1 = Veterans may meet Area E requirements via DD-214.

COURSES COUNT IN ONE AREA ONLY.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

CERTIFICATION COURSE PATTERN 2018-2019

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 semesters units. A course cannot be certified unless it was on the IGETC list during the year in which it was taken by the student. Students beginning in Fall 2018 must follow the 2018-2019 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. IGETC for STEM is a separate IGETC track for students completing an associate degree for transfer (ADT) that permits the use of IGETC for STEM. The IGETC for STEM pattern allows students to transfer to a CSU with partial IGETC certification with one remaining course in each of Areas 3 and 4, and to transfer to a UC with one remaining course in each of Areas 3, 4, and 6. Minimum coursework distribution is still required as noted in each area. The remaining courses will need to be completed after transfer.

AREA 1 ENGLISH COMMUNICATION

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

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

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

AREA 2A MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING
(Required CSU/UC - 1 course)
Computer Science 4
Mathematics 25FA03*, 60*, 61*, 65A*, 65B, 75, 81, 85
Social Science 10FA03*
Statistics 10

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

A. Arts:
Art 50
Art History 3, 5, 7, 9, 11, 19
Cinema 25, 26
Dance 1
Music 2A, 2B, 4, 5, 21SP07, 22SP06, 26SP07
Theatre Arts 1, 4, 5

B. Humanities:
American Sign Language 3, 4
Arabic 3, 4
Chinese 3, 4, 18FA16
English 1C, 32, 33, 68, 70A, 70B, 71, 74FA03, 75A, 75B, 76, 77, 79, 80A, 80B, 81
History 1, 2, 4FA03, 5, 6, 7, 9, 10, 12, 16FA03, 20, 25, 40SP06, 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
Business: Legal Studies 10FA16
Child Development and Education 2*, 4
Communication Studies 12, 74
Economics 1*, 2, 4, 7, 8
Geography 1SP07, 3, 10, 11SP06
Gerontology 18*
History 4FA03, 5, 6, 7, 9, 10, 12, 16FA03, 17, 18, 19, 20, 37, 40SP06, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 21FA12, 25, 32FA12
Psychology 1, 20*, 25*, 65, 80FA15
Sociology 10, 14, 15SP05, 16SP07, 18*, 25, 26, 32, 70, 80FA15

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.)

A. Physical Sciences:
Astronomy 26*, 35
Chemistry 7FA16*, 8SP07, 9*, 10*, 12SP07, 24A*, 24B*, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5SP07, 5 & 5LSP07
Geography 2, 4, 4 & 5, 6SP05
Geology 1, 2
Physical Science 10
Physics 5*, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44SP07*, 45*, 46*, 47*

B. Biological Sciences:
Anthropology 1, 1 & 1L
Biology 1*, 2, 10*, 12, 20, 22, 23, 23 & 23L, 61, 62, 63

C. Laboratory Science:
This requirement is satisfied by completion of any course in 5A or 5B with a laboratory. Lab courses are underlined.

AREA 6 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

American Sign Language 3 or 4, ***or*** Arabic 3 or 4, ***or*** Chinese 3 or 4, ***or*** Spanish 3, 3SS, 4, or 4SS may be used to validate this requirement. Other methods for verifying language competency exist. Contact counseling for information.

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, and AMERICAN IDEALS

Not part of IGETC. May be completed prior to transfer. At the discretion of each CSU, these courses may also count for IGETC certification. ***See a counselor for details.***

US 1: Historical Development of American Institutions & Ideals
History 17 or 18

US 2: U.S. Constitution and Government
Political Science 1 (also satisfies US 3)

US 3: California State and Local Government
History 37 or Political Science 1 (also satisfies US 2)

NOTE: Superscripts indicate the first term and year a course may be used to meet general education pattern requirements. For example, FA03 indicates that the course must be completed Fall 2003 or later.

* = Transfer credit may be limited by either UC or CSU, or both.

COURSES MAY COUNT IN ONLY ONE AREA, EXCEPT FOR COURSES IN LANGUAGES OTHER THAN ENGLISH WHICH CAN BE COUNTED IN BOTH 3B AND 6.

CSU GE Breadth for STEM Majors within ADTs

Students pursuing Chemistry or Biology ADTs may complete CSU GE Breadth for STEM or IGETC for STEM, deferring one lower-division course in Area C or Area 3 and one lower-division course in Area D or Area 4 until after transfer. CSU GE Breadth for STEM and IGETC for STEM is applicable only to majors for which the Transfer Model Curriculum specifies. A current list of ADT's that allow for use of IGETC for STEM can be found at www.c-id.net.

A CCC preparing a CSU GE Breadth for STEM certification as part of an ADT shall ensure that the student has completed:

a. All courses in Areas A, B, and E of the traditional GE curriculum; and
b. One course in Area C1 Arts and one course in Area C2 Humanities; and
c. Two courses in Area D from two different disciplines.

IGETC for STEM certification – Complete the following courses before transfer:

a. All courses in Area 1, 2 and 5 of the traditional IGETC: and
b. One course in Area 3A; one course in Area 3B; and two courses in Area 4 from two different disciplines.

GE Breadth (CSU only)		**Discipline**	**IGETC** (CSU and UC systems)
A1	Oral Communication	1C [not required for UC]	
A2	Written Communication	1A	
A3	Critical Thinking	1B	
B1	Physical Sciences	5A	
B2	Biological Sciences	5B	
B3	Laboratory Activity	5C	
B4	Mathematics	2	
C1	Arts	3A	
C2	Humanities	3B	
D	Social Sciences	D	AREA 4
E	Lifelong Learning		[no area]
No Area	Language Other than English	6A [not required for CSU]	AREA 6A

Detailed review criteria for each Area and Subarea, as well as sample reviewer's responses for each, comprise the next section of these Guiding Notes. Reviewers consider similar questions for the two patterns.

However, within their similarities are some important differences:

GE Breadth pattern (CSU only)	**IGETC pattern (CSU plus UC)**
requires oral communication	doesn't require oral communication of students transferring to the UC
doesn't require Language Other Than English	requires Language Other Than English for students transferring to the UC
any passing grade will count for courses other than the golden four which require a C- or better: written communication, oral communication, critical thinking, and quantitative reasoning	only grades of C or better will count for any courses
a single course may carry any number of units. Typically, CSU GE courses (other than physical activity courses) are at least 3 semester units.	each course must carry at least three semester- or four quarter-units

Transfer Information

Chaffey College Transfer Center

The Transfer Center offers a variety of services to help potential transfer students identify options, choose a transfer destination, and complete required applications.

Students are encouraged to utilize the resources and services available through the Transfer Center, including transfer fairs, university contact information, specialized software programs for college research and applications, transfer-related workshops, individual appointments with university representatives, and trips to visit local campuses. Students are also urged to work closely with their counselors to develop and maintain an education plan to support their transfer goals.

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

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.

Cross Enrollment - California residents currently enrolled at a California community college may enroll in one undergraduate course per academic term at CSU or UC campuses 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 and Admissions and Records Office.

Helpful online resources for transfer-bound students:

CAL STATE APPLY

www.calstate.edu/apply
http://adegreewithaguarantee.com
Explore campuses, plan for transfer, and apply to any of the twenty-three California State University campuses.

UC Admissions

www.universityofcalifornia.edu/admissions
http://ucal.us/transferpathways
Access general information and apply online to any of the nine University of California campuses

AICCU

www.aiccu.edu
Learn about colleges in the network of the Association of Independent California Colleges and Universities.

CaliforniaColleges.edu
The Official Source for College & Career Planning in California

www.californiacolleges.edu
Research careers and learn about higher education opportunities throughout California.

icanaffordcollege.com
Brought to you by the California Community Colleges

www.icanaffordcollege.com
Learn about the year-around availability of financial aid to help pay for fees, books, supplies, and sometimes even help with rent.

assist

www.assist.org
Use ASSIST to explore majors and review course articulation agreements between Chaffey College and the CSU and UC systems.

The California State University

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.

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.cpp.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

During this trip to CSU Los Angeles in April 2017 students were given a tour of the CSULA campus and an opportunity to speak with transfer mentors.

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.

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 the "Golden Four" general education courses in written communication, oral communication, critical thinking, and mathematics (GPA requirements may vary by campus and major).

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 system-wide options for fulfilling CSU lower division general education requirements: CSU General Education (CSUGE) and the Intersegmental General Education Transfer Curriculum (IGETC). See pages 40-41 of this catalog. Within either pattern, the highest priority classes are the "Golden Four" general education courses mentioned above. 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 transfer courses to ensure completion of all admission and major preparation requirements while completing 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 www2.calstate.edu/apply/transfer.

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.

UNIVERSITY OF CALIFORNIA

Helpful information about transferring to the University of California is available at www.universityofcalifornia.edu/admissions and on each campus' website:

University of California, Berkeley	www.berkeley.edu
University of California, Davis	www.ucdavis.edu
University of California, Irvine	www.uci.edu
University of California, Los Angeles	www.ucla.edu
University of California, Merced	www.ucmerced.edu
University of California, Riverside	www.ucr.edu
University of California, San Diego	www.ucsd.edu
University of California, Santa Barbara	www.ucsb.edu
University of California, Santa Cruz	www.ucsc.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:

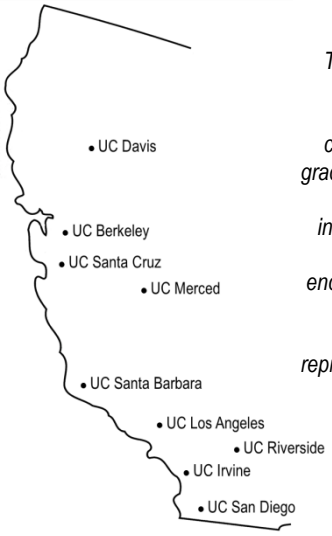
1. Complete 60 semester or 90 quarter units of transferable college credit with a GPA of at least 2.4 (2.8 for nonresidents of California). GPA requirements may vary by campus and major. Please contact a representative or consult the university website.

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.
- Four personal insight questions to be answered. (One required question and three of the additional seven questions to be chosen by the applicant.)



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 a Transfer Center representative at the Chino or Fontana campuses.

Transfer Admission Guarantee
Six UC campuses (Berkeley, Los Angeles, and San Diego 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 (September 1-30). 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 (November 1-30). Students are encouraged to create a UC Transfer Admissions Planner (TAP) account at http://uctap.universityofcalifornia.edu.

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 A-G (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 UCs are marked ***(UC)*** in the "Course Descriptions" section of this catalog.

Private/Independent Colleges and Universities

Admission requirements to private 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.

The Transfer Center maintains articulation agreements with several local private universities. To view a list of course-to-course agreements, visit www.chaffey.edu/transfer/articulation.

The Association of Independent California Colleges and Universities
The Association of Independent California Colleges and Universities (AICCU) represents almost 80 California private nonprofit colleges and universities. Visit www.aiccu.edu to research member colleges and access a college planning guide for high school students.

During this trip to Loma Linda University in March 2017, students learned a great deal about many health-science programs and took a campus tour.

Out-of-State Colleges

Admission requirements to out-of-state colleges 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.

Historically Black Colleges and Universities
Historically Black Colleges and Universities (HBCUs) were founded to serve the higher education needs of African-American students, though they are open to all students. Most HBCUs are located in the South and East Coast regions.

HBCUs have an excellent academic track record. While only about 17 percent of black undergraduate students attend an HBCU, more than 28 percent of African-Americans who receive a bachelor's degree obtain them from an HBCU. These colleges and universities are also leading institutions in awarding degrees to African-American students in the life sciences, physical sciences, mathematics, and engineering programs.

California Community College students who complete certain academic requirements are now guaranteed transfer to a participating HBCU campus. The 21 participating institutions are:

Alabama State University, Montgomery AL
Alcorn State University, Lorman, MS
Arkansas Baptist College, Little Rock, AR
Bennett College, Greensboro, NC
Bethune-Cookman University, Daytona Beach, FL
Bowie State University, Bowie, MD
Central State University, Wilberforce, OH
Claflin University, Orangeburg, SC
Clark Atlanta University, Atlanta, GA
Dillard University, New Orleans, LA
Edward-Waters College, Jacksonville, FL
Fisk University, Nashville, TN
Florida Memorial University, Miami Gardens, FL
Fort Valley State University, Fort Valley, GA
Grambling State University, Grambling, LA
Harris-Stowe State University, St. Louis, MO
Huston-Tillotson University, Austin,TX
Kentucky State University, Frankfort, KY
Lane College, Jackson, TN
Lincoln University of Missouri, Jefferson City, MO
Lincoln University of Pennsylvania, Lincoln University, PA
Mississippi Valley State University, Itta Bena, MS
North Carolina Central University
Philander Smith College, Little Rock, AK
Shaw University, Raleigh, NC
Southern University and A&M College, Baton Rouge, LA
Stillman College, Tuscaloosa, AL
Talladega College, Talladega, AL
Tennessee State University, Nashville, TN
Texas Southern University, Houston, TX
Tougaloo College, Jackson, MS
Tuskegee University, Tuskegee, AL
Virginia State University, Petersburg, VA
West Virginia State University, Institute, WV
Wiley College, Marshall, TX

For more information, visit www.cccco.edu/HBCUTransfer.

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 § 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 49-50. Detailed information about each program's constituent coursework and any additional requirements may be found on pages 51-129.

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.

At press date, Chaffey has twenty-eight (28) approved transfer degrees: Administration of Justice, Anthropology, Art History, Biology, Business Administration, Communication Studies, Computer Science, Early Childhood Education, Economics, Elementary Teacher Education, English, Geography, Geology, History, Journalism, Kinesiology, Mathematics, Music, Nutrition and Dietetics, Philosophy, Physics, Political Science, Psychology, Social Justice Studies, Sociology, Spanish, Studio Arts, 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" (Pass) if the course is taken on a "pass-no pass" basis.
4. Certified completion of the California State University General Education-Breadth pattern (see page 40) OR the Intersegmental General Education Transfer Curriculum pattern (see page 41).

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 careers in technical fields. Most AA degree and many AS degrees provide a solid foundation for further academic study for students wishing to transfer. All courses in the major must be completed with a grade of A, B, C, or P or better. (Title 5 § 55063)

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:

Certificates of Achievement (STATE-APPROVED) are certificate programs consisting of 12 or more units of degree-applicable coursework. These certificates appear by name on student's transcripts.

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

Certificates of Competency (NON-CREDIT) are certificates with a sequence of noncredit courses in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution.

Certificates of Completion (NON-CREDIT) are certificates with a sequence of noncredit courses that culminate in a Certificate of Completion or a certificate leading to improved employability or job opportunities.

CTE / Vocational Education Designation

An asterisk (*) following a program name or code number indicates a vocational education discipline.

Degree and Certificate Programs

These are the Associate Degree majors/areas of emphasis and Certificates currently available at Chaffey College. 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.

AA-T / AS-T = Associate in Arts for Transfer degree or Associate in Science for Transfer degree
AA / AS = Associate in Arts degree or Associate in Science degree
CA = Certificate of Achievement
CCP = Certificate of Career Preparation (*not shown on transcripts*)
NCCL = Non-Credit Certificate of Completion
NCCC = Non-Credit Certificate of Competency

Career Technical Education / Vocational Education Designation
An asterisk (*) following a program name or code number indicates a vocational education discipline.

PROGRAM	AA-T / AS-T	AA / AS	CA	CCP	NCCL	NCCC
Accounting*		✓	✓			
Bookkeeping*				✓		
Government and Not-For-Profit Organizations*				✓		
Paraprofessional*			✓			
Financial Planning*				✓		
Payroll and Income Tax Preparer*				✓		
Anthropology	✓					
Art - Studio Arts	✓					
Art Emphasis		✓				
Ceramics Studio Emphasis		✓				
Drawing/Painting Studio Emphasis		✓				
Intermedia Emphasis		✓				
Art/Digital Media						
Computer Graphic Design for Print Media Emphasis*		✓	✓			
Design for Multimedia Emphasis*		✓	✓			
Web Design Emphasis*		✓	✓			
Art/Visual Communication: Illustration*		✓				
Art History	✓					
Automotive Technology						
Automotive Electrical Systems*				✓		
Engine Performance (Smog Check) Technician*			✓			
Engine Rebuilding*				✓		
General Automotive Service Technician*		✓	✓			
High Performance Engines Building & Blueprinting*				✓		
Master Automotive Technician*		✓	✓			
Aviation Maintenance Technology						
Airframe*		✓	✓			
Powerplant*		✓	✓			
Aviation Maintenance (Airframe & Powerplant)*			✓			
Biology	✓					
Biological Science		✓				
Broadcasting and Cinema*		✓				
Film, Television, and Electronic Media*	✓					
Motion Picture Production*			✓			
On-Air Radio Production*			✓			
Post Production Editing*			✓			
Screenwriting*			✓			
Television and Video Production*			✓			
Business Administration	✓					
General Business*		✓	✓			
International Business*		✓				
Marketing*				✓		
Small Business Entrepreneur*		✓	✓			
Business: Management		✓	✓			
Facilities Management*		✓	✓			
Retail Management*		✓	✓			
Supervision*		✓		✓		
Supply Chain Management*		✓	✓			
Business: Paralegal Studies*		✓	✓			
Business: Pathway to Law School*			✓			
Business and Office Technologies						
Business Information Worker (BIW) Stage One*			✓			
Business Information Worker (BIW) Stage Two*			✓			
Electronic Health Records Specialist*			✓			
Inpatient Medical Coder Specialist*			✓			
Medical Biller Specialist*			✓			
Microsoft Office*			✓			
Microsoft Office Excel Applications*			✓			
Microsoft Word*				✓		
Outpatient Medical Coder Specialist*			✓			
Professional Administrative Assistant*		✓	✓			
Professional Office Management*		✓	✓			
Professional Office Skills*			✓			
California State University-GE (CSU-GE)			✓			
Chemistry		✓				
Child Development*		✓				
Early Childhood Education*	✓					
Chinese		✓				
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 CCNA Security Examination Preparation*			✓			
Cisco CCNP Examination Preparation Level V*			✓			
Cisco CCNP Examination Preparation Level VII*			✓			
Cisco CCNP Examination Preparation Level VIII*			✓			
Cisco CCNP Examination Preparation Level IX*			✓			
Computer Foundations*				✓		
Computer Game Development*				✓		
Computer Support Technician*				✓		
Network Specialist*			✓			
Programming Foundations*			✓			
Project Management*				✓		
Web Page Developer, Level One*				✓		
Computer Science	✓					
Criminal Justice*			✓			
Administration of Justice*	✓					
Correctional Science*		✓	✓			
Homeland National Security*			✓			
Leadership in Criminal Justice*			✓			
Culinary Arts*		✓	✓			
Professional Baking and Patisserie*			✓			

Degree and Certificate Programs

PROGRAM	AA-T / AS-T	AA / AS	CA	CCP	NCCL	NCCC
Dance		✓				
Dental Assisting*		✓	✓			
Dietetic Service Supervisor*			✓			
Drafting						
Architectural*		✓	✓			
CAD/CAM Operator*				✓		
Mechanical*		✓	✓			
Earth Science		✓				
Economics	✓					
Political Economics		✓				
Elementary Teacher Education	✓					
Education Paraprofessional Level I*				✓		
Emergency Medical Provider*			✓			
Engineering		✓				
Engineering Technology*		✓	✓			
English	✓					
Fashion Design*		✓	✓			
Custom Dressmaking*			✓			
Industrial Sewing*				✓		
Patternmaking for Apparel*			✓			
Fashion Merchandising*		✓	✓			
Fire Technology: Professional Firefighter*		✓	✓			
Fire Prevention Inspector*			✓			
Geography	✓					
Geology	✓					
Gerontology*		✓	✓			
Community Caregiver*			✓			
Heating, Ventilation, Air Conditioning and Refrigeration (HVACR)*						
HVACR - Level I						✓
History	✓					
Hospitality Management*						
Food Service Management*		✓	✓			
Hotel Management*		✓	✓			
Industrial Electrical Technology*		✓				
Industrial Electrical Technology - Level I*				✓		
Industrial Electrical Technology - Level II*			✓			
Industrial Electrical Technology - Level III*			✓			
Electromechanical Technology - Level I*				✓		
Industrial Maintenance Mechanic*			✓			
Industrial Maintenance Mechanic Skills Builder I*					✓	
Industrial Maintenance Mechanic Skills Builder II*					✓	

PROGRAM	AA-T / AS-T	AA / AS	CA	CCP	NCCL	NCCC
Interior Design*		✓	✓			
Intersegmental GE Transfer Curriculum (IGETC)			✓			
Journalism*	✓		✓			
Kinesiology	✓					
Athletic Training*				✓		
Physical Education		✓				
Mathematics	✓					
Music	✓					
Commercial Music*		✓				
Nursing						
Associate Degree Nursing (A.D.N.)*		✓				
Associate Degree Nursing (V.N. to R.N.)*		✓				
Home Health Aide (H.H.A.)*				✓		
Nursing Assistant (N.A.)*				✓		
Vocational (V.N.)*		✓	✓			
Nutrition and Dietetics*	✓					
Nutrition and Food*			✓			
Pharmacy Technician*		✓	✓			
Philosophy	✓					
Religious Studies		✓				
Photography*		✓				
Still Photography*			✓			
Physical Science		✓				
Physics	✓					
Political Science	✓					
Psychology	✓					
Radiologic Technology*		✓				
Real Estate*		✓				
Real Estate Salesperson*				✓		
Sign Language Studies		✓				
Social Justice Studies	✓					
Sociology	✓					
Spanish	✓					
Theatre Arts	✓					
Performance		✓				
Technical Theatre*				✓		
University Studies						
Arts and Humanities Emphasis		✓				
Social and Behavioral Sciences Emphasis		✓				
Mathematics and Science Emphasis		✓				
Business and Technology Emphasis		✓				

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Apply the conceptual framework of financial and managerial accounting and reporting in business.
2. Demonstrate the ability to work effectively as a member of a team.
3. Communicate accurately and effectively, both verbally and in writing.
4. Demonstrate the ability to conduct business research, analyze, and interpret the findings.
5. Demonstrate the ability to recognize an ethical dilemma and make an appropriate response.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S005/04756/0502.00*/52.0302]		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
BUSL 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**

ACCOUNTING AND FINANCIAL PLANNING CERTIFICATE PROGRAMS

Accounting Certificate

The Accounting certificate program is 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate analysis and critical reflection appropriate in the field of accounting.
2. Demonstrate communication and problem solving appropriate in the field of accounting.
3. Plan and prepare for employment and career advancement in the field of accounting.
4. Recognize the need for, and implement ethical decision-making.

Requirements for the Accounting Certificate:

[T005/20675/0502.00*/52.0302]		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
BUSL 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
CIS 68	Internet Technologies	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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate analysis and critical reflection appropriate in the field of accounting.
2. Demonstrate communication and problem solving appropriate in the field of accounting.
3. Plan and prepare for employment and career advancement in the field of governmental accounting and not-for-profit accounting.
4. Recognize the need for, and implement ethical decision-making.

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

[L008/99999/0502.00*/52.0302] ***(Non-transcripted)***		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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate analysis and critical reflection appropriate in the field of accounting.
2. Demonstrate communication and problem solving appropriate in the field of accounting.
3. Plan and prepare for employment and career advancement in the field of accounting.
4. Recognize the need for, and implement ethical decision-making.

Requirements for the Accounting Paraprofessional Certificate:

[L006/07370/0502.00*/52.0302]		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.

Program Learning Outcomes:

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

1. Demonstrate analysis and critical reflection appropriate in the field of business.
2. Demonstrate communication and problem solving appropriate in the field of business.
3. Plan and prepare for employment and career advancement in the field of business.
4. Recognize the need for, and implement ethical decision-making.

Requirements for the Bookkeeping Certificate:

[E115/99999/0502.00*/52.0302] ***(Non-transcripted)***		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.

Program Learning Outcomes:

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

1. Demonstrate analysis and critical reflection appropriate in the field of financial planning.
2. Demonstrate communication and problem solving appropriate in the field of financial planning.
3. Plan and prepare for employment and career advancement in the field of financial planning.
4. Recognize the need for, and implement ethical decision-making.

Requirements for the Financial Planning Certificate:

[E116/99999/0504.00*/52.0803] ***(Non-transcripted)***		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
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 financial data effectively in preparing a variety of tax returns. Additionally, this certificate fulfills the preliminary requirements to become a Registered Tax Preparer in the state of California.

Program Learning Outcomes:

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

1. Demonstrate analysis and critical reflection appropriate in the field of payroll and tax preparation.
2. Demonstrate communication and problem solving appropriate in the field of payroll and tax preparation.
3. Plan and prepare for employment and career advancement in the field of payroll and tax preparation.
4. Recognize the need for, and implement ethical decision-making.

Requirements for the Payroll and Income Tax Preparer Certificate:

[E117/99999/0502.10*/52.1601] ***(Non-transcripted)***		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	4
	Total units for the certificate	**14**

ADMINISTRATION OF JUSTICE

(See Criminal Justice)

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN ANTHROPOLOGY FOR TRANSFER

Anthropology is an interdisciplinary area of study focusing on 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.

The Associate in Arts for Anthropology for Transfer (AA-T) degree is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four-year institution to complete their bachelor's degree. Successful completion of the transfer degree in Anthropology 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 for a career in the field of anthropology.

The goals and outcomes for the Anthropology major include the following:
1. Prepare students for seamless transfer to a CSU to complete an Anthropology baccalaureate degree.
2. Prepare students for advanced studies within the field of Anthropology.

To obtain the Anthropology AA-T degree, students must:
- Complete all major requirements with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University-General Education Breadth (CSU-GE) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Understand key Anthropological concepts and develop critical thinking skills to assess anthropological concepts, and to evaluate the validity of anthropological methods, interpretations, solutions, and arguments.
2. Demonstrate an appreciation for human diversity.
3. Demonstrate an understanding of the integrative/holistic nature of Anthropology and its utility in fostering a deeper understanding of allied academic disciplines and personal identity.

Major requirements for the Associate in Arts for Transfer Degree

[A016/32166/2202.00/45.0201]		Units
Core – (9 units):		
ANTHRO 1	Introduction to Biological Anthropology	3
ANTHRO 2	Introduction to Archaeology	3
ANTHRO 3	Introduction to Social and Cultural Anthropology	3
List A – One course (4 units):		
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4
List B – One or two* courses (4 units):		
BIOL 20	Human Anatomy	4
ESC 1	Earth Science	3
	and	
ESC 1L	Earth Science Laboratory	1
GEOL 1	Physical Geology	4
PSYCH 80	Research Methods in Psychology (or SOC 80, Introduction to Research Methods in Sociology)	4
List C – One course (1-4 units):		
Any List A or List B course not already used, or:		
ANTHRO 1L	Laboratory for Biological Anthropology	1
COMSTD 74	Intercultural Communication	3
GEOG 11	Human Geography	3
MUSIC 26	World Music	3
PHIL 80	Introduction to Religion	3
SOC 10	Introduction to Sociology	3
SOC 15	Ethnic and Race Relations: U.S. and Global Perspectives	3
	Total units for the major	**18-21**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**19**	**19**
Elective (CSU transferable) units	**21-24**	**19-22**
Total units required for the degree	**60**	**60**

* If Earth Science is selected, both ESC-1 and 1L are required.

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN STUDIO ARTS FOR TRANSFER

The Studio Arts AA-T provides a comprehensive, student-centered program that serves a diverse population. Studio and lecture courses prepare students for employment in a variety of fields related to the visual arts and design. Critical thinking and problem-solving skills are emphasized across the curriculum. Coursework requires students to examine the world from alternate cultural, ethnic, gender and personal perspectives. Professional practices, skills, and the ability to use technology to communicate are integral components of the program.

Students should consult with the intended transfer institution to determine the appropriate courses to complete at Chaffey. 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 Studio Art 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 Studio Art.

The goals and outcomes for the Studio Arts major include the following:
1. Prepare students for transfer to a CSU to complete a Studio Arts baccalaureate degree.
2. The Studio Arts program strives to teach contemporary continuing education to career professionals.

To obtain the Studio Arts A.A.-T degree, students must complete the following:
1. A minimum of 26 semester units in the major with a grade of C or better while maintaining a grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
2. 60 semester CSU-transferable units following the California State University General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer (IGETC). No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Transfer to a CSU to complete a Studio Art Baccalaureate degree.
2. Possess a foundation of knowledge and skills in Studio Art.
3. Apply critical thinking skills in the creation and evaluation of the visual arts.

Major requirements for the Associate in Arts for Transfer Degree

[A038/33239/1002.00/50.0701]		Units
Required Core (14 units)		
ART 10	Fundamentals of Design in Two Dimensions	4
ART 12	Fundamentals of Design in Three Dimensions	4
ART 14	Introduction to Drawing	3
ARTH 5	Survey of Western Art from Renaissance to Contemporary	3
List A: Select one (3 units)		
ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
ARTH 7	Arts of Africa, Oceania, and Indigenous North America	3
ARTH 9	Art of the Ancient Americas	3
ARTH 11	Survey of Asian Arts	3
List B: Select three (9 - 12 units)		
ART 15	Color Theory	3
ART 16	Introduction to Painting	3
ART 18	Introduction to Ceramics	3
ART 20	Ceramic Sculpture (or ART 50, Introduction to Sculpture)	4
ART 30	Figure Drawing (or ART 32, Intermediate Drawing, 4)	3
ART 34	Intermediate Painting (or ART 35, Intermediate Ceramics, 3 or ART 62B, Illustration II, 3)	4
ART 63	Introduction to Graphic Design	4
ART 73	Typography and Layout	4
PHOTO 7	Introduction to Digital Photography (or PHOTO 10, Beginning Photography)	4
	Total units for the major	**26-29**

	IGETC
General Education	**37**
Total units that may be double-counted	**6**
Elective (CSU transferable) units	**0-3**
Total units required for the degree	**60**

ART

The program provides a comprehensive, student-centered program that serves a diverse population. It prepares students for transfer to University of California, California State University, and most private art colleges in the nation. Studio and lecture courses prepare students for employment in a variety of fields related to the visual arts and design. Critical thinking and problem-solving skills are emphasized across the curriculum. Coursework requires students to examine the world from alternate cultural, ethnic, gender and personal perspectives. Professional practices, vocational skills and the ability to use technology to communicate are integral components of the program.

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.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

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 15	Color Theory	3
ART 89*	Student Invitational Exhibition (or ART 488*, Portfolio and Presentation)	4

* A substantial number of core and emphasis requirements should be completed prior to enrollment. Students taking ART 89 must pass faculty review of creative proposal and portfolio in November for following spring term.

Plus completion of one of the following emphases:

Art Emphasis

Program Learning Outcomes:

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

1. Demonstrate technical skills for producing art in a variety of media.
2. Create work that demonstrates an understanding of the visual elements and principles of design.
3. Analyze works of art and design and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts.

Major requirements for the Art Emphasis:

[A020/04776/1002.00/50.0701]		Units
Core requirements, ***plus:***		18
ART 16	Introduction to Painting	3
ART 18	Introduction to Ceramics	3
PHOTO 7	Introduction to Digital Photography (or PHOTO 10, Beginning Photography)	4
Plus one course from the following:		
ART 407	History of Design	3
ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
ARTH 5	Survey of Western Art from the Renaissance through Contemporary	3
ARTH 11	Survey of Asian Arts	3
ARTH 19	Contemporary Art: 1945-Present	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	**34-35**

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

Ceramics Studio Emphasis

Program Learning Outcomes:

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

1. Demonstrate technical skills for producing art in ceramics.
2. Create work that demonstrates an understanding of the visual elements and principles of design as they apply to ceramics.
3. Analyze works of ceramic art and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in ceramics.

Major requirements for the Ceramics Studio Emphasis:

[A025/04777/1002.30/50.0711]		Units
Core requirements, ***plus:***		18
ART 18	Introduction to Ceramics	3
ART 20	Ceramic Sculpture	4
ART 35	Intermediate Ceramics	3
ART 40	Advanced Ceramics	3
ART 44	Mixed-Media Studio and Theory	3
ARTH 19	Contemporary Art: 1945 – Present	3
	Total units for the major	**37**

Recommended Courses: ARTH 9, ART 16, 50

Drawing/Painting Studio Emphasis

Program Learning Outcomes:

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

1. Demonstrate technical skills for producing art in drawing or painting.
2. Create work that demonstrates an understanding of the visual elements and principles of design as they apply to drawing or painting.
3. Analyze drawings and paintings and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in drawing or painting.

Major requirements for the Drawing/Painting Studio Emphasis:

[A030/10366/1002.10/50.0705]		Units
Core requirements, ***plus:***		18
ART 16	Introduction to Painting	3
ART 30	Figure Drawing	3
ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ARTH 19	Contemporary Art: 1945-Present	3
	Total units for the major	**35**

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

Intermedia Emphasis

The Intermedia emphasis provides students an interdisciplinary approach to art making with exploration in mixed media, sculpture, installation, and multimedia. Curriculum integrates a variety of subjects to encourage artistic exploration of traditional modes of production within the interrelated disciplines.

Program Learning Outcomes:

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

1. Demonstrate technical skills for producing art within a multidisciplinary art practice.
2. Create works that demonstrate conceptual and aesthetic explorations utilizing a variety of media.
3. Analyze a variety of media and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts as it applies to a multidisciplinary arts practice.

Major requirements for the Intermedia Emphasis:

[A040/10367/1002.00/50.0701]		Units
Core requirements, ***plus:***		18
ART 44	Mixed-Media Studio and Theory	3
ART 50	Introduction to Sculpture	4
ART 63	Introduction to Graphic Design	4
ART 82	Introduction to Digital Media	4
ART 482	Editing Digital Media	4
ARTH 19	Contemporary Art: 1945-Present	3
	Total units for the major	**40**

Recommended Courses: BRDCAST 3; CINEMA 25; PHOTO 1, 7, 9, 10

ART / DIGITAL MEDIA

The Digital Media program is a cross-discipline program designed to prepare students for employment in the fields of visual design for print, screen, and time based media including web, multimedia and motion graphics. The programs' focus is to educate students for college transfer to 4-year programs or professional training in digital media design. Both fundamental and advanced courses are offered in state of the art facilities taught by distinguished professors from the fine art, graphic design and multimedia industries. The program offers transfer credits, AA degrees and certificate programs in three separate digital media career field emphases. The focus of these programs is to examine the creative design and content development process in relationship to technology in a rapidly evolving communication environment. The Digital Media program prepares students for transfer to the University of California, California State University, and most private art colleges in the nation. To transfer, students should consult with the intended transfer institution to obtain a list of appropriate courses to complete at Chaffey College.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

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 73	Typography and Layout	4
ART 82	Introduction to Digital Media	4

Plus completion of one of the following emphases:

Computer Graphic Design for Print Media Emphasis

Program Learning Outcomes:

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

1. Demonstrate technical skills in computer graphic design for print media.
2. Create print media work that demonstrates an understanding of the visual elements and principles of design as they apply to computer graphic design.
3. Analyze print media and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in computer graphic design for print media.

Major requirements for the Computer Graphic Design for Print Media Emphasis:

[A045/12210/0614.60*/11.0803]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 407	History of Design	3
ART 474	Identity System Design (or ART 89*, Student Invitational Exhibition)	4
ARTH 19	Contemporary Art: 1945 - Present	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the major	**37**

* Students taking ART 89 must pass faculty review of creative proposal and portfolio in November for following spring term.

Computer Graphic Design for Print Media Certificate

The Computer Graphic Design for Print Media Certificate of Achievement is intended for students who are not matriculating through a degree program. This curriculum prepares students for the graphic design industry with entry-level skills for industry employment with an emphasis in print media.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate technical and critical skills for entry-level positions in the print media field.
2. Develop an understanding of contemporary issues in the print media field.
3. Identify and solve visual problems in the creation of print media projects.

Requirements for the Computer Graphic Design for Print Media Certificate:

[T046/20696/0614.60*/11.0803]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 407	History of Design	3
ART 474	Identity System Design	4
ARTH 19	Contemporary Art: 1945 - Present	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the certificate	**37**

Recommended Courses: ARTH 5, ART 12; PHOTO 9

Design for Multimedia Emphasis

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate technical skills in digital design for multimedia.
2. Create work that demonstrates an understanding of the visual elements and principles of design as they apply to digital design for multimedia.
3. Analyze multimedia and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in multimedia.

Major requirements for the Design for Multimedia Emphasis:

[A046/12211/0614.10*/10.0304]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 474	Identity System Design (or ART 89*, Student Invitational Exhibition)	4
ART 482	Editing Digital Media	4
ART 484	Motion Graphic Animation	4
ARTH 19	Contemporary Art: 1945 - Present	3
Plus one of the following:		
CINEMA 25	Survey of World Cinemas	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the major	**41-42**

* Students taking ART 89 must pass faculty review of creative proposal and portfolio in November for following spring term.

Design for Multimedia Certificate

The Design for Multimedia Certificate of Achievement is intended for students who are not matriculating through a degree program. The curriculum prepares students to enter the multimedia design industry with entry level skills for a variety of digital media industry employment.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate technical and critical skills for entry-level positions in the design for multimedia field.
2. Develop an understanding of contemporary issues in the design for multimedia field.
3. Identify and solve visual problems in the creation of design for multimedia projects.

Requirements for the Design for Multimedia Certificate:

[T047/20691/0614.10*/10.0304]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 474	Identity System Design	4
ART 482	Editing Digital Media	4
ART 484	Motion Graphic Animation	4
ARTH 19	Contemporary Art: 1945 - Present	3
Plus one of the following:		
CINEMA 25	Survey of World Cinemas	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the certificate	**41-42**

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

Web Design Emphasis

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate technical skills for web design.
2. Create work that demonstrates an understanding of the visual elements and principles of design as they apply to web design.
3. Analyze web design and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in web design.

Major requirements for the Web Design Emphasis:

[A048/12213/0614.30*/11.0801]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 407	History of Design	3
ART 474	Identity System Design (or ART 89*, Student Invitational Exhibition)	4
ART 484	Motion Graphic Animation	4
ARTH 19	Contemporary Art: 1945 - Present	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the major	**41**

* Students taking ART 89 must pass faculty review of creative proposal and portfolio in November for following spring term.

Web Design Certificate

The Web Design Certificate of Achievement is intended for students who are not matriculating through a degree program. The curriculum prepares students to enter the web design industry with entry level skills for a variety of digital media industry employment.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate technical and critical skills for entry-level positions in the web design field.
2. Develop an understanding of contemporary issues in the web design field.
3. Identify and solve visual problems in the creation of web design projects.

Requirements for the Web Design Certificate:

[T049/20692/0614.30*/11.0801]		Units
Core requirements, ***plus:***		16
ART 14	Introduction to Drawing	3
ART 83	Web Design	4
ART 407	History of Design	3
ART 474	Identity System Design	4
ART 484	Motion Graphic Animation	4
ARTH 19	Contemporary Art: 1945 - Present	3
PHOTO 7	Introduction to Digital Photography	4
	Total units for the certificate	**41**

Recommended Course: PHOTO 9

ART / VISUAL COMMUNICATION: ILLUSTRATION

The Illustration program develops students' ability to visually communicate ideas. Primary emphasis is on conceptual development and refinement of technical skills in varied forms including drawing, painting, and digital imagery. The Illustration Program is designed to assist students in the preparation of a portfolio for transfer to a four-year institution. To transfer, students should consult with the intended transfer institution to obtain a list of appropriate courses to complete at Chaffey College.

Program Learning Outcomes:

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

1. Demonstrate technical skills in illustration.
2. Create work that demonstrates an understanding of the visual elements and principles of design as they apply to illustration.
3. Analyze illustration and convincingly form and defend value judgments of these works.
4. Identify and solve visual problems within a variety of physical, technological, social and cultural contexts with an emphasis in illustration.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:		Units
[S045/04782/1013.00*/50.0402]		
ART 10	Fundamentals of Design in Two Dimensions	4
ART 14	Introduction to Drawing	3
ART 15	Color Theory	3
ART 16	Introduction to Painting	3
ART 30	Figure Drawing	3
ART 62A	Illustration I	3
ART 62B	Illustration II	3
ART 63	Introduction to Graphic Design	4
ART 73	Typography and Layout	4
ART 89*	Student Invitational Exhibition (or ART 488*, Portfolio and Presentation)	4
ART 478	Illustration on the Computer	3
Plus one course from the following:		
ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ART 407	History of Design	3
ART 474	Identity System Design	4
ARTH 19	Contemporary Art: 1945 – Present	3
	Total units for the major	**40-41**

* A substantial number of core and emphasis requirements should be completed prior to enrollment. Students taking ART 89 must pass faculty review of creative proposal and portfolio in November for following spring term.

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN ART HISTORY FOR TRANSFER

The Associate in Arts in Art History for Transfer degree 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.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Art History 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 for a career in the field of Art History.

The goals and outcomes for the Art History major include the following:

1. Prepare students for seamless transfer to a CSU to complete an Art History baccalaureate degree.
2. Prepare students for advanced studies within the field of Art History.

To obtain the Art History AA-T degree, students must:

- Complete all major requirements with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University-General Education Breadth (CSU-GE) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:

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

1. Identify and describe formal stylistic characteristics and principal developments in the visual arts and relate them to their historical context.
2. Interpret the historical function and meaning of art through research and analysis of multiple forms of evidence.
3. Use discipline specific terminology in oral and written communication to evaluate the significance of the theories, disciplines, and practices of art history.
4. Recognize and respect diverse individuals, social forces, and ideologies of the world's cultures through the study of the visual arts.

Major requirements for the Associate in Arts for Transfer Degree

[A037/32344/1001.00/50.0101]		Units
Core – (9 units):		
ART 14	Introduction to Drawing	3
ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
ARTH 5	Survey of Western Art from Renaissance to Contemporary	3
List A – One course (3 units):		
ARTH 7	Arts of Africa, Oceania, and Indigenous North America	3
ARTH 9	Art of the Ancient Americas	3
ARTH 11	Survey of Asian Arts	3
List B – One course (3-4 units):		
Any List A course not used above or:		
ART 10	Fundamentals of Design in Two Dimensions	4
ART 12	Fundamentals of Design in Three Dimensions	4
ART 18	Introduction to Ceramics	3
ART 20	Ceramic Sculpture	4
ART 30	Figure Drawing	3
PHOTO 7	Introduction to Digital Photography	4
PHOTO 10	Beginning Photography	4
List C – One course (3-4 units):		
Any List A or List B course not already used, or:		
ART 16	Introduction to Painting	3
ART 44	Mixed-Media Studio and Theory	3
ARTH 19	Contemporary Art: 1945-Present	3
PHOTO 1	History of Photography	3
	Total units for the major	**18-20**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**6**	**6**
Elective (CSU transferable) units	**9-11**	**7-9**
Total units required for the degree	**60**	**60**

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).

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.

Program Learning Outcomes:

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

1. Successfully complete the tasks required for employment, certification, and/or licensure as a General Automotive Service Technician.
2. Demonstrate mastery of the information required for ASE certification as a General Automotive Service Technician.
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.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S056/30658/0948.00*/47.0604]		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, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)	12
	Total units for the major	**21-24**

Master Automotive Technician

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

Program Learning Outcomes:

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

1. Successfully complete the tasks required for employment, certification, and/or licensure as a Master Automotive Technician.
2. Demonstrate mastery of the information required for ASE certification as a Master Automotive Technician.
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.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S055/04770/0948.00*/47.0604]		Units
AUTOTEC 423	Engine Management Systems and Drivability	4
AUTOTEC 427	Engine Operation and Service	5
AUTOTEC 429	Advanced 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, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as an Automotive Electrical Systems Specialist.
2. Demonstrate mastery of the information required for ASE certification and/or licensure as an Automotive Electrical Systems Specialist.
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.

Requirements for the Automotive Electrical Systems Certificate:

[E445/99999/0948.00*/47.0604] ***(Non-transcripted)***		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	Advanced 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as an Engine Performance Technician.
2. Demonstrate mastery of the information required for ASE certification and/or licensure as an Engine Performance Technician.
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.

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

[L448/15527/0948.00*/47.0604]		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	Advanced Automotive Electrical Systems	4
AUTOTEC 443	Engine and Emission Control Training Level I	4
	Total units for the certificate	**23**

Engine Rebuilding

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

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as an Engine Rebuilding Technician.
2. Demonstrate mastery of the information required for ASE certification as an Engine Rebuilding Technician.
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.

Requirements for the Engine Rebuilding Certificate:

[L449/99999/0948.00*/47.0604] ***(Non-transcripted)***		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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as a General Automotive Service Technician.
2. Demonstrate mastery of the information required for ASE certification as a General Automotive Service Technician.
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.

Requirements for the General Automotive Service Technician Certificate:

[L446/15528/0948.00*/47.0604]		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, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as a High Performance Engine Technician.
2. Demonstrate mastery of the information required for ASE certification as a High Performance Engine Technician.
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.

Requirements for the High Performance Engines Certificate:

[E110/99999/0948.00*/47.0604] ***(Non-transcripted)***		Units
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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Successfully complete the tasks required for employment, certification, and/or licensure as a Master Automotive Technician.
2. Demonstrate mastery of the information required for ASE certification as a Master Automotive Technician.
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.

Requirements for the Master Automotive Technician Certificate:

[T055/20708/0948.00*/47.0604]		Units
AUTOTEC 423	Engine Management Systems and Drivability	4
AUTOTEC 427	Engine Operation and Service	5
AUTOTEC 429	Advanced 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, Auto Electricity and Electronics, 2 and AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 and AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)	12
	Total units for the certificate	**39-42**

AVIATION MAINTENANCE TECHNOLOGY

This program provides coursework needed for the Associate in Science degree major in Aviation Maintenance Airframe and/or Powerplant Technology and is intended for those students who wish to transfer to a four-year institution. The program also meets requirements for the Federal Aviation Administration (FAA) Airframe and Powerplant Certificates. 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 FAA to provide the experience required to become an Airframe or Powerplant technician.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:		Units
AMT 15	Introduction to Aviation Maintenance for Airframe and Powerplant	14
AMT 16A	Aviation Materials, Processes, Inspections and Regulations	1
AMT 16B	Aviation Science	1

Plus completion of one of the following emphases:

Airframe Emphasis

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate critical thinking and problem solving appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
2. Demonstrate skills that foster communication appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles, and other emerging aviation technologies.
3. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

Major requirements for the Airframe Emphasis:

[S011/04772/0950.10*/47.0607]		Units
Core requirements, ***plus:***		16
AMT 35	Airframe Structures: Fabrication, Inspection and Repair	7
AMT 36	Aircraft Primary Systems	7
AMT 37	Aircraft Secondary Systems	7
AMT 38A	Airframe Structure: Structure Fabrication	1
AMT 38B	Airframe Structure: Hydraulic Systems	1
AMT 38C	Airframe Structure: Aircraft Secondary Systems and Components	1
	Total units for the major	**40**

Airframe Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate skills that foster critical thinking and problem solving appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
2. Demonstrate skills that foster communication appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles, and other emerging aviation technologies.
3. Demonstrate skills to procure or advance in the aviation job market.

Requirements for the Airframe Certificate:

[L011/20711/0950.10*/47.0607]	Units
Same as the major requirements for the Airframe A.S. Degree (core + emphasis)	
Total units for the certificate	**40**

Powerplant Emphasis

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate critical thinking and problem solving appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
2. Demonstrate skills that foster communication appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles, and other emerging aviation technologies.
3. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

Major requirements for the Powerplant Emphasis:

[S012/04773/0950.20*/47.0608]		Units
Core requirements, ***plus:***		16
AMT 25	Powerplant: Aircraft Reciprocating Engines	7
AMT 26	Powerplant: Engine Instrumentation, Lubrication, & Electrical	7
AMT 27	Powerplant: Reciprocating Engine Fuel and Auxiliary Systems	7
AMT 28A	Powerplant: Reciprocating Engine Inspection	1
AMT 28B	Powerplant: Electrical Systems	1
AMT 28C	Powerplant: Turbine Engine Auxiliary Systems	1
	Total units for the major	**40**

Powerplant Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate skills that foster critical thinking and problem solving appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
2. Demonstrate skills that foster communication appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
3. Demonstrate skills to procure or advance in the aviation job market.

Requirements for the Powerplant Certificate:

[L012/20712/0950.20*/47.0608]		Units
Same as the major requirements for the Powerplant A.S. Degree (core + emphasis)		
	Total units for the certificate	**40**

Aviation Maintenance Certificate

The Aviation Maintenance certificate is intended for students who desire a comprehensive course of study in both the airframe and powerplant systems, as opposed to those requiring only one certificate. This certificate will meet the needs of students who - per Federal guidelines - require continuous enrollment throughout each and every semester of the two year Aviation Maintenance Technician (AMT) Program.

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 experience required to become an Airframe or Powerplant technician. This certificate meets requirements for both the FAA Airframe and Powerplant Certificates.

Program Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Demonstrate skills that foster critical thinking and problem solving appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles and other emerging aviation technologies.
2. Demonstrate skills that foster communication appropriate to the national and international general aviation, corporate aviation, commercial aviation, aerospace, unmanned aerial vehicles, and other emerging aviation technologies.
3. Demonstrate skills to procure or advance in the aviation job market.

Requirements for the Aviation Maintenance Certificate:

[F010/32996/0950.00*/47.0607]		Units
AMT 15	Introduction to Aviation Maintenance for Airframe and Powerplant	14
AMT 16A	Aviation Materials, Processes, Inspections and Regulations	1
AMT 16B	Aviation Science	1
AMT 25	Powerplant: Aircraft Reciprocating Engines	7
AMT 26	Powerplant: Engine Instrumentation, Lubrication, & Electrical	7
AMT 27	Powerplant: Reciprocating Engine Fuel and Auxiliary Systems	7
AMT 28A	Powerplant: Reciprocating Engine Inspection	1
AMT 28B	Powerplant: Electrical Systems	1
AMT 28C	Powerplant: Turbine Engine Auxiliary Systems	1
AMT 35	Airframe Structures: Fabrication, Inspection and Repair	7
AMT 36	Aircraft Primary Systems	7
AMT 37	Aircraft Secondary Systems	7
AMT 38A	Airframe Structure: Structure Fabrication	1
AMT 38B	Airframe Structure: Hydraulic Systems	1
AMT 38C	Airframe Structure: Aircraft Secondary Systems and Components	1
	Total units for the certificate	**64**

ADegreeWithAGuarantee.com℠ Associate Degree for Transfer

Associate in Science in Biology for Transfer

The Biology Associate in Science for Transfer degree includes courses that explore life at the molecular, cellular, organismal and ecological levels, providing a foundation for further study in the life sciences. The Associate in Science for Transfer is particularly suited to the needs of students who will complete their Chaffey associate degree and then plan to transfer to a California State University to complete a bachelor's degree. Successful completion of the Biology Associate in Science for Transfer degree guarantees the student acceptance to a California State University (but does not guarantee acceptance to particular campus or major) to pursue a baccalaureate degree, in preparation for a career in biology or a related field (e.g. medicine, dentistry, veterinary science, agriculture, botany, microbiology, zoology, entomology, wildlife, ecology). Students should consult with a counselor for more information on university admission, selecting an appropriate general education pattern, and other transfer requirements.

To obtain the Associate in Science in Biology for Transfer, students must complete the following:
1. Completion of 60 semester units which are eligible for transfer to the California State University, including both of the following:
   A. The Intersegmental General Education Transfer Curriculum for STEM or the California State University General Education – Breadth for STEM Requirements*.
   B. 36 units in the major or area of emphasis, as determined by Chaffey College.
2. Obtainment of a minimum grade point average of 2.0. Associate Degrees for Transfer also require that students must earn a C or better in all courses required for the major or area of emphasis.

* Use of CSU GE-Breadth for STEM or IGETC for STEM is presumed.

Program Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Demonstrate skill in scientific thinking, communication, problem solving and experimental methodology.
2. Discuss current scientific hypotheses of the evolutionary origins of organismal diversity.
3. Apply evolutionary theory and structure-function relationships, relative to interactions between biological entities and their environments, as unifying ideas across all levels of biological organization.

Major requirements for the Associate in Science Transfer (AS-T) Degree

[S066/35060/0401.00/26.0101]		Units
Required core (14 units):		
BIOL 61	Introduction to Cell and Molecular Biology	5
BIOL 62	Biology of Organisms	5
BIOL 63	Evolutionary Ecology	4
List A – (22 units)		
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
MATH 65A	Calculus I	4
PHYS 30A	Physics for the Medical and Life Sciences I	4
PHYS 30B	Physics for the Medical and Life Sciences II	4
	Total units for the major	**36**

	IGETC STEM	CSUGE STEM
General Education	**31**	**33**
Total units that may be double-counted	**10**	**10**
Elective (CSU transferable) units	**3**	**1**
Total units required for the degree	**60**	**60**

Biological Sciences

The Biological Sciences Associate in Science degree is designed to prepare students for transfer to a college or university with the goal of earning a bachelor's degree in Biology or a related discipline. The program includes courses that explore life at the molecular, cellular, organismal and ecological levels, providing a foundation for further study in a variety of life sciences fields (e.g. medicine, dentistry, veterinary science, agriculture, botany, microbiology, zoology, entomology, wildlife, ecology). Although the requirements are similar to those of the Biology Associate in Science for Transfer degree, this degree includes an option for students to focus their studies in areas other than physics, such as microbiology, organic chemistry, or advanced mathematics. In consultation with a counselor, students can adapt their coursework at Chaffey to better articulate with the pathways desired by non-CSU transfer institutions [e.g. UCs or private colleges and universities]. Students should consult with a counselor for more information on university admission, selecting an appropriate general education pattern, and other transfer requirements.

Program Learning Outcomes:

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

1. Demonstrate skill in scientific thinking, communication, problem solving and experimental methodology
2. Discuss current scientific hypotheses of the evolutionary origins of organismal diversity.
3. Apply evolutionary theory and structure-function relationships, relative to interactions between biological entities and their environments, as unifying ideas across all levels of biological organization.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S065/04755/0401.00/26.0101]		Units
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 one course from the following:		
BIOL 23	General Microbiology	3
CHEM 75A	Organic Chemistry I	5
MATH 65B	Calculus II	4
PHYS 20A	Algebra/Trigonometry College Physics I	4
PHYS 30A	Physics for the Medical and Life Sciences I	4
PHYS 45	Physics for Scientists and Engineers I	5
	Total units for the major	**31-33**

Broadcasting and Cinema

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.

Program Learning Outcomes:

Upon the successful completion of this degree, 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 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 page 38.

Major requirements for the Associate in Science Degree:

[S070/04764/0604.00*/09.0701]		Units
BRDCAST 3	Introduction to Electronic Media	3
BRDCAST 74	High Definition Cinematography	3
CINEMA 20	Screenwriting - Cinema	3
CINEMA 22	Introduction to Media Writing	3
CINEMA 25	Survey of World Cinemas	3
CINEMA 30	Beginning Motion Picture Production	3
CINEMA 80	Producing for Broadcast and Cinema	3
Plus nine units from the following:		
BRDCAST 55	Beginning Audio Production	3
BRDCAST 60	Beginning Single Camera Production	3
BRDCAST 62	Beginning TV Studio Production	3
BRDCAST 67	Beginning Radio Production	3
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
CINEMA 26	Survey of American Cinema	3
CINEMA 96	Internships in Cinema, Television or Radio	3
	Total units for the major	**30**

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Associate Degree for Transfer

Associate in Science in Film, Television and Electronic Media for Transfer

The Associate in Science in Film, Television and Electronic Media for Transfer degree is a study in the fields of preproduction, production and postproduction in the fields of television, film and electronic media. Students will be learning the essential first parts of filmmaking, including aesthetic, political, social, ethical and occupational impact of film, television and electronic media. Basic elements of production will be covered, including theory, terminology and operation of production equipment used in producing a film. Postproduction will cover elements of editing and how to make important decisions about the sequence, flow, and visual style of a film as scenes are cut and rearranged as the project takes its final shape. Students should consult with the intended transfer institution to determine the appropriate courses to complete at Chaffey. 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 CSU to complete their bachelor's degree. Successful completion of the transfer degree in Film, Television & Electronic Media 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 Film, Television & Electronic Media. To obtain the Associate in Science in Film, Television and Electronic Media for Transfer degree, students must complete both of the following: A) A minimum of 18 semester units in the major with a grade of C or better while maintaining a grade point average (GPA) of at least 2.0 in all CSU transferable coursework. B) 60 semester CSU-transferable units following the California State University-General Education Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. C) No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this program, students should be able to:
1. Develop pre-production skills including screenwriting, and budgeting.
2. Utilize narrative techniques and visual storytelling to communicate a message.
3. Operate a film/video camera, sound, and lighting equipment on a remote or studio shoot.
4. Use and apply principles of editing and post-production techniques.
5. Understand film and television's greater role in the current global media context.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:
[S142/36201/0604.20*/09.0701]

		Units
BRDCAST 3	Introduction to Electronic Media	3
	(or COMSTD 12, Mass Communication and Society, 3)	
CINEMA22	Introduction to Media Writing	3

List A (select one from each area) six units
Audio

BRDCAST 55	Beginning Audio Production	3
BRDCAST 67	Beginning Radio Production	3

Video or Film Production

BRDCAST 60	Beginning Single Camera Production	3
BRDCAST 62	Beginning TV Studio Production	3
CINEMA 30	Beginning Motion Picture Production	3

List B (select one) any course not used in above sections or one from the following list (three units)

ARTH 5	Survey of Western Art from Renaissance to Contemporary	3
CINEMA 25	Survey of World Cinemas	3
CINEMA 26	Survey of American Cinema	3

List C (select one) any course not used in above sections or one from the following list (three units)

BRDCAST 70	Postproduction for Broadcasting & Cinema	3
BRDCAST 74	High Definition Cinematography	3
CINEMA 96	Internships in Cinema, Television or Radio	3
	Total units for the major	**18**

Broadcasting and Cinema Certificate Programs

Motion Picture Production

This certificate trains students for career paths in the field of motion picture production, focusing on the technical aspects of the preproduction, production, and post-production phases of the cinematic image. Production process includes motion picture cinema camera operation, microphone placement, audio operation, lighting, art direction and set design. Students utilize Pro8 MM reversal and negative film stocks to shoot and edit various student projects. Courses assist students to develop communication, computer, problem-solving, and technical skills needed for employment in the motion picture and entertainment industries.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate professional and creative operation of cinema cameras.
2. Demonstrate professional and creative competencies with microphone placement and audio operation.
3. Demonstrate professional and creative theories of lighting a set.
4. Demonstrate professional and creative theories of set design.

Requirements for the Motion Picture Production Certificate:
[B001/33195/0612.20*/50.0602]

		Units
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
BRDCAST 74	High Definition Cinematography	3
	(or CINEMA 80, Producing for Broadcast and Cinema	
	(or CINEMA 96, Internships in Cinema, Television or Radio)	
CINEMA 20	Screenwriting – Cinema	3
CINEMA 26	Survey of American Cinema	3
CINEMA 30	Beginning Motion Picture Production	3
	Total units for the certificate	**15**

On-Air Radio Production

This certificate trains students for career paths in the field of radio and electronic media. Coursework integrates news writing, music programming, talk, and other radio program formats. Hands-on experience on Chaffey College radio 1630 AM and live radio Internet streaming. Principles of FCC and AM Alert rules and regulations are covered. Courses assist students to develop communication, computer, problem-solving, and technical skills needed for employment in the broadcast industry.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Synthesize a basic overview of the historical practices and personnel involved in the three production phases of the broadcasting process.
2. Conceptualize and arrange subject matter (e.g. radio content, storyboarding) in aspects of broadcasting.
3. Complete a production of his/her announcing voice.
4. Operate industry-standard equipment and computer software programs.

Requirements for the On-Air Radio Production Certificate
[B005/33737/0604.10*/09.0701]

		Units
BRDCAST 3	Introduction to Electronic Media	3
BRDCAST 55	Beginning Audio Production	3
BRDCAST 67	Beginning Radio Production	3
CINEMA 80	Producing for Broadcast and Cinema	3
	(or CINEMA 96, Internships in Cinema, Television or Radio)	
	Total units for the certificate	**12**

Post Production Editing

This certificate trains students for career paths in the field of motion picture and television post production editing. Post production focuses on the editing and completion of student projects using Final Cut Pro and various Adobe and Avid editing software programs. Courses assist students to develop communication, computer, problem-solving, and technical skills needed for employment in the motion picture and entertainment industries.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate a working knowledge of Final cut Pro software.
2. Demonstrate a working knowledge of Adobe editing software features.
3. Demonstrate a working knowledge of Avid editing software.
4. Demonstrate artistic, enterprising, and investigative expression within film editing processes.

Requirements for the Post Production Editing Certificate:
[B002/33194/0612.20*/50.0602]

		Units
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
CINEMA 22	Introduction to Media Writing	3
CINEMA 25	Survey of World Cinemas	3
CINEMA 26	Survey of American Cinema	3
CINEMA 30	Beginning Motion Picture Production	3
	(or BRDCAST 60, Beginning Single Camera Production)	
	(or BRDCAST 74, High Definition Cinematography)	
	(or CINEMA 96, Internships in Cinema, Television or Radio)	
	Total units for the certificate	**15**

Screenwriting

This certificate trains students for career paths in the field of motion picture and television screenwriting. Screenwriting for motion picture, television, and new media prepares students to work in the story preparation and idea-development areas. Courses include the study of screenplay structure, characterization, theme, scene execution, and writing dialogue. Courses help students to develop communication, computer, problem-solving, and technical skills needed for employment in the motion picture and entertainment industries.

Program Learning Outcomes:

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

1. Demonstrate professional and creative written expression as they apply to a television, motion picture or video production.
2. Demonstrate professional and creative written expression as they relate to the physical environment of the storyline.
3. Demonstrate professional and creative written expression as they apply to the moods of characters in the story.

Requirements for the Screenwriting Certificate:

[B003/33226/0604.20*/09.0701]		Units
CINEMA 20	Screenwriting – Cinema	3
CINEMA 22	Introduction to Media Writing	3
CINEMA 25	Survey of World Cinemas	3
CINEMA 26	Survey of American Cinema	3
CINEMA 30	Beginning Motion Picture Production	3
	(or CINEMA 96, Internships in Cinema, Television or Radio)	
	Total units for the certificate	**15**

Television and Video Production

This certificate trains students for career paths in the field of television and video production. Television production focuses on the technical and storytelling aspects of single- and multi-camera production, including camera operation, microphone placement, audio operation, lighting, art direction, and set design. Students have hands-on experience in Chaffey College's state of the art high-definition TV studio. Courses help students to develop communication, computer, problem-solving, and technical skills needed for employment in the television and video industries.

Program Learning Outcomes:

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

1. Demonstrate a working knowledge of camera operation.
2. Demonstrate a working knowledge of microphone placement and audio operation.
3. Demonstrate a working knowledge of lighting.
4. Demonstrate a working knowledge of art direction and set design.

Requirements for the Television and Video Production Certificate:

[B004/33193/0604.20*/09.0701]		Units
BRDCAST 3	Introduction to Electronic Media	3
BRDCAST 60	Beginning Single Camera Production	3
BRDCAST 62	Beginning TV Studio Production	3
BRDCAST 74	High Definition Cinematography	3
	(or CINEMA 80, Producing for Broadcast and Cinema	
	(or CINEMA 96, Internships in Cinema, Television or Radio)	
CINEMA 20	Screenwriting - Cinema	3
	Total units for the certificate	**15**

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER

The Associate in Science in Business Administration for Transfer (AS-T) degree provides students with sufficient understanding of basic concepts, skills, and applications to attain upper-division status in Business Administration in the CSU system, and is intended for students who plan to complete a bachelor's degree in Business Administration at a California State University (CSU) campus. Typical Business Administration concentrations at CSU campuses may include – but are not limited to – Accounting, Management, Marketing, Finance, Human Resources, International Business, Entrepreneurship, Risk Management, Operations Management, Real Estate, and Information Management.

Successful completion of the transfer degree in Business Administration guarantees the student acceptance to a California State University, but does not guarantee acceptance to a particular campus or major. Universities and colleges outside of the CSU system may have different requirements for their Business or related programs. Chaffey's Business Department also offers an A.S. degree in General Business that is not tailored to the transfer requirements of a CSU business program. That degree may be a more appropriate choice, depending on the student's career or educational plans. Students having a Business Administration AS-T and who are accepted at a particular CSU campus are required to complete no more than 60 additional units after transfer to earn a bachelor's degree. In all cases, students are advised to consult with a counselor for more information on degree requirements, or university admission and transfer requirements.

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

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

Program Learning Outcomes:

Upon the successful completion of this degree, students shall:

1. Be eligible to transfer to a CSU campus to pursue a Business Administration degree.
2. Have examined core business concepts and built an educational foundation such that they are prepared to earn a Business Administration degree at a CSU campus.
3. Have examined core accounting concepts and built an educational foundation such that they are prepared to earn a Business Administration degree at a CSU campus.
4. Have examined core economic concepts and built an educational foundation such that they are prepared to earn a Business Administration degree at a CSU campus.
5. Have examined core mathematical concepts and built an educational foundation such that they are prepared to earn a Business Administration degree at a CSU campus.

Major requirements for the Associate in Science Transfer (AS-T) Degree

[S076/31737/0505.00*/52.0201]		Units
Required (17 units):		
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
BUSL 28A	Business Law I	3
ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3
List A – Any one course (4 units)		
MATH 60	Calculus for Business	4
STAT 10	Elementary Statistics	4
	(or SCSCI 10, Statistics for Social Science)	
List B – Any two courses (6-7 units)		
Any List A course not used above, and/or:		
BUS 10	Introduction to Business	3
	(or BUS 88, Business Communication)	
CIS 1	Introduction to Computer Information Systems	3
	Total units for the major	**27-28**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**9**
Elective (CSU transferable) units	**4-5**	**2-3**
Total units required for the degree	**60**	**60**

BUSINESS - GENERAL BUSINESS

The Associate in Science in Business focuses on the study of Business and, depending on the concentration chosen, allows the student to obtain a general background in business principles and techniques, or to focus on specific business areas or specialties. Concentrations are available in General Business, Management, Small Business, and Supervision. Each concentration shares a core of business courses that give students a foundation for the study of business and their business career. These courses provide a solid grounding in business law, communication, accounting, and business ethics.

The General Business concentration provides a broad range of options for students to learn about and experience business concepts from diverse areas, including Management, Marketing, International Business, Accounting, Logistics, and Economics. The Associate in Science in Business with a General Business Concentration is designed for the student seeking a career in business upon completion of the Associate Degree. This degree may also be appropriate for students planning to transfer to a four-year institution other than a California State University. Students in this category should consult with a counselor to make sure their education plan is consistent with this objective. Students interested in Retail Management or Logistics should consider Chaffey College's specialized programs in these areas.

Program Learning Outcomes:

Upon the successful completion of this degree, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of general business, marketing, and management.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
5. Have examined core business concepts and built a broad foundation in Business and related topics.
6. Have examined a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S075A/04757/0505.00*/52.0201]		Units
Core courses (15-16 units)		
ACCTG 1A	Financial Accounting	4
	(or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3
Required courses for General Business Concentration (6 units)		
BUSMGT 40	Introduction to Management	3
BUSMKT 40	Marketing Principles	3
Plus nine units from the following:		
ACCTG 1B	Managerial Accounting	4
ACCTGFS 442	Fundamentals of Finance and Investing	3
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSL 28B	Business Law II	3
BUSL 410	International Business Law	3
BUSL 435	The Law of Marketing and Business Competition	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSMKT 13	Professional Selling	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3
BUSMKT 405	International Marketing	3
ECON 1	Introduction to Economics	3
	(or ECON 2, Principles of Macroeconomics or ECON 4, Principles of Microeconomics)	
	Total units for the major	**30-33**

General Business Certificate

The General Business Certificate prepares students for entry level business and management training positions. It is also appropriate for students seeking further education to obtain career advancement.

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of general business, marketing, and management.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the General Business Certificate:

[L075A/20677/0505.00*/52.0201]		Units
BUS 10	Introduction to Business	3
BUS 88	Business Communication	3
BUSMGT 40	Introduction to Management (or ECON 4, Principles of Microeconomics)	3
BUSMKT 40	Marketing Principles	3

Plus six units from the following:

ACCTGFS 442	Fundamentals of Finance and Investing	3
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSL 28A	Business Law I	3
BUSL 28B	Business Law II	3
BUSL 410	International Business Law	3
BUSL 435	The Law of Marketing and Business Competition	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3
BUSMKT 405	International Marketing	3
ECON 1	Introduction to Economics (or ECON 2, Principles of Macroeconomics or ECON 4, Principles of Microeconomics)	3
	Total units for the certificate	**18-20**

BUSINESS - INTERNATIONAL BUSINESS

The International Business Program integrates the foundation of international trade, marketing, law, and management. This degree focuses on global business practices used in a culturally diverse, global economy and is designed for the student seeking a career in International Business upon completion of the Associate Degree. This Associate Degree may also be appropriate for students planning to transfer to a four-year institution other than a California State University.

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Examine and consider the social and/or ethical responsibilities of international businesses and multinational corporations.
2. Demonstrate a working knowledge of International Business.
3. Examine and consider the professional communication skills involved with international businesses and multinational corporations.
4. Demonstrate professional problem solving within a teamwork setting when dealing with international businesses and multinational corporations.
5. Examine core business concepts and build a broad foundation in Business and related topics.
6. Examine a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S080/35819/0508.00*/52.1101]		Units
Core courses (15-16 units)		
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	4
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3

Required Courses for the International Business Concentration (9 units):

BUS 61	Introduction to Global Business	3
BUSL 410	International Business Law	3
BUSMKT 405	International Marketing	3

Plus two courses from the following (6 units):

BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSL 435	The Law of Marketing and Business Competition	3
BUSMGT 40	Introduction to Management	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMKT 13	Professional Selling	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3
ECON 1	Introduction to Economics (or ECON 2, Principles of Macroeconomics)	3
	Total units for the major	**30-31**

In addition, we recommend that students take the following courses as general education and/or electives: At least two semesters of a foreign language, History course(s) in their area of interest, and Geography course(s) in their area of interest.

BUSINESS - MANAGEMENT

The Management concentration focuses on planning, organizing, leading, and controlling. The Management concentration prepares students for entry-level positions in Management and/or Human Resources. The Associate in Science in Business with a concentration in Management is designed for the student seeking a career in Management upon completion of the Associate Degree. This degree may also be appropriate for students planning to transfer to a four-year institution other than a California State University. Students intending to transfer should consult with a counselor to ensure that their education plan is consistent with this objective.

Program Learning Outcomes:

Upon the successful completion of this degree, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of management.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the finding.
5. Have examined core business concepts and build a broad foundation in Business and related topics.
6. Have examined a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S285/04758/0506.00*/52.0201]		Units
Core courses (15-16 units)		
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	4
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3
Required Courses for the Management Concentration (9):		
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
Plus two courses from the following (5-7):		
ACCTG 1B	Managerial Accounting	4
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSL 28B	Business Law II	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSMKT 40	Marketing Principles	3
	Total units for the major	**29-32**

Management Certificate

The Management Certificate program prepares students for management and management training positions. It is also appropriate for students seeking further education to obtain career advancement.

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of management.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Management Certificate:

[L286/20678/0506.00*/52.0201]		Units
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
Plus nine units from the following:		
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSL 28A	Business Law I	3
BUSL 28B	Business Law II	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 13	Supply Chain Management	3
BUSMGT 14	Transportation Management	3
BUSMGT 45	Small Business Ownership and Management	3
BUSMGT 48	Quality Management Principles	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
BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
	Total units for the certificate	**18**

BUSINESS - MARKETING

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

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of marketing.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Marketing Certificate:

[L080/99999/0509.00*/52.1801] ***(Non-transcripted)***		Units
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 60	Business Ethics	3
BUS 61	Introduction to Global Business	3
BUSL 28A	Business Law I	3
BUSL 28B	Business Law II	3
BUSL 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 - PARALEGAL STUDIES

The Paralegal Studies program is intended to prepare students for employment as paralegals in various legal sectors. The terms "paralegal" and "legal assistant" are often used interchangeably to refer to persons who are qualified through education, training, or work experience, and are employed or retained by a lawyer, law office, corporation, governmental agency, or other entity in a capacity or function that involves the performance of substantial legal work under the direction and supervision of a licensed attorney. Tasks performed by a paralegal include, but are not limited to, case planning, development, and management; legal research; interviewing clients; fact gathering and retrieving information; drafting and analyzing legal documents; collecting, compiling, and utilizing technical information to make a recommendation to the supervising attorney. The Paralegal Studies 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 research, analytical, and critical thinking skills. Graduates of the program will possess skills to enter the paralegal profession. It also allows those already working as paralegals to improve their understanding of the paralegal profession. Pursuant to California law, students who earn a degree or certificate from an accredited post-secondary institution and complete sufficient coursework may work as paralegals. Chaffey College's Paralegal Studies program meets and exceeds those requirements. Chaffey College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges. Paralegal students are required to complete enough coursework to satisfy the state mandate. The Associate of Science degree in Paralegal Studies is appropriate for students who do not have a college or university degree.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Students shall demonstrate competence and understanding of basic job skills to enter the paralegal profession.
2. Students shall have a basic understanding of different career opportunities for paralegals in the business and legal sectors.
3. Students shall demonstrate legal problem solving skills, supported by appropriate analytical and critical thinking techniques.
4. Students shall be able to produce professional quality documents of the type used in the legal profession.
5. Students shall demonstrate effective interpersonal communication and teamwork skills in a collaborative setting.
6. Students shall examine a variety of general education subjects that enable them to better understand the broader world in which the legal system operates.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Requirements for the Paralegal Studies Associate in Science Degree:

[S077/36238/1402.00*/22.0302]		Units
BUSL 28A	Business Law I	3
BUSL 28B	Business Law II	3
BUSL 400	Introduction to Paralegal Studies	3
BUSL 401	Legal Research and Writing	3
BUSL 402	Civil Litigation	3
BUSL 403	Evidence	3
BUSL 404	Law Office Operations	3
BUSL 405	Legal Document Preparation	3
BUSL 406	Advanced Legal Research and Writing	3

Plus a minimum of 9 units from the following:

BUSL 10	Introduction to Law and the Legal Process	3
BUSL 50	Legal Aspects of Real Estate	3
BUSL 407	Criminal Law & Procedure	3
BUSL 408	Bankruptcy and Debtor/Creditor Relations	3
BUSL 409	Family Law	3
BUSL 410	International Business Law	3
BUSL 411	Estate Planning and Probate Law	3
BUSL 412	Immigration Law	3
BUSL 413	Workers' Compensation Law	3
BUSL 435	The Law of Marketing and Business Competition	3
	Total units for the major	**36**

Requirements for the Certificate:
[L400/17631/1402.00*/22.0302] Units
Same as the major requirements for the A.S. Degree.

Total units for the certificate **36**

BUSINESS - FACILITIES MANAGEMENT

Facility management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology. Core competencies for a facility manager include communication, emergency preparedness and business continuity, environmental stewardship and sustainability, finance and business, human factors, leadership and strategy, operations and maintenance, project management, quality, real estate and property management, and technology. Coursework on these core competencies, combined with a general education pattern will prepare the student with a base of knowledge that will enhance communication skills, critical thinking skills, global awareness and career and personal development.

Program Learning Outcomes:
Upon the successful completion of this certificate, students shall:
1. Students shall examine and consider the social and/or ethical responsibilities of business and businesspersons.
2. Students shall demonstrate a working knowledge of the functional areas of Facilities Management.
3. Students shall demonstrate the ability to work effectively as a member of a team.
4. Students shall demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S286/36000/0510.00*/52.0203]		Units
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for Non-Accounting Majors, 3)	4
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUS 496ABCD	Internships in Business	1 - 4
BUSL 28A	Business Law I	3
BUSMGT 40	Introduction to Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 470	Essentials of Facilities Management	3
BUSMGT 466	Introduction to Project Management	3
	Total units for the major	**28-32**

Requirements for the Certificate:
[L290/36474/0510.00*/52.0203] Units
Same as the major requirements for the A.S. Degree.

Total units for the certificate **28-32**

BUSINESS - RETAIL MANAGEMENT

Retail Management prepares students for employment in all aspects of retail store operations and management. Other career avenues are sales representatives for manufacturers, visual display, distribution, importing and exporting, and sales promotions. This program is also designed to give an understanding of the retail manager's role, and the requirements for success in the retail industry.

Program Learning Outcomes:
Upon the successful completion of this degree, students shall:
1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of retail management encompassed under their degree program.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
5. Have examined a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S295/04759/0506.50*/52.0212]		Units
ACCTGFS 465	Financial Accounting for the Non-Accounting Major	3
BUS 88	Business Communication	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMKT 40	Marketing Principles	3
CIS 1	Introduction to Computer Information Systems	3
	Total units for the major	**24**

Retail Management Certificate

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of retail management encompassed under their certificate program.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Retail Management Certificate:

[L295/20682/0506.50*/52.0212]		Units
Same as the major requirements for the A.S. Degree.		
	Total units for the certificate	**24**

BUSINESS - SMALL BUSINESS ENTREPRENEUR

The Associate in Science in Business with a concentration in Small Business Entrepreneurship focuses on the unique needs of small businesses and their owners. The curriculum is designed 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. This degree may also be appropriate for students planning to transfer to a four-year institution other than a California State University. Students intending to transfer should consult with a counselor to ensure that their education plan is consistent with this objective.

Program Learning Outcomes:

Upon the successful completion of this degree, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of small business entrepreneurship.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
5. Have examined core business concepts and build a broad foundation in Business and related topics.
6. Have examined a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S390/07371/0506.40*/52.0703]		Units
Core courses (15-16 units)		
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	4
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3
Required Courses for the Small Business Entrepreneur Concentration (6):		
ACCTG 460	Commercial Accounting Software	3
BUSMGT 45	Small Business Ownership and Management	3
Plus three courses from the following:		
ACCTG 435	Payroll Accounting	3
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
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSL 28B	Business Law II	3
BUSL 435	The Law of Marketing and Business Competition	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3
BUSMKT 405	International Marketing	3
	Total units for the major	**29-32**

Small Business Entrepreneur Certificate

The Small Business Entrepreneur Certificate prepares students for employment in, creation, or management of small business entities. It is also appropriate for students seeking to enhance their skills as an entrepreneur.

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of the functional areas of small business entrepreneurship.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Small Business Entrepreneur Certificate:

[L391/20681/0506.40*/52.0703]		Units
ACCTG 1A	Financial Accounting (or ACCTGFS 465, Financial Accounting for the Non-Accounting Major, 3)	4
ACCTG 460	Commercial Accounting Software	3
BUSMGT 45	Small Business Ownership and Management	3

Plus nine units from the following:

ACCTG 435	Payroll Accounting	3
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
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSL 435	The Law of Marketing and Business Competition	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 436	Introduction to Logistics Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3
BUSMKT 13	Professional Selling	3
BUSMKT 40	Marketing Principles	3
BUSMKT 55	Advertising	3
BUSMKT 402	Introduction to Import/Export	3
BUSMKT 405	International Marketing	3
	Total units for the certificate	**18-19**

BUSINESS - 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.

Program Learning Outcomes:

Upon the successful completion of this degree, students shall:

1. Understand the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge of business and supervision.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
5. Have examined core business concepts and build a broad foundation in Business and related topics.
6. Have examined a variety of general education subjects that enable them to better understand the broader world in which organizations operate.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S410/14401/0506.30*/52.0204]		Units
Core courses (15-16 units)		
ACCTG 1A	Financial Accounting (or ACCTGFS 465 Financial Accounting for the Non-Accounting Major, 3)	4
BUS 10	Introduction to Business	3
BUS 60	Business Ethics	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3
Required courses for the Supervision Concentration (8 units)		
BUSMGT 40	Introduction to Management	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3

Plus two courses from the following:

BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUSL 28B	Business Law II	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 48	Quality Management Principles	3
	Total units for the major	**29-30**

Supervision Certificate

Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Understand and consider the social and ethical responsibilities of businesses and businesspersons.
2. Demonstrate a working knowledge business and supervision.
3. Demonstrate the ability to work effectively as a member of a team.
4. Demonstrate the ability to convey an idea orally or in writing so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.

Requirements for the Supervision Certificate:

[L411/99999/0506.30*/52.0204] ***(Non-transcripted)***		Units
BUSMGT 40	Introduction to Management	3
BUSMGT 44	Introduction to Human Relations	3
BUSMGT 440	Principles of Leadership	2
BUSMGT 480	Principles of Supervision	3

Plus two courses from the following:

BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 61	Introduction to Global Business	3
BUS 88	Business Communication	3
BUSL 28A	Business Law I	3
BUSMGT 11	Retail Merchandising and Management	3
BUSMGT 42	Human Resource Management	3
BUSMGT 48	Quality Management Principles	3
	Total units for the certificate	**17**

BUSINESS - SUPPLY CHAIN MANAGEMENT

The Supply Chain Management degree prepares students for a career in the Logistics industry. Students will gain a working knowledge of transportation, warehousing, and supply chain management in addition to the skills needed to efficiently operate and manage a warehouse or distribution center. Students will study the principles and methods for moving people or goods by air, rail, sea, or road, including the relative costs and benefits of each intermodal option. Students will also obtain knowledge of production processes and quality control systems. This program enhances the student's ability to think critically and solve complex problems. Upon completion of the Supply Chain Management degree, students may be able to qualify for positions such as first-line Logistics Supervisor, Global Trade and Logistics Analysts, and Supply Chain Operations Manager. This degree also provides an academic pathway from Chaffey College to California State University in San Bernardino (CSUSB).

Program Learning Outcomes:
Upon the successful completion of this degree, students shall:
1. Understand the social and ethical responsibilities of businesses and businesspersons.
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 so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
4. Have a basic understanding of different career opportunities in the field of logistics.
5. Have a working knowledge of transportation, warehousing, and supply chain management in addition to the skills needed to efficiently operate a warehouse.
6. Have examined a variety of general education subjects that enable them to better understand the broader world in which the logistics and distribution industry operates.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S288/16802/0510.00*/52.0203]		Units
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
BUSL 28A	Business Law I	3
BUSMGT 13	Supply Chain Management	3
BUSMGT 14	Transportation Management	3
BUSMGT 48	Quality Management Principles	3
ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4
	Total units for the major	**30**

Supply Chain Management Certificate

The Supply Chain Management certificate 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students shall:
1. Understand the social and ethical responsibilities of businesses and businesspersons.
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 so that the intended audience understands the idea. This shall include the ability to conduct business research, analyze, and interpret the findings.
4. Have a basic understanding of different career opportunities in the field of logistics.
5. Have a working knowledge of transportation, warehousing, and supply chain management in addition to the skills needed to efficiently operate a warehouse.

Requirements for the Supply Chain Management Certificate:

[L288/20683/0510.00*/52.0203]		Units
ACCTGFS 465	Financial Accounting for the Non-Accounting Major	3
BUS 88	Business Communication	3
BUSMGT 13	Supply Chain Management	3
BUSMGT 14	Transportation Management	3
BUSMGT 40	Introduction to Management	3
BUSMGT 48	Quality Management Principles	3
BUSMGT 430	Warehouse Management and Material Handling	3
BUSMGT 436	Introduction to Logistics Management	3
CIS 1	Introduction to Computer Information Systems	3
	Total units for the certificate	**27**

BUSINESS - PATHWAY TO LAW SCHOOL

The Pathway to Law School certificate program provides a broad background to help prepare students for success in law school. The courses in the program were identified by the California State Bar's Council on Access and Fairness based on empirical studies of factors important to lawyer effectiveness. Students interested in a career in law should also complete their Associate's Degree and an academic major leading to transfer to a four-year college or university. (P) Unlike medical schools or other graduate programs, law schools do not have any undergraduate course requirements. They seek to assemble a diverse group of students with different backgrounds and undergraduate majors. As a result, college graduates with any undergraduate major may achieve admission to law school. Although law schools do not have specific undergraduate course requirements, some legal specialties are limited to students possessing certain types of undergraduate degrees. For example, patent lawyers are typically required to have a degree in engineering or in the sciences. (P) The Pathway to Law School certificate provides students with the opportunity to major in the subject of their choice while strengthening their abilities in areas that are associated with success in law school and the practice of law. Chaffey College is one of a select group of California community colleges participating in a program providing a unique pathway from community college to six California law schools and their respective undergraduate schools. There are currently eight law schools (and associated undergraduate schools) in the program: Loyola Law School, Los Angeles (Loyola Marymount University); Santa Clara University; University of California, Davis; University of California, Irvine; University of San Francisco, University of Southern California, University of California, Los Angeles and University of California, Berkeley. Chaffey College has a special relationship with the participating law schools and their universities. In addition to completing the certificate program, students must complete all major prerequisites for his/her major as required by the participating undergraduate institutions and must transfer successfully to one of the six universities listed above. It is important to highlight that Pathway to Law School students are not in any way limited in their choices of undergraduate or law school. (P) Chaffey Pathway to Law School students who complete this certificate are designated as COAF Scholars (Council on Access and Fairness). This will entitle them to the benefits provided by the pathway program if they complete this seven-course certificate program and earn their undergraduate degree. Students are strongly advised to participate in an approved public interest/civic service activity. Interested students should contact their counselor or a member of the Chaffey College law faculty for more information on this program.

Program Learning Outcomes:

1. Upon successful completion of the Pathway to Law School Certificate of Achievement, students will have developed critical thinking skills that help prepare them for success in the study of law.
2. Upon successful completion of the Pathway to Law School Certificate of Achievement, students will have developed oral communication and argumentation skills that help prepare them for success in the study of law.
3. Upon successful completion of the Pathway to Law School Certificate of Achievement, students will have developed an understanding of American history and government that help prepare them for success in the study of law.
4. Upon successful completion of the Pathway to Law School Certificate of Achievement, students will have developed a basic understanding of the American legal system and the role of lawyers, judges and litigants in our society.

Requirements for the Pathway to Law School Certificate:

[L405/35949/1401.00/22.0000]		Units
BUSL 10	Introduction to Law and the Legal Process	3
ENGL 1A	Composition	3
ENGL 1B	Advanced Composition and Critical Thinking	3
COMSTD 72	Logic and Argumentation (or PHIL-76, Critical Thinking, 3)	3
PS 1	American Politics	3
SCSCI 10	Statistics for Social Science (or STAT 10, Elementary Statistics, 4)	4

Plus one course selected from the following U.S. History courses: Units

HIST 12	Asian American History	3
HIST 16	Westward Movement and the Indian Wars 1840-90	3
HIST 17	United States History through 1877	3
HIST 18	United States History from 1865	3
HIST 19	History of Ethnic Relations in the United States	3
HIST 20	History of the United States from 1945-Present	3
HIST 21	The Sixties in American History	3
HIST 25	Women in United States History	3
HIST 50	African-American History I	3
HIST 51	African-American History II	3
HIST 70	Chicanos: The Common History of Mexico and the US	3
HIST 71	Chicanos: The Chicano Minority in the United States	3

Total units for the certificate **22**

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, state-approved Certificates of Achievement, locally-approved Certificates of Career Preparation, and Proficiency Certificates.

Business Information Worker (BIW) Stage One

The Business Information Worker Stage One Certificate of Achievement is designed to provide students with practical, career-oriented skills in professional office environments using current industry technologies. Students receive hands-on experience in the fundamentals of business communications and human relations in addition to the basics of keyboarding, the Windows environment, Word, Excel and Outlook, and introductory computer information systems concepts.

Program Learning Outcomes:

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

1. Create and organize various types of files using various workplace computer programs.
2. Construct and modify solutions to very simple personal, educational, or business needs applying use of office workplace computer programs.
3. Integrate the features of working with tasks and schedules to organize both professional and personal information.

Requirements for the BIW Stage One Certificate:

[L357/35467/0514.00*/52.0401]		Units
BUSOT 40A	Beginning Computer Keyboarding	3
BUSOT 60A	Microsoft Office Word - Specialist	3
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 455	Fundamentals of English for Business	3
BUSOT 470	Office Systems and Procedures (or BUSMGT 44, Introduction to Human Relations)	3
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Fundamentals of Microsoft Windows	1.5

Total units for the certificate **21**

Business Information Worker (BIW) Stage Two

BIW pathway increases students' value and opportunities in multiple occupations, including but not limited to: office, business, and executive administrative support, office supervision/coordination, small business support, retail sales, and customer service. The BIW Pathway helps students build basic skillsets for advanced jobs. These skillsets include advanced and in-demand office skills that will help students move from entry level to advanced positions in the workplace. Courses include advanced Microsoft Office skills, accounting with QuickBooks, collaboration/document management software, electronic records management, and customer relationship management.

Program Learning Outcomes:

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

1. Evaluate, judge, and execute solutions to comprehensive educational applications in multiple business projects in school and in the workplace.
2. Compare, apply, and interpret basic commercial accounting software, and integrating simulated applications of records retrieval.
3. Differentiate and demonstrate principles of managing an office via sound collaboration, applying work ethics, organization, planning, designing, composing business documents, professional tone in using proper grammar, and evaluating routine business communications.

Requirements for the BIW Stage Two Certificate:

[L358/35816/0514.00*/52.0401]		Units
ACCTG 460	Commercial Accounting Software	3
BUS 88	Business Communication	3
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 50	Filing and Records Management	3
BUSOT 60B	Microsoft Office Word - Expert	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 64	Microsoft Office Access - Comprehensive	3
BUSOT 471	Administrative Office Management	3
	Total units for the certificate	**22.5**

Electronic Health Records Specialist

An Electronic Health Record (EHR) is an electronic version of a patient's medical history that is maintained by the health provider over time, and may include all of the key administrative clinical data relevant to that person's care under a particular provider, including demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports. The EHR automates access to information and has the potential to streamline the clinician's workflow. The EHR also has the ability to support other care-related activities directly or indirectly through various interfaces, including evidence-based decision support, quality management, and outcomes reporting. EHRs are the next step in the continued progress of healthcare that can strengthen the relationship between patients and clinicians. The data, and the timeliness and availability of it, will enable providers to make better decisions and provide better care. EHRs can improve patient care by the following:

- Reducing the incidence of medical error by improving the accuracy and clarity of medical records.
- Making the health information available, reducing duplication of tests, reducing delays in treatment, and patients well informed to take better decisions.
- Reducing medical error by improving the accuracy and clarity of medical records.

This Certificate introduces the concepts and terminology relating to health information technology (HIT), medical practice workflows, coding systems, and rules implemented by the California Health and Human Services Agency (HHS), and the Centers for Medicare and Medicaid Services, (CMS). Students train in Keyboarding, Excel, and Job Search and Interviewing Techniques. Students will seek employment in hospitals, physician offices, insurance companies, government agencies, rehabilitation centers, medical clinics, hemodialysis agencies, and laboratories. This certificate will prepare students for employment and national certifications as Medical Records and Health Information Technicians.

Program Learning Outcomes:

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

1. The Electronic Health Records Certificate introduces the concepts and terminology relating to health information technology (HIT), medical practice workflows, coding systems, and rules implemented by the Health and Human Services (HHS) and the Centers for Medicare and Medicaid Services.
2. The Electronic Health Records Certificate familiarizes students with a longitudinal electronic record that applies information in demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports.
3. The Electronic Health Records Certificate presents students with a diversity of electronic health records where they can differentiate and choose Medical Practice Efficiencies and Cost Savings.

Requirements for the Electronic Health Records Specialist Certificate:

[E360/36318/0514.20*/51.0716]		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 475	Medical Office Procedures	3
BUSOTMD 408	Coding of Body Systems for Medical Billing and Coding	3
	Total units for the certificate	**13.5**

Inpatient Medical Coder Specialist

An inpatient hospital coder assigns codes to medical diagnoses and treatments for inpatient facilities. Inpatient facilities are medical facilities that accommodate patients that need more extensive care, usually involving stays over 24 hours or overnight stays. Hospitals are the most common types of inpatient facilities, but other inpatient facilities include nursing homes and rehabilitation centers. Inpatient coding is typically much more involved than outpatient coding. Instead of simply coding a few medical services and procedures that occur during an outpatient stay, inpatient coders must perform coding services for every day a patient stays in the facility. Hospital inpatient coders also primarily use International Classification of Diseases, 10th Edition (ICD-10-CM) and International Classification of Procedures, (ICD-10-PCS) codes, whereas outpatient coders primarily use Current Procedural Terminology (CPT) codes. ICD-10-CM codes are designed to describe a patient's diagnoses or medical conditions. Inpatient coders must also be familiar with Diagnosis-related Group (DRG) coding as well. This certificate validates expert level knowledge and experience in abstracting information from the medical record for ICD-10-CM and ICD-10-PCS coding, and specialized payment knowledge in MS-DRGs and Inpatient Prospective Payment Systems (IPPS). This certificate will prepare students for national inpatient certification as Health Information technicians. After program completion, students will seek employment in hospitals, trauma centers, insurance companies, government agencies, and as remote coding consultants.

Program Learning Outcomes:

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

1. Upon successfully completing the Inpatient Medical Coder Specialist certificate, students will demonstrate critical thinking skills to appropriately match and encode diagnoses related to the systems of the human body.
2. Upon successfully completing the Inpatient Medical Coder Specialist certificate, student will be able to demonstrate critical thinking skills to appropriately match and encode inpatient procedures related to the systems of the human body.
3. Upon successfully completing the Inpatient Medical Coder Specialist certificate, students will demonstrate ability to differentiate the process and structure to code inpatient procedures vs. outpatient procedures.

Requirements for the Inpatient Medical Coder Specialist Certificate:

[L220/36320/0514.20*/51.0716]		Units
BIOL 30	Beginning Medical Terminology	3
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOTMD 408	Coding of Body Systems for Medical Billing and Coding	3
BUSOTMD 420	Basic ICD-10-CM Coding	3
BUSOTMD 430	Intermediate Level ICD-10-CM, ICD-10-PCS Coding	3
	Total units for the certificate	**18**

Medical Biller Specialist

This certificate is intended for those who wish to work with the medical billing component in a medical office, and not the medical coding which is required of a medical insurance billing specialist. The main responsibilities of a medical biller are to understand each individual's responsibility for payment as they may differ from patient to patient, evaluate and analyze insurance coverage and medical charges, prepare accurate billing forms, and collect accurate payments from insurance plans and/or individual patients. This certificate prepares medical billers with skills to maintain all aspects of the revenue cycle. Students adapt online medical billing software to complete medical case scenarios. This certificate will prepare students for employment and national certifications as Medical Records and Health Information Technicians.

Program Learning Outcomes:

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

1. Demonstrate critical thinking skills to appropriately explain and apply the uses of different blocks on the CMS-1500 medical insurance form.
2. Demonstrate proficiency in adding modifiers, diagnostic, and procedural medical codes to medical insurance claim submissions.
3. Demonstrate ability to differentiate the process and structure of a superbill and a hospital sheet.

Requirements for the Medical Biller Specialist Certificate:

[E338/36323/0514.20*/51.0716]		Units
BIOL 30	Beginning Medical Terminology	3
BUSOT 62	Microsoft Office Outlook	1.5
BUSOTMD 408	Coding of Body Systems for Medical Billing and Coding	3
BUSOTMD 410	CPT Current Procedural Terminology	3
BUSOTMD 420	Basic ICD-10-CM Coding	3
BUSOTMD 440	Medical Billing, Reimbursement, and Compliance	3
	Total units for the certificate	**16.5**

Medical Insurance Billing Specialist

This certificate differs from the Medical Biller Specialist in that the Medical Insurance Billing Specialist deals extensively with issues related to the patient's medical insurance. The Medical Insurance Billing Specialist Certificate offers a study of the medical front office, including office procedures, medical law and ethics, scheduling appointments and surgeries, billing and collection, records management, and physical coding for insurance billing. Students who successfully complete this certificate will learn how to bill Medicare, Medicaid (MediCal in California), TRICARE and CHAMPVA, how to complete the new CMS 1500 (universal claim form) used to bill insurance companies, will learn the latest information on the new Medicare contractor, Noridian Healthcare Solutions, learn how to keep current on changes on rules and regulation of government plans, learn how to read an Explanation of Benefits (EOB) and how to use it to bill secondary carrier, and how to look up diagnosis codes, procedure codes and modifiers. This certificate will prepare students for employment and national certifications as Medical Insurance Billers.

Program Learning Outcomes:

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

1. Demonstrate critical thinking skills appropriate in the field of medical billing and coding.
2. Demonstrate professional communication skills appropriate in the field of medical billing and coding.
3. Increase their marketability within the field of Medical Billing and Coding.

Requirements for the Medical Insurance Billing Specialist Certificate:

[L329/04762/0514.20*/51.0716]		Units
BIOL 30	Beginning Medical Terminology	3
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word - Specialist	3
BUSOT 475	Medical Office Procedures	3
BUSOTMD 408	Coding of Body Systems for Medical Billing and Coding	3
BUSOTMD 410	Basic CPT-4 Coding	3
BUSOTMD 420	Basic ICD-9-CM Coding	3
BUSOTMD 430	Intermediate Level ICD-9-CM and CPT4 Coding	3
BUSOTMD 440	Medical Billing, Reimbursement, and Compliance	3
Plus three units from the following:		
BUSOT 50	Filing and Records Management	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 64	Microsoft Office Access - Comprehensive	3
BUSOT 452	Office Financial Recordkeeping	3
BUSOT 455	Fundamentals of English for Business	3
BUSOT 471	Administrative Office Management	3
	Total units for the certificate	**30**

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

Microsoft Office

The Microsoft Office Certificate of Achievement program is designed to provide students with competencies in commonly-used business software application programs in the current electronic workplace, including word processing, spreadsheet applications, database management, presentations, contact management, and desktop publishing programs.

Program Learning Outcomes:

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

1. Apply efficient work procedures and practices for maintaining a productive work environment.
2. Proficiently use the features of spreadsheet, word processing, desktop publishing, presentation, contact management, and database application software.
3. Demonstrate skills to produce business communications and documents.

Requirements for the Microsoft Office Certificate:

[L354/15318/0514.00*/52.0401]		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word – Specialist	3
BUSOT 60B	Microsoft Office Word – Expert	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64	Microsoft Office Access – Comprehensive	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 410	Microsoft Office Publisher – Comprehensive	3
BUSOT 455	Fundamentals of English for Business	3

Plus a minimum keyboarding speed of 35 wpm for five minutes with five or fewer errors, as verified by the Business and Office Technologies Department Proficiency Certificate.

Total units for the certificate **25.5**

Microsoft Excel

The Microsoft Excel 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.

Program Learning Outcomes:

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

1. Use the features of spreadsheet software to create business documents.
2. Interpret data to create formulas for business calculations used in spreadsheets.
3. Integrate imported and exported data into charts, graphs, pivot tables and pivot charts.

Requirements for the Microsoft Excel Certificate:

[B006/35760/0514.00*/52.0401]		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64	Microsoft Office Access – Comprehensive	3
BUSOT 452	Office Financial Recordkeeping (or ACCTG 1A, Financial Accounting, 4)	3

Plus three units from the following:

BUSOT 50	Filing and Records Management	3
BUSOT 60A	Microsoft Office Word – Specialist	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 400	Job Search and Interviewing Techniques	1.5
	Total units for the certificate	**15-16**

Microsoft Word

The Microsoft Word Certificate of Career Preparation offers in-depth competency in utilizing current business word processing software. This certificate prepares students for employment in positions requiring expertise in Microsoft Word.

Program Learning Outcomes:

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

1. Proofread, edit, and produce effective business documents.
2. Proficiently use the features of word processing application software to create a variety of business documents.
3. Apply effective work procedures and practices for maintaining a productive work environment.

Requirements for the Microsoft Word Certificate:

[L352/99999/0514.00*/52.0401] ***(Non-transcripted)***		Units
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

Plus one course from the following:

BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 460	Proofreading: Text-Editing Skills	3
BUSOT 462	Machine Transcription and Voice Recognition Software	3
	Total units for the certificate	**13.5-15**

Outpatient Medical Coder Specialist

Outpatient coders are a similar but distinct job from inpatient coders. Inpatient coders must provide coding services for every service received by a patient for every day of their hospital stay. Outpatient medical coders are responsible for accurately assigning medical codes for diagnoses and services performed in outpatient settings like same day surgeries, physical therapy, diagnostic testing, and chemotherapy. Specific payment knowledge and Current Procedural Terminology (CPT) coding skills is required of an Outpatient Medical Coder. The certificate provides training in coding of body systems for medical coding and billing purposes, CPT procedural terminology, basic International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) coding, and Healthcare Common Procedure Coding system II (HCPCSII) currently utilized by Medicare and Medicaid. This certificate validates proficiency in the correct application of ICD-10-CM, CPT, and HCPCS Level II procedures and supply codes used for coding and insurance reimbursement in an outpatient hospital or medical practice. Students will seek employment in physician practices, surgi-centers, trauma centers, insurance companies, government agencies, and as remote coding consultants.

Program Learning Outcomes:

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

1. Students completing the Outpatient Medical Coder Specialist Certificate will demonstrate critical thinking skills to appropriately match and encode diagnoses related to the systems of the human body.
2. Students completing the Outpatient Medical Coder Specialist Certificate will demonstrate ability and accurately encode procedures, services, and supplies related to an outpatient case scenario
3. Students completing the Outpatient Medical Coder Specialist Certificate will be able to apply and demonstrate ability to apply National Level II medical codes to outpatient case scenarios.

Requirements for the Outpatient Medical Coder Specialist Certificate:

[L221/36331/0514.20*/51.0716]		Units
BIOL 30	Beginning Medical Terminology	3
BUSOT 40A	Beginning Computer Keyboarding	3
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOTMD 408	Coding of Body Systems for Medical Billing and Coding	3
BUSOTMD 410	CPT Current Procedural Terminology	3
BUSOTMD 420	Basic ICD-10-CM Coding	3
	Total units for the certificate	**18**

Professional Administrative Assistant

The Professional Administrative Assistant Associate Degree and Certificate of Achievement programs prepare students for careers with a full range of office and administrative duties. Administrative Assistants have opportunities for promotions to positions of greater responsibility and management. Emphasis on developing professional skills for today's workplace: computer applications competencies and office technologies, records management, communication skills, and interpersonal skills.

Program Learning Outcomes:

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

1. Proofread, edit, and produce effective business communications.
2. Proficiently use the features of spreadsheet, word processing, desktop publishing, presentation, contact management, and database application software to compile effective, credible, and relevant oral and written business communications.
3. Apply effective office procedures and practices for maintaining a productive work environment.
4. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S316/07372/0514.00*/52.0401]		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 50	Filing and Records Management	3
BUSOT 60B	Microsoft Office Word – Expert	3
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64	Microsoft Office Access – Comprehensive	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	3

Plus six units from the following:

BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 410	Microsoft Office Publisher Comprehensive	3
BUSOT 471	Administrative Office Management	3

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

Total units for the major **37.5**

Professional Administrative Assistant Certificate

Program Learning Outcomes:

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

1. Proofread, edit, and produce effective business communications.
2. Proficiently use the features of spreadsheet, word processing, desktop publishing, presentation, contact management, and database application software to compile effective, credible, and relevant oral and written business communications.
3. Apply effective office procedures and practices for maintaining a productive work environment.

Requirements for the Professional Administrative Assistant Certificate:

[L325/20685/0514.00*/52.0401] Units

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

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

Professional Office Management

The Professional Office Management Associate Degree and Certificate of Achievement programs prepare 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 is on supervision, leadership, and interpersonal skills.

Program Learning Outcomes:

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

1. Apply efficient work procedures and practices for maintaining a productive work environment.
2. Apply effective office management supervisory functions including planning, leading, organizing, and controlling.
3. Proficiently use the features of spreadsheet, word processing, desktop publishing, presentation, contact management, and database application software.
4. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S321/04761/0514.40*/52.0204]		Units
BUSOT 40B	Computer Keyboarding: Speed and Accuracy Development	3
BUSOT 60A	Microsoft Office Word – Specialist (or BUSOT 60B, Microsoft Office Word – Expert)	3
BUSOT 61	Microsoft Office PowerPoint	1.5
BUSOT 62	Microsoft Office Outlook	1.5
BUSOT 63	Microsoft Office Excel – Comprehensive	3
BUSOT 64	Microsoft Office Access – Comprehensive	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 455	Fundamentals of English for Business	3
BUSOT 460	Proofreading: Text-Editing Skills	3
BUSOT 471	Administrative Office Management	3

Plus nine units from the following:

BUSOT 50	Filing and Records Management	3
BUSOT 60B*	Microsoft Office Word – Expert (if not used above)	3
BUSOT 410	Microsoft Office Publisher – Comprehensive	3
BUSOT 452	Office Financial Recordkeeping	3
BUSOT 462	Machine Transcription and Voice Recognition Software	3
BUSOT 470	Office Systems and Procedures	3

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

Total units for the major **34.5**

Professional Office Management Certificate

Program Learning Outcomes:

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

1. Apply efficient work procedures and practices for maintaining a productive work environment.
2. Apply effective office management supervisory functions including planning, leading, organizing, and controlling.
3. Proficiently use the features of spreadsheet, word processing, desktop publishing, presentation, contact management, and database application software.

Requirements for the Professional Office Management Certificate:

[L321/20690/0514.40*/52.0204] Units

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

Total units for the certificate **34.5**

Professional Office Skills

The Professional Office Skills Program, a career pathways certificate, offers business and office employability skills including soft skills, communication skills, and computer skills needed to prepare students for client and customer interaction and for additional, more specialized workplace training.

Program Learning Outcomes:

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

1. Proficiently use the fundamental features of word processing and spreadsheet software to produce effective documents.
2. Use results from career exploration assessments to create appropriate job application documents and to demonstrate appropriate interviewing techniques.
3. Effectively communicate information through speaking, writing, visual, and other appropriate methods of communication.

Requirements for the Professional Office Skills Certificate:

[L314/35069/0514.00*/52.0401]		Units
BUSOT 40A	Beginning Computer Keyboarding	3
BUSOT 60A	Microsoft Office Word – Specialist	3
BUSOT 63	Microsoft Office Excel - Comprehensive	3
BUSOT 400	Job Search and Interviewing Techniques	1.5
BUSOT 455	Fundamentals of English for Business	3
COMSTD 74	Intercultural Communication	3
GUID 3	Career Exploration and Life Planning	3
	Total units for the major	**19.5**

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION - BREADTH (CSU GE-BREADTH)

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. Additional requirements are necessary for individual majors.

Each candidate for the bachelor's degree from a CSU institution shall complete a pattern of general education courses which totals 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 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	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. Each course may be used in only one area of CSU-GE certification and must be on the approved list in the year completed. **To earn this Chaffey CSU-GE certificate, *all* courses must be completed with a C or better.**

Program Learning Outcomes:

Upon the successful completion of this program, 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 CSUGE Certificate:

[T001/30503/4901.10/24.0101] Units

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 category. 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, 12SP07, 24A, 24B, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5, 5 & 5L
Geography 2, 4, 4 & 5, 6SP05
Geology 1, 2
Physical Science 10
Physics 5, 5 & 6, 20A, 20B, 30A, 30B, 44SP07, 45, 46, 47

B2 Life Science
Anthropology 1, 1 & 1L
Biology 1, 2, 3, 10, 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 underlined.

B4 Mathematics
Computer Science 4
Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81FA03, 85
Social Science 10
Statistics 10

AREA C ARTS AND HUMANITIES **9**
(Minimum 9 units) Choose at least one course from each category.

C1 Arts
Art 10, 12, 14, 15FA15, 16, 18, 20, 44, 50
Art History 3, 5, 7, 9, 11, 19
Cinema 25, 26
Communication Studies 14
Dance 1
Fashion Design 20, 45
Interior Design 11, 12
Music 2A, 2B, 4, 5, 21, 22SP06, 26
Photography 1, 10
Theatre Arts 1, 4, 5, 10, 12

C2 Humanities
American Sign Language 1FA03, 2, 3, 4
Arabic 1, 2, 3, 4
Chinese 1, 2, 3, 4, 18
English 1C, 32, 33, 68, 70A, 70B, 71, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81
French 1, 2
History 1, 2, 4FA03, 7, 12, 16FA03, 20, 21FA11, 25, 37, 40SP06
Humanities 5, 6, 20
Philosophy 70, 72, 73, 77, 78, 80, 81, 82
Spanish 1, 2, 3, 3SS, 4, 4SS, 8, 13, 14

AREA D SOCIAL SCIENCES **9**
(Minimum 9 units) Choose courses from at least two disciplines.
Criminal Justice 1FA03, 55FA11, 58FA11
American Sign Language 18
Anthropology 2, 3
Child Development 2, 4, 6
Communication Studies 12, 74, 76, 78
Economics 1, 2, 4, 8
Geography 1, 3, 10, 11SP06
Gerontology 11, 18, 22, 23
History 1, 2, 4FA03, 5, 6, 7, 9, 10, 12, 16, 17, 18, 19, 20, 21FA11, 37, 40SP06, 50, 51, 70, 71
Political Science 1, 2, 3FA12, 4, 7, 10, 21FA12, 25, 32FA12
Psychology 1, 20, 21, 25, 65
Sociology 10, 14, 15SP05, 16SP07, 18, 25, 26, 32, 70, 80FA15

AREA E	**LIFELONG LEARNING AND SELF-DEVELOPMENT**[1]	**3**
	(Minimum 3 units)	
	Biology 14	
	Child Development 2[FA05]	
	Gerontology 22	
	Guidance 3	
	Kinesiology Lecture 15	
	Nutrition and Food 5, 15, 22	
	Psychology 5, 25	
	Social Science 17	
	Sociology 16	
	Total units for the certificate	**39**

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, and AMERICAN IDEALS

May be completed prior to transfer. At the discretion of each CSU, these courses may also count for CSUGE certification.

See a counselor for details.

US 1: Historical Development of American Institutions & Ideals
History 17 or 18

US 2: U.S. Constitution and Government
Political Science 1 (also satisfies US 3)

US 3: California State and Local Government
History 37 or Political Science 1 (also satisfies US 2)

NOTE: Superscripts indicate the first term and year a course may be used to meet general education pattern requirements. For example, FA03 indicates that the course must be completed Fall 2003 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.

Program Learning Outcomes:

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

1. Apply critical thinking, hypothesis driven methods of scientific inquiry, and the mathematical skills to calculations and problem solving, predicting mechanisms, developing synthetic schemes, scientific data presented in literature, and evaluation of empirically developed data.
2. 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.
3. Apply experimental techniques to the laboratory environment as demonstrated by safe handling and disposal of chemicals, obtaining accurate and precise data, evaluating and validating scientific data, correctly using scientific instruments, and using proper laboratory etiquette.
4. Provide technical information in a clear and concise manner to demonstrate effective written and oral communication skills for chemical and physical concepts, results of laboratory experiments, and articles in the scientific literature.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S085/04808/1905.00/40.0501]		Units
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
CHEM 75A	Organic Chemistry I	5
CHEM 75B	Organic Chemistry II	5
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
	Total units for the major	**38**

CHILD DEVELOPMENT

CHILD DEVELOPMENT PERMITS

Chaffey College offers coursework in child development that can be used to fulfill the requirements of various child development permits issued by the State of California Commission on Teacher Credentialing. Visit www.ctc.ca.gov/credentials/req-child-dev for the requirements and alternative qualifications for each type of permit. For more information regarding child development permits, Chaffey College courses that fulfill permit requirements, and a list of frequently asked questions, visit www.chaffey.edu/sbs/child_dev or contact the Child Development Department at (909) 652-6240.

The Child Development A.S. degree prepares students to be competent, effective teachers and caregivers in settings for young children where specific skills and knowledge are required to effectively address the multitude of teaching and caregiving tasks. Included are courses on child growth and development, child/family systems, current practices in brain research and its application to classroom teaching, working with children with special needs, and the importance of play in learning and curriculum development. Additionally, the Math/Science and Creative Arts courses offer "hands on" knowledge and skills in curriculum/lesson plan implementation, and a student teaching practicum connects discipline theory to practical application. This program's component courses satisfy the State Commission on Teacher Credentialing for the Child Development Associate Teacher and Teacher permits required for employment in both the private and public sector in California.

This degree is primarily targeted to students who will meet their educational and career goals with an associate degree. Students planning to transfer to the California State University (CSU) system in pursuit of a bachelor's degree are advised to follow the Early Childhood Education Associate in Science for Transfer (AS-T) degree program.

Program Learning Outcomes:

Upon the successful completion of this degree, 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 quality standards for early childhood programs.
3. Describe the importance of play.
4. Translate current brain research into appropriate early childhood classroom practice.
5. Recognize professional and legal best practices in dealing with children with special needs.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S090/04797/1305.00*/19.0709]		Units
CDE 2	Child Growth and Development	3
CDE 4	Child, Family and Community	3
CDE 7	Curriculum Development: The Creative Arts	3
CDE 8	Curriculum Development: Math and Sciences	3
CDE 23	Introduction to Children with Special Needs	3
CDE 24	Introduction to Curriculum Theory	2
CDE 24W	Practicum I: Supervised Occupational Work Experience	1
CDE 415	Dynamics of Play	3
CDE 416	Brain Research and Implications for Classroom Teaching	3
CDE 430A	Infant and Toddler: Group Caregiving I	3
	Total units for the major	**27**

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN EARLY CHILDHOOD EDUCATION FOR TRANSFER

The Associate in Science for Early Childhood Education for Transfer (AS-T) degree is designed to prepare students for transfer into the California State University (CSU) system to complete a baccalaureate in Early Childhood Education or similar major. The Early Childhood Education degree is in alignment with Chaffey College's mission, goals and objectives, is directed towards the appropriate level for community colleges, adheres to the academic rigor expected of the first two years of college, and reflects systematic instruction as guided by student learning outcomes that gauge mastery in the relevant knowledge, skills and abilities expected within the field of Early Childhood Education.

The goals and outcomes for the Early Childhood Education major include the following:

1. Prepare students for seamless transfer to a CSU to complete a baccalaureate degree.
2. Prepare students for advanced studies within the field of Early Childhood Education.

The AS-T in Early Childhood Development is a degree 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 Early Childhood Education 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 Child Development, Child and Adolescent Development, Human Development, and Education.

To obtain the Early Childhood Education AS-T degree, students must:

- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:

Upon the successful completion of this degree, 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 quality standards for early childhood programs.
3. Describe the importance of play.

Major requirements for the Associate in Science Transfer (AS-T) Degree:

[S091/31999/1305.00*/19.0709]		Units
Required:		
CDE 1	Principles and Practices in Early Childhood Education	3
CDE 2	Child Growth and Development	3
CDE 3	Observation and Assessment	3
CDE 4	Child, Family and Community	3
CDE 5	Health, Safety and Nutrition	3
CDE 6	Teaching in a Diverse Society	3
CDE 24	Introduction to Curriculum Theory	2
CDE 24W	Practicum I: Supervised Occupational Work Experience	1
CDE 25	Advanced Curriculum Theory	2
CDE 25W	Practicum II: Supervised Occupational Work Experience	1
	Total units for the major	**24**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**6**	**9**
Elective (CSU transferable) units	**5**	**6**
Total units required for the degree	**60**	**60**

CHINESE STUDIES

The Chinese Studies program offers students a pattern of courses that provide preparation for study in a variety of liberal arts, language arts, and linguistics bachelor degree programs. In addition, majoring in Chinese Studies provides students 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. Chinese Studies also affords new perspectives on the world and on one's native language.

Program Learning Outcomes:

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

1. Demonstrate familiarity with the geography of the countries and regions where Chinese is spoken.
2. Demonstrate familiarity with important cultural issues related to the Chinese-speaking world.
3. Successfully engage in basic conversation strategies in Chinese.
4. Recognize and write frequently used simplified Chinese characters.
5. Spell in Chinese using pinyin.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:

[A404/31877/1107.00/16.0301]		Units
CHIN 1	Elementary Mandarin Chinese	4
CHIN 2	Elementary Mandarin Chinese	4
CHIN 3	Intermediate Mandarin Chinese I	4
CHIN 4	Intermediate Mandarin Chinese II	4
Plus one course from the following:		
ARTH 11	Survey of Asian Arts	3
CHIN 18	Chinese Civilization and Culture	3
ENGL 74	Asian-American Literature	3
HIST 10	History of Asian Civilizations II	3
	Total units for the major	**19**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN COMMUNICATION STUDIES 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 CSU 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-Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC).

Program Learning Outcomes:

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

1. Conceive, develop, and deliver a focused, cogent, and clear oral presentation.
2. Demonstrate the ability to critically listen and analyze speech performances for their logical soundness, elements of proof and delivery.
3. Select and employ appropriate and effective communication skills for the contexts and/or situations in which they find themselves.

Major requirements for the Associate in Arts Transfer (AA-T) Degree:

[A096/30702/1506.00/09.0101]		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)		
Any List A courses not used above, and/or:		
COMSTD 8	Fundamentals of Speech Communication	3
COMSTD 12	Mass Communication and Society	3
COMSTD 14	Oral Interpretation of Literature	3
COMSTD 74	Intercultural Communication	3
List C - Any 1 course (3-4 units)		
Any List A and List B courses not used above, and/or:		
ANTHRO 3	Introduction to Social and Cultural Anthropology	3
COMSTD 76	Gender and Communication	3
COMSTD 78	Family Communication	3
JOUR 10	Newswriting	3
JOUR 30	Student Media Practicum I	3
PHOTO 10	Beginning Photography	4
PSYCH 1	Introduction to Psychology	3
SOC 10	Introduction to Sociology	3
	Total units for the major	**18-19**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**12**	**15**
Elective (CSU transferable) units	**16-17**	**17-18**
Total units required for the degree	**60**	**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.

Program Learning Outcomes:

Upon the successful completion of this degree, 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 related majors.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S100/04765/0702.00*/11.0103]		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	Internet Technologies	1.5
CISPROG 1	Introduction to Computer Programming	3
CISIWEB 72	Web Page Development and Publishing	3

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
CISCO 420	Cisco Internetworking X	4

Game Development:

CISGAME 1	Fundamentals of Game Development	3
CISGAME 2	Fundamentals of Game Development II	3
CISGAME 403	Fundamentals of Game Programming	3
CISGAME 420	Mobile/Web Game Development	3

Hardware and Support:

CISHDSP 40	Microcomputer Hardware	3

Internet and Web Development:

CISIWEB 74	Creating Dynamic Web Content using Javascript	3
CISIWEB 424	WordPress Web Development	1.5

Networking:

CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 413	TCP/IP	1.5

Programming:

CIS 460	Fundamentals of Coding	1.5
CISPROG 5	Programming with Python	3

Computer Science:

COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3
COMPSCI 3	Computer Architecture and Organization	3
	Total units for the major	**32.5**

Computer Information Systems Certificate

The Computer Information Systems certificate program is designed to prepare students for the employment market at the entry level in computer and information technology in all sizes and types of organizations and/or upgrade existing skills to assume greater responsibility in a current employment position. 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.

Program Learning Outcomes:

Upon the successful completion of this certificate, 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 for employment.

Requirements for the Computer Information Systems Certificate:

[L100/20697/0702.00*/11.0103]		Units
Same as the major requirements for the A.S. Degree		
	Total units for the certificate	**32.5**

Other Computer Information Systems Certificate Programs

Computer Foundations

The Computer Foundations certificate provides students with a broad range of fundamental hardware, software, operating system, Internet, networking, web development, and coding skills. Completing this program will provide students a foundation for entry level positions or employment advancement in a number of high growth professions in computer-based industries and other fields that utilize technology.

Program Learning Outcomes:

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

1. Demonstrate a working knowledge of fundamental hardware and software use and application.
2. Demonstrate a working knowledge of computer operating systems.
3. Demonstrate a working knowledge of fundamental Internet technologies and Web page development.
4. Demonstrate fundamental knowledge of coding use and application.

Requirements for the Computer Foundations Certificate:

[E118/99999/0702.00*/11.0103] ***(Non-transcripted)***		Units
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Fundamentals of Microsoft Windows	1.5
CIS 68	Internet Technologies	1.5
CIS 420	Computer Security Basics	1.5
CIS 460	Fundamentals of Coding	1.5
CISIWEB 424	WordPress Web Development	1.5
	Total units for the certificate	**10.5**

Computer Game Development

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

Program Learning Outcomes:

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

1. Compare and contrast the use of tools and languages for game development.
2. Describe the process of game development from concept to production.
3. Create a working game.

Requirements for the Computer Game Development Certificate:

[E124/99999/0707.10*/11.0201] ***(Non-transcripted)***		Units
CIS 1	Introduction to Computer Information Systems	3
CISGAME 1	Fundamentals of Game Development	3
CISGAME 2	Fundamentals of Game Development II	3
CISGAME 403	Fundamentals of Game Programming	3
CISGAME 420	Mobile/Web Game Development	3
	Total units for the certificate	**15**

Computer Support Technician (A+ Certification Preparation)

The Computer Support Technician Certificate prepares students for positions in industry supporting microcomputer users in hardware and software areas, and to take the Comp TIA A+ certification examination administered by an outside agency.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate the knowledge required to assemble computer components based on customer requirements; install, configure and maintain mobile devices, PCs and software for end users; properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills required in an entry-level IT position.
2. Demonstrate appropriate end-user support through engaging end users on a professional basis, using proper communication skills, and providing appropriate solutions based on the end user's needs as required in an entry-level IT position.
3. Demonstrate the knowledge and skills to configure, maintain, and troubleshoot network devices using appropriate network tools; be familiar with common protocols and media types; and understand the features and purpose of network technologies required in an entry-level IT position.

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

[L106/99999/0708.20*/11.1006] ***(Non-transcripted)***		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	Internet Technologies	1.5
CIS 420	Fundamentals of Coding	1.5
CIS 460	Computer Security Basics	1.5
CISHDSP 40	Microcomputer Hardware	3
	Total units for the certificate	**15**

Network Specialist

The Network Specialist Certificate enables students to develop the expertise necessary to support computer networks in organizations of all sizes. Necessary skills include the ability to inspect, secure, and troubleshoot networked devices within an organization. They might operate a help desk or monitor the network for internal and external threats. Students must have extensive knowledge of network connectivity, protocols, network documentation, network security devices, network types, including wireless, fiber optic or CAT5 media as well as common operating systems. The Network Server Certificate allows students to acquire these skills and helps to prepare them to take the Computer Technology Industry Association (CompTIA) Network+, Server+ and Security+ industry certification exams (administered by outside agencies).

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Analyze, apply, implement, and support multiple industry standard operating systems in enterprise networking environments.
2. Apply networking concepts to design, implement and maintain LANs and WANs to support modern implementations including internetworking.
3. Define and manage network services for effective network performance.
4. Troubleshoot computer-networking infrastructures to resolve user problems.

Requirements for the Network Specialist Certificate:

[L475/15535/0708.10*/11.0901]		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	Internet Technologies	1.5
CIS 435	Fundamentals of Microsoft Visio	1.5
CISHDSP 40	Microcomputer Hardware	3
CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 413	TCP/IP	1.5
	Total units for the certificate	**21**

Programming Foundations

This certificate will provide experience with programming languages of different types. Courses will include exposure to programming with a markup language, a scripting language, an interpreted language, and a compiled language. Students completing this certificate will be qualified for entry level positions in programming and quality assurance/testing.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Compare and contrast programming languages, identifying their appropriate usage.
2. Analyze, plan, and create an application using an object oriented language.
3. Distinguish between scripting languages, compiled languages, interpreted languages, and markup languages.

Requirements for the Programming Foundations Certificate:

[E129/35999/0707.10*/11.0201]		Units
CIS 1	Introduction to Computer Information Systems	3
CISIWEB 72	Web Page Development and Publishing	3
CISIWEB 74	Creating Dynamic Web Content using Javascript	3
CISPROG 1	Introduction to Computer Programming	3
CISPROG 5	Programming with Python	3
	Total units for the certificate	**15**

Project Management

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

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Effectively communicate solutions to business problems, using appropriate language and tools and demonstrating understanding of business terms and concepts.
2. Develop and exhibit high standards of professional practice, demonstrating awareness of ethical and social responsibilities in today's multicultural, team-oriented, rapidly-changing global environment.
3. Analyze and recommend effective business decisions/solutions using a systematic, evaluative, and information based approach.

Requirements for the Project Management Certificate:

[E127/99999/0702.10*/11.0601] ***(Non-transcripted)***		Units
CIS 1	Introduction to Computer Information Systems	3
CIS 68	Internet Technologies	1.5
CIS 431	Project Management for Information Technology	3
CIS 435	Fundamentals of Microsoft Visio	1.5
	Total units for the certificate	**9**

Web Page Developer, Level One

The Web Page Developer Level One certificate prepares students for entry-level positions developing internet and intranet web pages.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Develop planning documents based on analysis, mission, goals, and purpose of a proposed website.
2. Develop, create, and publish accessible Web pages with text, images, links, tables, frames, forms, interactivity, and multimedia components using the principles of HTML and CSS.

Requirements for the Web Page Developer Level One Certificate:

[L108/99999/0709.00*/11.1004] ***(Non-transcripted)***		Units
CIS 1	Introduction to Computer Information Systems	3
CIS 68	Internet Technologies	1.5
CISIWEB 72	Web Page Development and Publishing	3
CISIWEB 424	WordPress Web Development	1.5
	Total units for the certificate	**9**

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.

Cisco CCNA Exam Preparation Level I Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Make an Ethernet straight cable according to IEE and Cisco standards.
3. Use "Telnet" to connect to another device in a network.

Requirements for the Cisco CCNA Exam Prep Level I Certificate:

[L451/99999/0708.10*/11.0901] ***(Non-transcripted)***		Units
CIS 1	Introduction to Computer Information Systems	3
CISCO 1	Cisco Internetworking I	4
	Total units for the certificate	**7**

Cisco CCNA Exam Preparation Level II Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Select an appropriate routing protocol for a given network.
3. Configure a (Virtual Terminal) VTY and Secret password on a router.

Requirements for the Cisco CCNA Exam Prep Level II Certificate:

[L452/99999/0708.10*/11.0901] ***(Non-transcripted)***		Units
CCNA Exam Prep Level I Certificate, or CISCO 1 or equivalent, ***plus:***		0-7
CISCO 2	Cisco Internetworking II	4
	Total units for the certificate	**4-11**

Cisco CCNA Exam Preparation Level III Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Configure inter VLAN routing in a network (Virtual LAN's).
3. Set up route aggregation (summarize) using variable length subnet masks (VLSM).

Requirements for the Cisco CCNA Exam Prep Level III Certificate:

[L453/99999/0708.10*/11.0901] ***(Non-transcripted)***		Units
CCNA Exam Prep Level II Certificate, or CISCO 2 or equivalent, ***plus:***		0-11
CISCO 3	Cisco Internetworking III	4
	Total units for the certificate	**4-15**

Cisco CCNA Exam Preparation Level IV Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit apprentice analysis and apprentice knowledge of Cisco Internetworking.
2. Set up a Frame Relay circuit between two routers.
3. Configure a (Point-to-Point) PPP link in a wide area network (WAN).

Requirements for the Cisco CCNA Exam Prep Level IV Certificate:

[L454/15533/0708.10*/11.0901]		Units
CCNA Exam Prep 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 CCNA Security Exam Preparation Certificate

CCNA Security, Implementing Secure Converged Networks. Topics will give the student skills necessary to protect network security, including developing a security infrastructure, recognizing and mitigating security threats, and ensuring availability of network data and devices. Qualifies students to take the newest Cisco CCNA security examination.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit professional analysis and professional knowledge of Cisco Internetworking.
2. Configure a queuing policy on a router.
3. Configure MPLS (Multiprotocol Label Switching) on a router.
4. Configure a Zone-Based Firewall policy on a router.
5. Configure an ASA (Adaptive Security Appliance) on a router.
6. Configure AAA (Authentication, authorization, and accounting) on a router.

Requirements for the Cisco CCNA Exam Security Prep Certificate:

[B007/15534/0708.10*/11.0901]		Units
CISCO 1 or equivalent, CISCO 2 or equivalent, ***plus:***		0-8
CISCO 416	Cisco Internetworking VI	4
	Total units for the certificate	**4-12**

Cisco CCNP Examination Preparation, Levels V-IX

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-IX confirms that the student possesses the industry-recognized knowledge and skills required for each of the CCNP components. Upon successful completion of all five levels (taken in any sequence), the student is qualified to take the Cisco CCNP examination which is administered by an outside agency.

Cisco CCNP Exam Preparation Level V Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit professional analysis and professional knowledge of Cisco Internetworking.
2. Set up an IPV6 addressing scheme in a network.
3. Set up a route map.

Requirements for the Cisco CCNP Exam Prep Level V Certificate:

[L455/15534/0708.10*/11.0901]		Units
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**

Cisco CCNP Exam Preparation Level VII Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit professional analysis and professional knowledge of Cisco Internetworking.
2. Configure inter VLAN trunking (Virtual LAN's).
3. Configure Hot Standby Routing protocol (HSRP).

Requirements for the Cisco CCNP Exam Prep Level VII Certificate:

[T457/15534/0708.10*/11.0901]		Units
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**

Cisco CCNP Exam Preparation Level VIII Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit professional analysis and professional knowledge of Cisco Internetworking.
2. Know how to implement Cisco Auto QoS on a Cisco router.
3. Know how to construct redundancy on Layer 1.

Requirements for the Cisco CCNP Exam Prep Level VIII Certificate:

[T458/15534/0708.10*/11.0901]		Units
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**

Cisco CCNP Exam Preparation Level IX Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Exhibit professional analysis and professional knowledge of Cisco Internetworking.
2. Know how to monitor and maintain complex, enterprise routed, and switched IP networks.
3. Analyze "Wireshark" information to properly troubleshoot a network.

Requirements for the Cisco CCNP Exam Prep Level IX Certificate:

[T459/31470/0708.10*/11.0901]		Units
CISCO 4 or equivalent, or passing the Cisco CCNA examination, ***plus:***		0-35
CISCO 419	Cisco Internetworking IX	4
	Total units for the certificate	**4-39**

ADegreeWithAGuarantee.com℠
Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN COMPUTER SCIENCE FOR TRANSFER

The Associate in Science for Transfer (AS-T) degree in Computer Science prepares students for transfer to four-year colleges and universities for upper-division coursework in the study of information systems, their representation, architecture, and implementation. Computer Science is the study of the methods by which data is accessed, stored and retrieved, including representational computation, programming languages, algorithmic modeling, and software design, testing and development. Student in the Computer Science program study and apply their knowledge of mathematics, physics and logic to solve a variety of problems using current technology. Coursework includes programming languages and concepts, systems analysis, mathematics, physics, computer hardware and data structures.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a CSU to complete their bachelor's degree. Successful completion of the Associate in Science in Computer Science for Transfer 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 computer science.

The goals and outcomes for the Computer Science for Transfer major include the following:
1. Prepares students for seamless transfer to a CSU to complete a Computer Science Baccalaureate degree.
2. Provides students with a core body of knowledge in computer science, with advanced topics that provide a breadth of knowledge, build on the core, and expose students to current and emerging technologies and trends in computing and information technology.
3. Prepares students for advanced studies within the field of computer science.

To obtain the Computer Science AS-T degree, students must:
- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) ***OR*** the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Evaluate basic theories of software design and operation, project management, databases, and computer architecture.
2. Express and implement algorithms using a variety of notation, programming languages, and paradigms.
3. Assess computer science solutions/information systems and debug computer programs.
4. Demonstrate the knowledge and skills necessary for transfer to four-year college or university programs in Computer Science.
5. Demonstrate the knowledge and skills necessary for entry-level employment in the field of computer science.

Major requirements for the Associate in Science for Transfer Degree

[S103/32748/0706.00/11.0701]		Units
Required (30 units):		
COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3
COMPSCI 3	Computer Architecture and Organization	3
COMPSCI 4	Discrete Structures	3
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
	Total units for the major	**30**

	IGETC
General Education	**37**
Total units that may be double-counted	**7**
Elective (CSU transferable) units	**0**
Total units required for the degree	**60**

CORRECTIONAL SCIENCE

(See Criminal Justice)

CRIMINAL JUSTICE

The Criminal Justice Program prepares students for a career in law enforcement, corrections, and homeland security. The program offers an Associate in Science in Administration of Justice for Transfer (AS-T), as well as a degree in Correctional Science. The program also offers certificates in Correctional Science, Criminal Justice, Homeland and National Security, and Leadership in Criminal Justice. Programs are suitable to facilitate career growth and further occupational and educational goals in the field of law enforcement. These programs may also assist existing law enforcement personnel to advance their P.O.S.T. certification.

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN 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).

Program Learning Outcomes:

Upon the successful completion of this degree, 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. 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 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 a 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*/43.0107] Units

Core (6 units)

CJ 1	Introduction to the Criminal Justice System	3
CJ 2	Concepts of Criminal Law	3

List A - Any 2 courses (6 units)

CJ 3	Criminal Court Process	3
CJ 4	Community and the Justice System	3
CJ 5	Legal Aspects of Evidence	3
CJ 6	Juvenile Procedures	3
CJ 7	Criminal Investigation	3
CJ 9	Crime Scene Management and Forensic Evidence	3
CJ 51	Introduction to Corrections	3

List B - Any 2 courses (6-7 units)

Any List A courses not used above, and/or:

CJ 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**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**12**
Elective (CSU transferable) units	**13-14**	**14-15**
Total units required for the degree	**60**	**60**

Correctional Science

The Associate in Science in Correctional Science prepares students for a variety of careers in the criminal justice system. Courses within the program acquaint students with the American Correctional system, criminal behavior, incarceration, rehabilitation, the role of correctional science practitioners, procedural and constitutional rights of inmates, and juvenile correctional procedures. The program is suited to the needs of students who will complete their education at Chaffey College with an A.S. degree. Successful completion of the Correctional Science Degree enables students to directly pursue occupations within the corrections field as correctional officers, jailers, or probation officers.

Program Learning Outcomes:

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

1. Analyze complex situations, employ a reasonable plan for resolution and devise methods for appraisal of desired outcomes as they apply to correctional science.
2. Differentiate between the roles and responsibilities of each component of the Criminal Justice system.
3. Explain the significance of the Due Process Clause in Corrections as provided by the Constitution of the United States.
4. Relate their understanding of Corrections to difficulties in society, based on factors from the neighborhood, the home, and the individual.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S105/04811/2105.10*/43.0102]		Units
CJ 51	Introduction to Corrections	3
CJ 52	Control and Supervision of Inmates	3
CJ 53	Correctional Law	3
CJ 55	Crime and Delinquency	3
CJ 56	Correctional Interviewing and Counseling	3
CJ 58	Ethnic Group Relations	3

Plus three courses from the following:

CJ 1	Introduction to the Criminal Justice System	3
CJ 2	Concepts of Criminal Law	3
CJ 3	Criminal Court Process	3
CJ 4	Community and the Justice System	3
CJ 5	Legal Aspects of Evidence	3
CJ 10	Violence in America	3
CJ 54	Public Relations and Corrections	3
CJ 57	Probation and Parole	3
CJ 412	Writing for Criminal Justice Professionals	3
	Total units for the major	**27**

Correctional Science Certificate

The Certificate in Correctional Science prepares students for a career within the criminal justice system. Courses within the program acquaint students with the American Correctional system, criminal behavior, incarceration, rehabilitation, the role of correctional science practitioners, procedural and constitutional rights of inmates, and juvenile correctional procedures. Successful completion of the Correctional Science Certificate enables students to directly pursue occupations within the corrections field as correctional officers and jailers.

Program Learning Outcomes:

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

1. Demonstrate critical thinking skills necessary for employment in the field of Corrections.
2. Demonstrate professional communication skills necessary for employment in the field of Corrections.
3. Demonstrate ethical behavior necessary for employment in the field of Corrections.
4. Demonstrate problem solving skills necessary for employment in the field of Corrections.

Requirements for the Correctional Science Certificate:

[L105/20738/2105.10/43.0102]	Units
Same as the major requirements for the A.S. Degree.	
Total units for the certificate	**27**

Criminal Justice Certificate

The Certificate in Criminal Justice prepares students for a variety of careers in the criminal justice system. Courses within the program acquaint students with the American Justice system, crime causes, the role of law enforcement and correctional officers, roles of administration of justice practitioners, procedural and constitutional rights of defendants, legal defenses, criminal courtroom procedure, 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 a certificate 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. The certificate enhances the student's ability to gain employment with public law enforcement agencies such as municipal police, probation officers, county deputy sheriffs, correctional offices, game wardens, state parks, and private security.

Program Learning Outcomes:

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

1. Identify and then analyze the basic elements of a crime, as defined by the California Penal Code, in order to prepare them for entry-level and career positions within law enforcement.
2. Explain the responsibilities of police, corrections, and the courts.
3. Explain appropriate investigative techniques and responsibilities at a crime scene to demonstrate mastery of crime scene management.
4. Explain law enforcement organizational composition to include paramilitary rank structure, methods of police deployment, and resources available to police operations.

Major requirements for the Criminal Justice Certificate:

[L133/20737/2105.00*/43.0107]		Units
CJ 1	Introduction to the Criminal Justice System	3
CJ 2	Concepts of Criminal Law	3
CJ 3	Criminal Court Process	3
CJ 4	Community and the Justice System	3
CJ 5	Legal Aspects of Evidence	3
CJ 6	Juvenile Procedures	3

Plus six units from the following:

CJ 7	Criminal Investigation	3
CJ 8	Criminology	3
CJ 9	Crime Scene Management and Forensic Evidence	3
CJ 408	Patrol Operations	3
CJ 410	Narcotics and Vice Investigation	3
CJ 412	Writing for Criminal Justice Professionals	3
CJ 413	Police Supervision, Leadership and Management	3
	Total units for the certificate	**24**

Homeland National Security

The Homeland/National Security Certificate program prepares students for a variety of careers in the criminal justice and homeland/national security systems. Courses within the program acquaint students with prevention and response to threats against the United States and its interests. Students will understand the roles of local, state, and federal agencies to properly secure the United States. Students will gain an understanding of the United States intelligence system, as well as transportation and border security. Additional focus is placed on international relations and middle-east customs and cultures. The program is suited to the needs of students who will utilize the certificate to be competitive within law enforcement and national security fields. The certificate program also complements the Administration of Justice AS-T degree for those who wish to transfer to universities supporting programs in Criminal Justice and Homeland/National Security to complete their bachelor's degree. Successful completion of the Certificate in Homeland/National Security enhances the student's potential for employment at any level of government in the field of law enforcement and national security to include municipal and state police as well as federal law enforcement and intelligence agencies, including the following positions: Police Officer, TSA Specialist, Police Detective, Police Sergeant, Military Intelligence Specialist, Customs and Border Patrol Protection Officer, Immigration and Customs Enforcement Officer.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate knowledge of the major theories, concepts, methods, and debates in security studies.
2. Articulate and critique present national and international security challenges and policy prescriptions.
3. Argue and apply comprehensive knowledge of security theory to address national and international security problem.
4. Identify the major themes in geo-political philosophy and perspectives with their historical context.
5. Comprehend the competing motivations and constraints underlying political behavior.

Requirements for the Homeland National Security Certificate:

[L134/33790/2105.30*/43.0301]		Units
CJ 1	Introduction to the Criminal Justice System	3
HNS 10	Introduction to Homeland Security	3
HNS 11	Intelligence Analysis and Security Management	3
HNS 12	Transportation and Border Security	3
PS 7	International Relations	3
Plus one course from the following:		
COMSTD 74	Intercultural Communication	3
GEOG 1	World Regional Geography	3
HIST 7	History of the Middle East	3
PHIL 82	Introduction to Monotheistic Religions: Judaism/Christianity/Islam	3
SOC 15	Ethnic and Race Relations: U.S. and Global Perspectives	3
	Total units for the certificate	**18**

Leadership in Criminal Justice Certificate

The Criminal Justice Leadership program focuses on developing a cross boundary understanding with emphasis on leadership of the criminal justice system to include law enforcement, corrections, and homeland security. Interdisciplinary courses are offered to expand leadership adaptability within these areas of expertise. These courses provide a foundation for supervision and management within the Criminal Justice field emphasizing all aspects of criminal justice coupled with leadership, supervision, and managerial education. The program is suited to the needs of students who will utilize the certificate to be competitive for leadership positions within law enforcement, corrections, and national security fields. Successful completion of the certificate in Leadership in Criminal Justice enhances the student's potential for promotion within any level of government in the field of public safety to include municipal and state police as well as federal law enforcement and intelligence agencies. Specific careers include Police Officer, TSA Specialist, Police Detective, Police Sergeant, Military Intelligence Specialist, Customs and Border Patrol Protection Officer, and Immigration and Customs Enforcement Officer.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate knowledge of the major theories, concepts, methods, and debates in security studies.
2. Articulate and critique present national and international security challenges and policy prescriptions.
3. Discuss the importance of leadership and command presence, as it relates to the effective management of personnel and law enforcement mission.
4. Explain the role of the supervisor in interviewing and counseling personnel in issues involving grievances, complaints, discipline, and performance.
5. Show an understanding of law enforcement and corrections including the roles of probation, parole, and community corrections; as well as the functions of prisons and jails.

Requirements for the Leadership in Criminal Justice Certificate:

[L136/35815/2105.00*/43.0107]		Units
CJ 1	Introduction to the Criminal Justice System	3
CJ 51	Introduction to Corrections	3
CJ 413	Police Supervision, Leadership and Management	3
HNS 400	Introduction to Homeland Security	3
Plus six units from the following:		
BUSMGT 42	Human Resource Management	3
BUSMGT 440	Principles of Leadership	2
CJ 52	Control and Supervision of Inmates	3
CJ 412	Writing for Criminal Justice Professionals	3
KINLEC 17	First Aid & Emergency Response to Community Disasters	3
	Total units for the certificate	**18**

CULINARY ARTS

(See also Hospitality Management)

The Culinary Arts A.S. degree prepares students for the professional food industry. Training focuses on the fundamentals of classical and modern cooking techniques, including baking, nutrition, menu development, food safety, catering operations, and cost control. Students who successfully complete this degree will be prepared to work in food and beverage management in a variety of entry-level positions, food writing, media and public relations, hotel entry-level management, restaurant ownership, catering, and healthcare in a wide range of role based upon skill level achieved. The Culinary Arts A.S. degree prepares students to continue their studies in Culinary Arts, as well as advance in the workforce.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate the ability to work and delegate as an effective member or leader of a team.
2. Successfully delegate a sequence of production assignments by a food service supervisor that utilize industry practices.
3. Maintain proper sanitation and safety standards while performing food preparation techniques.
4. Develop the capacities of analysis, critical reflection and problem solving skills to anticipate the needs of food service operations.
5. Communicate effectively with fellow workers, supervisors and guests.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Requirements for the Culinary Arts Associate in Science Degree:

[S111/36354/1306.30*/12.0500]		Units
CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
CUL 22	Restaurant and Catering Operations	3
CUL 440	Introduction to Baking	4
CUL 442	Professional Cooking	4
CUL 444	World Cuisine	3
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 428	Human Resources Management in Hospitality	3
HOTFS 482	Industry Internship: Hospitality Management	1
	Total units for the major	**36**

Requirements for the Culinary Arts Certificate:

[L255/07398/1306.30*/12.0500]	Units
Same as the major requirements for the A.S. Degree.	
Total units for the certificate	**36**

Professional Baking and Patisserie Certificate

This program is designed for people interested in employment and career advancement within the hotel and restaurant industry as a professional baker or pastry chef. The program combines theory and practical application of skills and abilities to meet the needs of employers in the hotel and restaurant industry. This program offers students educational and practical experience. The program takes a hands-on approach as students work in an actual production kitchen, baking for the Chaffey College Bistro. There is an ongoing need for trained bakers and cake decorators. Supermarkets, specialty food stores, discount chains and delicatessens are all expanding into the "hot bakery" field. Small retail bakers and large bread companies alike are proliferating around the country and all of them need skilled workers to fill the demand. Instructors with broad and deep industry experience offer instruction in the production of everything from doughnuts to wedding cakes, artisan breads and scratch cookies. The professionally equipped baking lab prepares students for the industry. The program is supported by the industry and provides trained graduates to work in retail bakeries, leading hotels, restaurants, catering companies and country clubs.

Program Learning Outcomes:

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

1. Students will observe safe and sanitary practices in the professional kitchen.
2. Students will practice professional standards in regards to baking, including breads, cakes and patisseries.
3. Students will demonstrate safe and professional standards involved in food preparation.

Requirements for the Professional Baking and Patisserie Certificate:

[L244/36340/1306.30*/12.0500]		Units
CUL17	Principles of Food Preparation	3
CUL440	Introduction to Baking	4
CUL441	Advanced Professional Baking	4
CUL443	Artisan Breads	4
CUL445	Cake Decorating, Pastry Art, and Chocolates	3
CUL15	Sanitation, Safety, and Equipment Management	3
	Total units for the major	**21**

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.

Program Learning Outcomes:

Upon the successful completion of this degree, 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 critical thinking development through dance historical 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, 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 page 38.

Major requirements for the Associate in Arts Degree:

[A115/04781/1008.00/50.0301]		Units
DANCE 1	Survey of Dance	3
DANCE 7A	Ballet IA	1
DANCE 7B	Ballet IB	1
DANCE 8A	Ballet IIA	1
DANCE 8B	Ballet IIB	1
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 40A	Modern Dance IIA	1
DANCE 40B	Modern Dance IIB	1
DANCE 50A	Jazz Dance IIA	1
DANCE 50B	Jazz Dance IIB	1
Plus one course from the following:		
DANCE 25	Dance Conditioning and Somatic Techniques	2
DANCE 30A	Tap Dance IA	1
Plus one course from the following:		
DANCE 42	Dance Production I	3
DANCE 450	Student Choreography for Performance	0.75
THEATRE 50	Main Stage Production Workshop - Rehearsal and Performance	3
Plus two courses from the following:		
DANCE 2 *	Theatrical Dance	3
DANCE 12	Introduction to Dance	3
DANCE 30B	Tap Dance IB	1
DANCE 44	Dance Production II	3
DANCE 60A	Tap Dance IIA	1
DANCE 400	Hip Hop Dance	1
DANCE 420	Social Dance	1
	Total units for the major	**18.75-26**

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Obtain employment in the dental profession or continue their education towards a degree.
2. Critically think, apply, and anticipate needs within dental applications and procedures.
3. Pass the Registered Dental Assistant (RDA) examination.
4. Give back to the community as a representative of a dental professional through membership in professional organization(s) and/or participation in Advisory Committee activities in the Chaffey College Dental Assisting program.
5. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S120/04791/1240.10*/51.0601]		Units
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**

Dental Assisting Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Obtain employment in the dental profession or continue their education towards a degree.
2. Critically think, apply, and anticipate needs within dental applications and procedures.
3. Pass the Registered Dental Assistant (RDA) examination.
4. Give back to the community as a representative of a dental professional through membership in professional organization(s) and/or participation in Advisory Committee activities in the Chaffey College Dental Assisting program.

Requirements for the Dental Assisting Certificate:

[T120/20723/1240.10/51.0601]		Units
Same as the major requirements for the A.S. Degree		
	Total units for the certificate	**24**

DIETETIC SERVICE SUPERVISOR

(See also Hospitality Management, and Nutrition and Food)

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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Be prepared to seek and obtain entry-level management positions in a food service department.
2. Effectively communicate and implement ethical decision making as part of a health care team.
3. Design meal plans and employ food preparation and storage techniques in accordance with federal and state guidelines.

Requirements for the Dietetic Service Supervisor Certificate:

[L256/07389/1306.20*/19.0505]		Units
CUL 17	Principles of Food Preparation	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 18	Sanitation, Safety and Equipment Management	2
NF 11	Food Service Management Supervision	3
NF 15	Nutrition I: Introduction to Nutrition Science	3
NF 19	Nutrition II: Modified Diets	3
NF 471	Dietetic Service Supervisor I	1
NF 471L	Dietetic Service Supervisor I: Supervised Clinical Laboratory	2
NF 472	Dietetic Service Supervisor II	1
NF 472L	Dietetic Service Supervisor II: Supervised Clinical Laboratory	2
	Total units for the certificate	**23**

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate the ability to effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, using digital media and other appropriate modes of communication/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 that comply with current industry accepted drafting standards and practices.
4. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity and work effectively in teams.
5. Demonstrate an understanding of the need for and an ability to engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.
6. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S125/04774/0953.10*/15.1303]		Units
ART 12	Fundamentals of Design in Three Dimensions	4
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
EGTECH 10	Introduction to Engineering Design	4
ID 12	History of Western Architecture and Interiors II	3
PHYS 5*	The Ideas of Physics	3
PHYS 6*	The Ideas of Physics Laboratory	1
	Total units for the major	**32**

* or any advanced course in Physics with a laboratory

Drafting Technician: Architectural Certificate

The drafting program 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. This certificate 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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, using digital media and other appropriate modes of communication/expression.
2. Demonstrate knowledge and technical competency in applied architectural drafting practice.
3. Demonstrate mastery of the application of modern CAD software tools in the production of technical documents that comply with current industry accepted drafting standards and practices.
4. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity and work effectively in teams.
5. Demonstrate an understanding of the need for and an ability to engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.

Requirements for Drafting Technician: Architectural Certificate:

[L125/20714/0953.10*/15.1303]	Units
Same as the major requirements for the A.S. Degree	
Total units for the certificate	**32**

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, using digital media and other appropriate modes of communication/expression.
2. Demonstrate knowledge and technical competency in applied mechanical drafting practice.
3. Demonstrate mastery of the application of modern CAD software tools in the production of technical documents that comply with current industry accepted drafting standards and practices.
4. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity and work effectively in teams.
5. Demonstrate an understanding of the need for and an ability to engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.
6. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S135/07382/0953.40*/15.1306]		Units
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	Advanced CAD Modeling and Applications	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)

Drafting Technician: Mechanical Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Effectively express information regarding drafting/design activities and topics through speaking, writing, producing drawings and diagrams, using digital media and other appropriate modes of communication/expression.
2. Demonstrate knowledge and technical competency in applied mechanical drafting practice.
3. Demonstrate mastery of the application of modern CAD software tools in the production of technical documents that comply with current industry accepted drafting standards and practices.
4. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity and work effectively in teams.
5. Demonstrate an understanding of the need for and an ability to engage in self-directed life-long learning, especially concerning maintenance and improvement of technical skills.

Requirements for Drafting Technician: Mechanical Certificate:

[L135/20715/0953.40*/15.1306]		Units
Same as the major requirements for the A.S. Degree and general education requirements, ***plus:***		29
COOPED 497ABCD	General Work Experience) (any combination to equal 3 units)	3
	Total units for the certificate	**32**

CAD/CAM Operator

Computer-Aided Drafting/Computer-Aided Manufacturing (CAD/CAM) certificate students have learned to operate current industry-standard software used in mechanical design and manufacturing. This includes 2D and 3D modeling, as well as using models designed in these programs as the basis for CNC tool-path generation for part fabrication. Students will also have a fundamental understanding of drafting practices and standards and material removal manufacturing processes.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Employ critical thinking skills that apply drafting standards and practices in the work place.
2. Demonstrate professional career skills employing drafting standards and practices in the workplace.
3. Communicate professionally in the work place.

Requirements for the CAD/CAM Operator Certificate:

[E128/99999/0953.00*/15.1301] ***(Non-transcripted)***		Units
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 43	Advanced CAD Modeling and Applications	3
EGTECH 10	Introduction to Engineering Design	4
EGTECH 16	Computer Integrated Manufacturing – CNC Material Removal	3
	Total units for the certificate	**17**

EARLY CHILDHOOD EDUCATION

(See Child Development)

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Explain and apply the scientific method to earth science processes.
2. Define and explain major concepts in earth sciences such as plate tectonics.
3. Demonstrate their ability to understand and critically review earth science news as reported in the popular press.
4. Use scientific experiments and investigations to demonstrate an understanding of earth science.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S140/07392/1930.00/40.0601]		Units
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 61	Introduction to Cell and Molecular Biology	5
BIOL 62	Biology of Organisms	5
	Total units for the major	**24-26**
Required General Education courses:		
ENGL 1A	Composition	3
ESC 1	Earth Science	3
MATH 31	Plane Trigonometry (or higher-level math)	4

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN ECONOMICS FOR TRANSFER

The Associate in Arts in Economics for Transfer enables students to understand the world in a more analytical way, particularly clarifying the process of decision making. Whenever choices are made 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 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.

This degree differs from the Economics AA degree in that the AA-T degree in Economics requires courses in calculus and statistics. The AA-T in Economics will better prepare students for the rigors of upper division and graduate level courses in economics at the many universities that emphasize the mathematical approach to economics. Additionally, this degree will better prepare students for employment in areas requiring mathematical and statistical skills, e.g. actuarial science, forensics economists, cost estimating, claims adjusting, management, advertising and marketing, and data collection for various government and private sector entities.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and transfer to a four-year institution to complete their bachelor's degree. Successful completion of the Associate in Arts in Economics for Transfer degree 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.

The goals and outcomes for the Economics for Transfer major include the following:

1. Prepares students for seamless transfer to a CSU to complete an Economics Baccalaureate degree.
2. Provides students with a core body of knowledge in the study of Economics, with a firm foundation in calculus.
3. Prepares students for advanced studies within the field of Economics.

To obtain the Economics AA-T degree, students must:

- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:

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

1. Successfully complete upper division coursework in the discipline of Economics upon transfer to a CSU.
2. Identify the three macroeconomic goals and determine economic policies to achieve them.
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. Apply marginal benefit marginal opportunity cost analysis to economic decisions made by individuals, households, businesses, and/or governments.
5. Determine the type of industrial organization/market structure by analyzing the characteristics of an industry to determine its degree of competition.

Major requirements for the Associate in Arts for Transfer Degree:

[A146/33201/2204.00/45.0601]		Units
Required (14 units):		
ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3
MATH 60	Calculus for Business (or MATH 65A, Calculus I)	4
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4
List A: Select one (3-4 units)		
ACCTG 1A	Financial Accounting	4
ACCTG 1B	Managerial Accounting	4
BUS 88	Business Communication	3
CIS 1	Introduction to Computer Information Systems	3
MATH 65B	Calculus II	4
List B: Select one (3-5 units)		
Any List A course not used above, or		
ECON 1	Introduction to Economics (or ECON 8, History of Economic Ideas)	3
MATH 75	Calculus III	5
MATH 81	Linear Algebra	4
	Total units for the major	**20-23**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**12**
Elective (CSU transferable) units	**9-12**	**10-13**
Total units required for the degree	**60**	**60**

POLITICAL ECONOMICS

The Political Economics degree is intended to emphasize a different analytical skill set than the Economics AA-T degree. The discipline of economics 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.

This degree differs from the Economics AA-T in that the Political Economics degree does not require calculus, thus enabling a more diverse student population to major in economics at the AA level.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Identify the three macroeconomic goals and determine economic policies to achieve them.
2. 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.
3. Apply marginal benefit marginal opportunity cost analysis to economic decisions made by individuals, households, businesses, and/or governments.
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 page 38.

Major requirements for the Associate in Art Degree:

[A145/04815/2204.00/45.0601]		Units
ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3
SCSCI 10	Statistics for Social Science (or STAT 10, Elementary Statistics)	4

Plus three courses from the following:

ECON 1	Introduction to Economics	3
ECON 7	Economics History of the United States	3
ECON 8	History of Economic Ideas	3
PS 7	International Relations	3
PS 10	Comparative Politics	3
SOC 10	Introduction to Sociology	3
	Total units for the major	**19**

EDUCATION PARAPROFESSIONAL

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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate professional behavior and employ professional vocabulary appropriate to an entry-level educational job setting.
2. Communicate effectively within a classroom environment as a learning facilitator.
3. Demonstrate teaching and learning strategies sensitive to the needs of diverse k-12 learners.
4. Demonstrate preparation and qualifications for employment in the education field.

Requirements for the Education Paraprofessional Level I Certificate:

[L013/99999/0802.00*/13.1501] ***(Non-transcripted)***		Units
CDE 2	Child Growth and Development	3
ED 10	Elementary Classroom Fieldwork	3
ED 400	Introduction to Education and Teaching I	3
ENGL 495	College Reading and Writing	4
	Total units for the certificate	**13**

ELECTRICITY

(See Industrial Electrical Technology)

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN ELEMENTARY TEACHER EDUCATION FOR TRANSFER

The Associate in Arts in Elementary Teacher Education for Transfer prepares students for seamless transfer to California State Universities to major in either a General Track Liberal Studies Program, or an Integrated Liberal Studies/Multiple Subject Teaching Credential Program.

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 Associate in Arts in Elementary Teacher Education for Transfer 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 Elementary Teacher Education.

The goals and outcomes for the Elementary Teacher Education major include the following:
1. Prepare students for seamless transfer to a California State University to major in either a General Track Liberal Studies Program, or an Integrated Liberal Studies/Multiple Subject Teaching Credential Program.
2. Prepare students for the Multiple Subject California Subject Examination for Teachers (CSET: Multiple Subject)
3. Prepare students for admission to a California Teacher Preparation Program.
4. Prepare students for careers in K-12 paraprofessional work.

To obtain the Elementary Teacher Education A.A.-T degree, students must complete the following:
1. Completion of 60 semester units or 90 quarter units which are eligible for transfer to the California State University, including both of the following:
   (A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
   (B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
2. Obtainment of a minimum grade point average of 2.0. Associate Degrees for Transfer also require that students must earn a C or better in all courses required for the major or area of emphasis.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate academic skills from a broad range of liberal arts subject matter.
2. Communicate effectively within a classroom environment as a learning facilitator.
3. Demonstrate teaching and learning strategies sensitive to the needs of diverse k-12 learners.

Major requirements for the Associate in Arts for Transfer Degree

[A120/33241/4901.20/24.0101]		Units
Required Core (43 units)		
BIOL 1	General Biology	4
CDE 2	Child Growth and Development	3
COMSTD 2	Fundamentals of Effective Speaking	3
ED 10	Elementary Classroom Fieldwork	3
ENGL 1A	Composition	3
ENGL 1C	Introduction to Literature	3
ESC 1	Earth Science	3
ESC 1L	Earth Science Laboratory	1
GEOG 1	World Regional Geography	3
HIST 1	World History: Pre-Civilization to 1500	3
HIST 17	United States History through 1877	3
MATH 4	Mathematical Concepts for Elementary School Teachers	4
PHSCI 10	Survey of Chemistry and Physics	4
PS 1	American Politics	3
List A: Select one (3 units)		
COMSTD 72	Logic and Argumentation	3
ENGL 1B	Advanced Composition and Critical Thinking	3
PHIL 75	Symbolic Logic	3
PHIL 76	Critical Thinking	3
List B: Select one (3 units)		
DANCE 1	Survey of Dance	3
MUSIC 4	Music Appreciation	3
THEATRE 1	Introduction to Theatre	3
	Total units for the major	**49**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**34**	**40**
Elective (CSU transferable) units	**8**	**12**
Total units required for the degree	**60**	**60**

EMERGENCY MEDICAL PROVIDER

The Emergency Medical Provider Certificate of Achievement (EMPCA) trains students to perform basic life support in a pre-hospital setting, preparing them for employment in the field of Emergency Medicine. Successful completion of the EMPCA identifies the student as having met the educational requirements as an Emergency Medical Provider - Basic EMT. Certificate holders are qualified to take the National Registry examinations necessary for state certification. The EMPCA will prepare the student to meet requirements for career advancement as an emergency medical provider – Paramedic.

Program Learning Outcomes:

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

1. Describe the role and responsibilities of First Responders as professionals in the health care system interacting with other allied health personnel.
2. Recognize the signs and symptoms of life threatening situations and be able to triage clients accurately in pre-hospital settings.
3. Demonstrate the process for conducting patient assessments in a variety of pre-hospital situations for clients of various ages.

Major requirements for the Emergency Medical Provider Certificate:

[L233/35466/1250.00*/51.0904]		Units
BIOL 30	Beginning Medical Terminology	3
BIOL 424	Anatomy and Physiology	3
BIOL 424L	Anatomy and Physiology Laboratory	1
EMT 405	Emergency Medical Responder	3
EMT 411	Emergency Medical Technician	7
FIRETEC 12	Occupational Safety and Health for Emergency Services	3
	Total units for the certificate	**20**

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.

Program Learning Outcomes:

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

1. Apply the laws of electricity and mechanics appropriately as needed for engineering.
2. Apply laws of physical and chemical properties of materials appropriately in relation to the effective design of buildings and products.
3. Apply computer-programming language to solve practical engineering problems.
4. Effectively display information graphically and employ graphics as a fundamental thought process in drawing and design.
5. Increase problem solving skills and critical thinking in engineering.
6. Conduct laboratory experiments and apply an understanding of theory to the use and operation of electrical test equipment.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S165/04768/0901.00/14.0102]		Units
CHEM 24A	General Chemistry I	5
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 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	**39-40**
Strongly recommended:		
CHEM 24B	General Chemistry II	5
DRAFT 43	Advanced CAD Modeling and Applications	3
MATH 75	Calculus III	5
MATH 81	Linear Algebra	4
MATH 85	Differential Equations	4
STAT 10	Elementary Statistics	4

ENGINEERING TECHNOLOGY

The Engineering Technology Associate Degree program prepares students for employment in technical fields or to transfer to university engineering technology programs. By completing the degree or certificate requirements, students acquire a foundation in the principles of engineering, engineering design, computer-aided design, electronics, manufacturing processes, manufacturing automation, and the application of math and science in technical fields.

Careers in engineering technology involve high level technical work in the creation, manufacture, production, utilization, and distribution of industrial materials, products, and processes. Engineering technicians/technologists serve as members of the engineering team and engage in the management, design, production, assembly, quality control, and sales activities in their respective fields.

Graduates accept jobs with titles such as CAD and design technicians, engineering aides, plant maintenance personnel, designers/draftspersons, production assistants, project managers, sales engineers, consultants, design/production assistant, manufacturing support, and lab technicians/technologists within many disciplines of engineering technology. With additional experience, promotion to positions such as industrial supervisors, machine and tool designers, technical buyers, production expeditors, and cost estimators is possible.

The Engineering Technology Certificate of Achievement provides students the fundamental skills needed for employment in technical positions in the design and manufacturing workplace. By completing the certificate requirements, students acquire a foundation in math, chemistry, physics, drafting, computer-aided design (CAD), engineering principles and design, manufacturing processes, and electronics, and can apply the associated concepts and tools in technical fields. Engineering technicians can expect to find employment as key members of an engineering/production team and be involved in the product development/production cycle at virtually any stage from research and development to quality assurance to customer support or technical sales.

Program Learning Outcomes:

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

1. Effectively express information regarding engineering technology activities and topics through speaking, writing, producing engineering drawings and diagrams, using digital media and other appropriate modes of communication/expression.
2. Apply the knowledge, techniques, skills, and modern tools of their disciplines to narrowly defined engineering technology activities
3. Function competently in a laboratory setting, which includes working effectively in teams, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for process improvement.
4. Utilize principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in engineering technology careers.
5. Demonstrate an understanding of and a commitment to 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. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S166/31876/0924.00*/15.0000]		Units
CHEM 24A	General Chemistry I	5
EGTECH 10	Introduction to Engineering Design	4
EGTECH 12	Principles of Engineering	4
EGTECH 14	Electronics for Engineering Technologists I	3
EGTECH 16	Computer Integrated Manufacturing – CNC Material Removal	3
PHYS 20A	Algebra/Trigonometry College Physics I	4
Plus two courses from the following:		
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 43	Advanced CAD Modeling and Applications	3
ENGIN 60	Materials of Engineering	3
	Total units for the major	**29-30**

Engineering Technology Certificate

The Engineering Technology Certificate of Achievement provides students the fundamental skills needed for employment in technical positions in the design and manufacturing workplace. By completing the certificate requirements, students acquire a foundation in math, chemistry, physics, drafting, computer-aided design (CAD), engineering principles and design, manufacturing processes, and electronics, and can apply the associated concepts and tools in technical fields. Engineering technicians can expect to find employment as key members of an engineering/production team and be involved in the product development/production cycle at virtually any stage from research and development to quality assurance to customer support or technical sales.

Program Learning Outcomes:

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

1. Effectively express information regarding engineering technology activities and topics through speaking, writing, producing engineering drawings and diagrams, using digital media and other appropriate modes of communication/expression.
2. Apply the knowledge, techniques, skills, and modern tools of their disciplines to narrowly defined engineering technology activities.
3. Function competently in a laboratory setting, which includes working effectively in teams, making measurements, operating technical equipment, critically examining and properly reporting experimental results, and reflecting on their potential for process improvement.
4. Utilize principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in engineering technician careers.
5. Demonstrate an understanding of and a commitment to 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.

Major requirements for the Engineering Technology Certificate:

[L166/31873/0924.00*/15.0000]		Units
CHEM 10	Introductory Chemistry (or CHEM 24A, General Chemistry I, 5)	4
EGTECH 10	Introduction to Engineering Design	4
EGTECH 12	Principles of Engineering	4
EGTECH 14	Electronics for Engineering Technologists I	3
EGTECH 16	Computer Integrated Manufacturing – CNC Material Removal	3
PHYS 5*	The Ideas of Physics	3
PHYS 6*	The Ideas of Physics Laboratory	1
Plus two courses from the following:		
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 43	Advanced CAD Modeling and Applications	3
ENGIN 60	Materials of Engineering	3
	Total units for the certificate	**28-30**

* PHYS 20A, Algebra/Trigonometry College Physics I may substitute for PHYS 5 and PHYS 6.

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN ENGLISH FOR TRANSFER

The Associate in Arts in English for Transfer degree will prepare students for baccalaureate degrees in English.

The goals and outcomes for the English major include the following:

1. Prepare students to read, write, and think critically through the study and application of rhetorical methods, literary devices, literary history, and creative expression
2. Prepare students for transfer to a CSU to complete an English baccalaureate degree.
3. Prepare students for advanced studies within the fields of English, literature, creative writing, linguistics, or journalism.
4. Prepare students for careers in English, education, publishing, law, or business.

The Associate in Arts in English for Transfer degree gives students an appreciation of literature and increased skills in written communication. The Associate for Transfer in English degree will provide seamless transfer opportunities to California State Universities for those students desiring to transfer to the CSU system. This degree is flexible enough to meet transfer requirements at four year institutions. 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.

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 English 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.

To obtain the English Associate in Arts for Transfer (AA-T) degree, students must:

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

Program Learning Outcomes:

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

1. Transfer to a CSU or other university for completion of a major in English.
2. Understand the relationship between purpose and audience in a text.
3. Apply the elements of the reading process (prereading, active reading, reviewing, responding, etc.) to any reading assignment in the academic and professional spheres.
4. Apply the elements of the writing process (inventing, drafting, revising, editing, proofreading, etc.) to any writing assignment both in the academic and professional spheres.
5. Respond critically to reading assignments using reflection, analysis, and synthesis.
6. Reflect on and evaluate their own progress as readers, writers, and critical thinkers.

Major requirements for the Associate in Arts for Transfer Degree:

[A171/31657/1501.00/23.0101]		Units
Required (6 units):		
ENGL 1B	Advanced Composition and Critical Thinking	3
ENGL 1C	Introduction to Literature	3
List A – Any two courses (6 units)		
ENGL 70A	World Literature	3
ENGL 70B	World Literature	3
ENGL 75A	American Literature	3
ENGL 75B	American Literature	3
ENGL 80A	Survey of British Literature	3
ENGL 80B	Survey of British Literature	3
List B – Any one course (3 units)		
Any List A courses not used above, or:		
ENGL 7A	Creative Writing: Short Fiction	3
ENGL 7B	Creative Writing: Fiction	3
ENGL 7D	Creative Writing: Poetry	3
ENGL 68	Mythology	3
List C – Any one course (3 units)		
Any List A or List B courses not used above, or:		
COMSTD 14	Oral Interpretation of Literature	3
ENGL 7E	Creative Writing: Nonfiction	3
ENGL 32	Introduction to the Novel	3
ENGL 33	Introduction to Poetry	3
ENGL 35	Literary Magazine Production	4
ENGL 73	LGBT Literature	3
ENGL 74	Asian-American Literature	3
ENGL 76	African-American Literature	3
ENGL 77	Latino Literature	3
ENGL 79	Native American Literature	3
ENGL 81	Shakespeare	3
JOUR 10	Newswriting	3
	Total units for the major	**18-19**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**12**
Elective (CSU transferable) units	**13-14**	**14-15**
Total units required for the degree	**60**	**60**

FASHION DESIGN

The Fashion Design degree prepares students for positions in design, patternmaking, production management, textile buying, and other related positions. The degree also prepares students for transfer to a four-year program to complete a bachelor's degree.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Transfer to a four-year college, and obtain a bachelor's degree in fashion design.
2. Identify and select the technical skills and technology necessary for fashion design, production and retailing and effective marketing.
3. Obtain advancement in the fashion industry.
4. Have a global awareness and understanding of the social, organizational and technological systems that are an integral part of the fashion community.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S180/04795/1303.10*/50.0407]		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**

Fashion Design Certificate

The Fashion Design certificate prepares students for entry-level positions as designer assistants, sample makers, production technicians, CAD operators, illustrators, sewers and other related positions.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Perform effective business practices, work ethics and professionalism relevant to employment in the fashion industry.
2. Apply critical thinking, teamwork, multicultural and global awareness skills as they relate to the international marketplace and cross-cultural apparel industry.
3. Obtain entry-level positions as a patternmaker, design assistant, sample-maker, textile and trim buyer, market research, tech-pack developer and a variety of other support positions.
4. Research and identify market trends, communicate their findings to a design team and use the data to strategize a plan for a new apparel line.

Requirements for the Fashion Design Certificate:

[L180/20729/1303.10*/50.0407]	Units
Same as the major requirements for the A.S. Degree.	
Total units for the certificate	**37**

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

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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Interview a client and obtain pertinent information on garment design, fabrication, and cost and completion schedule for custom garments.
2. Adapt commercial patterns to individual client measurements and construct finished garments.
3. Select fabrics, linings, notions, and construction methods, using industry standards that will complete a variety of ready-to-wear garments.
4. Perform a variety of garment alterations including re-sizing, hemming, repairs, and basic design modification.
5. Analyze garment fit, apply appropriate markings, provide a cost estimate and execute the changes necessary to correct a variety of fitting problems.

Requirements for the Custom Dressmaking Certificate:

[L184/15526/1303.30*/19.0902]		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.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Efficiently and safely operate a variety of industrial sewing machines.
2. Select the machine that generates the stitch necessary for a variety of fabric types and seam structures.
3. Perform basic machine maintenance for a variety of industrial sewing machines.
4. Utilize the U.S. standards for machine class, stitch classification and seam specification, and apply that information to specification sheets used in international apparel construction.
5. Communicate with designers, production engineers, sewers and contractors using industry terminology.

Requirements for the Industrial Sewing Certificate:

[L182/99999/1303.30*/19.0902] ***(Non-transcripted)***		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.

Program Learning Outcomes:

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

1. Analyze fashion drawings and create a pattern to construct a sample garment, and then adapt the pattern for manufacturing.
2. Make modifications to existing patterns that will generate new designs or a change in fit.
3. Modify historic fashion designs to fit current body types, foundation garments, and fabrication.
4. Produce apparel patterns and provide assembly instructions utilizing industry methods.

Requirements for the Patternmaking for Apparel Certificate:

[L187/15525/1303.10*/50.0407]		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

The Fashion Merchandising degree prepares students for employment in retailing related to apparel and accessory merchandise buying and management. Other career avenues are sales representatives for manufacturers, visual display, image consulting, product distribution, importing and exporting, and sales promotions. Completion of the degree also prepares students for transfer to four-year colleges to pursue a bachelor's degree.

Program Learning Outcomes:

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

1. Transfer to a four-year college and obtain a bachelor's degree in fashion merchandising.
2. Develop the tools, contacts, and skills necessary to compete for employment in the fashion merchandising field.
3. Identify design trends, manufacturing methods, market research and forecasting, and quality control and distribution.
4. Utilize the technology necessary in the field of fashion merchandising.
5. Obtain advancement or employment in a variety of careers in fashion merchandising with the development of problem-solving and improved communication skills.
6. Develop a global awareness and understanding of the social, economic, cultural, and technological systems that intersect in merchandising fashion.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S185/04822/1303.20*/19.0905]		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	3
FASHM 12	Visual Merchandising	3
FASHM 60	Textiles	3
FASHM 482	Industry Internships: Fashion Merchandising	1

Plus two courses from the following:

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**

Fashion Merchandising Certificate

The Fashion Merchandising certificate prepares students for entry-level positions in retail, merchandising, assisting buyers, and display design in the fashion industry or related businesses.

Program Learning Outcomes:

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

1. Work as a merchandiser for a retailer, wholesaler, or apparel manufacturer.
2. Assist a buyer by researching and collecting data on fashion trends, targeted customer patterns, past and projected sales and strategies for improvement.
3. Design retail displays that include fixture styles, function and quantities needed, floor plans, projected costs, lighting design, and timelines for project completion.
4. Perform the skills of a stylist by assessing body types, identifying color palettes, clothing designs and accessories that flatter the individual.
5. Create a buying plan for a store or department that will factor in target market, season, location, style, quality, quantity, price-point, profit margin and delivery timeline.
6. Provide information for manufacturers relating to textile sourcing, selection, serviceability, and performance for clothing and accessory products.

Requirements for the Fashion Merchandising Certificate:

[L185/20730/1303.20*/19.0905]		Units
Same as the major requirements for the A.S. Degree.		
	Total units for the certificate	**32-33**

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Be prepared for careers in fire technology within California communities.
2. Analyze the elements of firefighter safety and survival; differentiate fire prevention, firefighting, and the types of fire apparatus.
3. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety.
4. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S141/15674/2133.00*/43.0201]		Units
FIRETEC 1	Principles of Emergency Services	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 9	Principles of Fire and Emergency Services Safety and Survival	3

Plus two courses from the following:

FIRETEC 6	Fire Apparatus and Equipment	3
FIRETEC 7	Strategies and Tactics	3
FIRETEC 10	Wildland Fire Control	3
FIRETEC 11	Legal Aspects of Emergency Services	3
FIRETEC 12	Occupational Safety and Health for Emergency Services	3
	Total units for the major	**24**

Fire Technology: Professional Firefighter Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate preparedness for careers in fire technology within California communities.
2. Analyze the elements of firefighter safety and survival; differentiate fire prevention, firefighting, and the types of fire apparatus.
3. Demonstrate the ability to analyze, appraise, and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety.

Requirements for the Fire Technology: Professional Firefighter Certificate:

[L141/20739/2133.00*/43.0201]	Units
Same as the major requirements for the A.S. Degree.	
Total units for the certificate	**21-24**

Fire Prevention Inspector

The Fire Prevention Inspector Certificate of Achievement (FPICA) is designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. The FPICA will permit students to compete for employment as a civilian entry level Fire Inspector, and future advancement. This certificate is designed for employment as non-safety personnel. The FPICA will permit fire service professionals to take advantage of promotional opportunities as they become available within the Fire Prevention community. Upon successful completion of Fire 420-423, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Identify and comprehend laws, regulations, codes, and standards that influence fire department operations.
2. Identify regulatory (federal) and advisory organizations (professional, i.e., NFPA) that impact fire service.
3. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development.

Requirements for the Fire Prevention Inspector Certificate:

[L143/35468/2133.00*/43.0201]		Units
FIRETEC 2	Fire Behavior and Combustion	3
FIRETEC 3	Fire Protection Systems	3
FIRETEC 4	Building Construction for Fire Protection	3
FIRETEC 12	Occupational Safety and Health for Emergency Services	3
FIRETEC 420	Fire Inspector 1A - Duties and Administration	2
FIRETEC 421	Fire Inspector 1B, Fire and Life Safety	2
FIRETEC 422	Fire Inspector 1C - Field Inspection	1.5
FIRETEC 423	Fire Inspector 1D: Field Inspection-California Specific	1
	Total units for the certificate	**18.5**

FOREIGN LANGUAGES

(See Chinese, Sign Language and Spanish)

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN GEOGRAPHY FOR TRANSFER

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.

The Associate in Arts for Geography for Transfer (AA-T) degree is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a CSU to complete their bachelor's degree. Successful completion of the transfer degree in Geography 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 geography, earth science, geology, geophysics, and various social sciences.

The goals and outcomes for the Geography major include the following:
1. Prepare students for seamless transfer to a CSU to complete a Geography baccalaureate degree.
2. Prepare students for advanced studies within the field of Geography

To obtain the Geography AA-T degree, students must:
- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Investigate their physical environment and explain how various physical forces shape the environment in which they live.
2. Discuss and describe the major concepts in human geography including place, space, scale, and landscape.
3. Assess how all inhabitants of earth are interrelated with the lives of people in other places, thereby creating a greater understanding of the places and landscapes encountered in everyday life.

Major requirements for the Associate in Arts for Transfer Degree:

[A206/32073/2206.00/45.0701]		Units
Required core (7 units):		
GEOG 4	Physical Geography	3
GEOG 5	Physical Geography Laboratory	1
GEOG 11	Human Geography	3
List A (6 units):		
GEOG 1	World Regional Geography	3
GEOG 2	Introduction to Weather, Climate and Society	3
GEOG 3	Geography of California	3
List B (6-7 units):		
ANTHRO 3	Introduction to Social and Cultural Anthropology	3
GEOG 6	Environmental Geography	3
GEOG 10	Cultural Geography of North America	3
GEOL 1	Physical Geology	4
	Total units for the major	**19-20**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**13**	**16**
Elective (CSU transferable) units	**16-17**	**17-18**
Total units required for the degree	**60**	**60**

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN GEOLOGY 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-Breadth), or the Intersegmental General Education Transfer Curriculum (IGETC).

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Distinguish between scientific arguments and those generated by other ways of knowing.
2. Effectively communicate unifying concepts.
3. Demonstrate the ability to follow current events in the discipline, as reported in the lay media.
4. Use laboratory equipment and procedures to experience previously unfamiliar aspects of the physical world.
5. Seamlessly transfer to a CSU for students who wish to complete a bachelor's degree in Geology.

Major requirements for the Associate in Science for Transfer Degree:

[S221/30941/1914.00/40.0601]		Units
Required (26 units):		
GEOL 1	Physical Geology	4
GEOL 2	Historical Geology	4
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
	Total units for the major	**26**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**7**	**7**
Elective (CSU transferable) units	**4**	**2**
Total units required for the degree	**60**	**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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Apply critical thinking skills by using analytical, qualitative and quantitative reasoning, and the application of previously learned concepts, to situations and complex challenges experienced by older adults and their families.
2. Demonstrate oral and written communication skills to enable effective work as a multidisciplinary team member or leader to achieve goals.
3. Apply a broad comprehension of the liberal arts integrated with a depth of knowledge in biopsychosocial concepts to theoretical and practical problems in gerontology.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S230/04798/1309.00*/19.0702]		Units
GERO 11	Introduction to Gerontology	3
GERO 18	Aging and the Life Course	3
GERO 23	Aging and Older Adulthood	3
GERO 404	Health and Wellness for Older Adults	3
GERO 407	Gerontology Career Cooperative Education	3
GERO 455	Resources and Services for Older Adults	3

Plus two courses from the following:

GERO 22	Dying and Death	3
GERO 400	Principles of Caregiving: Older Adults and Their Care	3
GERO 462	Activity Coordinator Training	4
GERO 463	Social Work Designee/Assistant Training	3
	Total units for the major	**24-25**

Gerontology Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Describe the importance of planning for their own 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 Baby Boomers "aging" less or later and healthier.
4. Evaluate policy debates, e.g. public programs and the costs associated with an aging population.

Requirements for the Gerontology Certificate:
Same as the major requirements for the A.S. Degree.

[L230/20736/1309.00*/19.0702]		Units
	Total units for the certificate	**24-25**

Community Caregiver

The Community Caregiver certificate prepares students for employment as a formal caregiver in a variety of settings, including residential care facilities, adult day care, and home care. The certificate also prepares students for informal caregiving of family members and other older adults. Community caregivers provide direct care to persons with chronic conditions, disabilities, and/or dementia and also to other individuals who need non-medical personal care including assistance with Activities of Daily Living (ADLs).

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate skills that foster capacities of analysis in the role as a community caregiver.
2. Demonstrate skills that foster capacities of critical reflection in the role as a community caregiver.
3. Demonstrate professional communication skills in the role as a community caregiver.
4. Explain how cultural ethnic, racial, gender, and social class diversity as well as disability and dementia affect aging.
5. Demonstrate the personal care skills necessary for working in the patient's home, assisted living, independent living, and hospice environments.
6. Demonstrate appropriate skills to assist patients in attaining and maintaining independence.

Requirements for the Community Caregiver Certificate:

[L232/36475/1309.00*/19.0702]		Units
GERO 11	Introduction to Gerontology	3
GERO 22	Dying and Death	3
GERO 400	Principles of Caregiving: Older Adults and their Care	3
GERO 404	Health and Wellness for Older Adults	3
GERO 455	Resources and Services for Older Adults	3
	Total units for the certificate	**15**

Note: Verification of valid CPR certification is required to be completed prior to certificate completion.

HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION

Level I Certificate (Non-Credit)

This entry-level certificate introduces students to the basics of HVACR: heating, cooling, air distribution systems, basic copper and piping practices, soldering and brazing, and basic carbon steel practices. This certificate will provide successful students the skills to become an entry-level assistant in the field of Heating, Ventilation, Air Conditioning and Refrigeration.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Students will demonstrate critical thinking skills in troubleshooting problems with heating and ventilation.
2. Students will demonstrate critical thinking skills in troubleshooting problems with air conditioning and refrigeration.
3. Students will demonstrate professional communication, employing professional vocabulary expected in the field of heating, ventilation, air conditioning and refrigeration.

Requirements for the Certificate:
[O025/36678/0946.00*/15.0501]

		Units
HVACR 600	Introduction to Heating Ventilation and Air Conditioning	0
HVACR 601	HVAC Piping Practices	0
HVACR 602	HVAC Electrical Systems	0
HVACR 603	Environmental Protection Agency Certification	0
HVACR 604	HVAC Compressors and Refrigerants	0
HVACR 605	HVAC Metering Devices, Heat Pumps and Basic Maintenance	0
	Total units for the certificate	**0**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN HISTORY FOR TRANSFER

The Associate in Arts in History for Transfer (AA-T in History) degree is designed to prepare students for transfer into the California State University (CSU) system to complete a baccalaureate in History or similar major. The History AA-T is in alignment with Chaffey College's mission, goals and objectives, is directed towards the appropriate level for community colleges, adheres to the academic rigor expected of the first two years of college, and reflects systematic instruction as guided by student learning outcomes that gauge mastery in the relevant knowledge, skills and abilities expected within the field of History.

The goals and outcomes for the History major include the following:
1. Prepare students for seamless transfer to a CSU to complete a History baccalaureate degree.
2. Prepare students for advanced studies within the field of History.
3. Deepen students' awareness of the world – past and present – and cultivate appreciation for beneficial community participation.

The Associate in Arts in History for Transfer is an area of study that deepens one's awareness of the work – past and present – and cultivates appreciation for beneficial community participation. The Associate in Arts in History is a degree 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 into the CSU system to complete their bachelor's degree. Successful completion of the transfer degree in History 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 for careers in the fields of law, public administration, foreign service, journalism, business, and teaching.

To obtain the AA-T in History, students must:
- Complete a minimum of 18 semester units in the major listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University-General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, 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. Distinguish between primary and secondary sources.
5. Organize historical events according to chronology.

Major requirements for the Associate in Arts for Transfer Degree:
[A236/31891/2205.00/54.0101]

		Units
Required (6 units):		
HIST 17	United States History through 1877	3
HIST 18	United States History from 1865	3
List A – Two courses (6 units); one from each group		
Group 1		
HIST 1	World History: Pre-Civilization to 1500	3
HIST 5	Early Western Civilizations	3
Group 2		
HIST 2	World History: 1500 to Present	3
HIST 6	Modern Western Civilizations	3
List B – Two courses (6 units); one from each group		
Group 1		
HIST 1	World History: Pre-Civilization to 1500 *(if not used in List A)*	3
HIST 2	World History: 1500 to Present *(if not used in List A)*	3
HIST 4	History of Slavery	3
HIST 7	History of the Middle East	3
HIST 9	History of Asian Civilizations I	3
HIST 10	History of Asian Civilizations II	3
HIST 12	Asian-American History	3
HIST 19	History of Ethnic Relations in the United States	3
HIST 25	Women in United States History	3
HIST 50	African-American History I	3
HIST 51	African-American History II	3
HIST 70	Chicanos: Common History of Mexico and the United States	3
HIST 71	Chicanos: The Chicano Minority in the United States	3
Group 2		
HIST 16	Westward Movement and the Indian Wars 1840-90	3
HIST 20	Contemporary History of the United States: 1945-Present	3
HIST 21	The Sixties in American History	3
HIST 37	California History	3
HIST 40	Retrospective of World War II	3
HUMAN 5	Arts and Ideas: Antiquity to Renaissance	3
HUMAN 6	Arts and Ideas: Renaissance to Modern	3
	Total units for the major	**18**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**15**	**15**
Elective (CSU transferable) units	**20**	**18**
Total units required for the degree	**60**	**60**

HOMELAND NATIONAL SECURITY

(See Criminal Justice)

HOSPITALITY MANAGEMENT: FOOD SERVICE MANAGEMENT

Students awarded the degree in Food Service Management will be prepared for entry-level management and trainee management opportunities in the rapidly expanding food service industry. Graduates may assume a variety of employment opportunities in hotels, restaurants, resorts, cruise lines, schools, prisons, military, hospitals, owner-operated businesses and a variety of food service management companies nationwide.

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

Program Learning Outcomes:
Upon the successful completion of this degree, 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 page 38.

Major requirements for the Associate in Science Degree:

[S255/04799/1307.10*/12.0504]		Units
CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
CUL 22	Restaurant and Catering Operations	3
CUL 442	Professional Cooking	4
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 428	Human Resources Management in Hospitality	3
HOTFS 431	Hospitality Marketing Management	3
	Total units for the major	**31**

Food Service Management Certificate

Students who earn the Certificate will be prepared to work in a variety of positions in food service establishments under the supervision of a manager or supervisor. Employment opportunities include restaurants, hotels, catering facilities, hospitals, schools, prisons, military, cruise lines, resorts, and owner-operated businesses. The industry internship opportunity provides on-the-job training and experience to expose graduates to the extensive variety of jobs available in the ever-growing food service industry.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Follow the required sanitation and safety guidelines.
2. Perform tasks as assigned in commercial kitchens of food service establishments.
3. Identify and operate a variety of food service equipment in a commercial kitchen.
4. Provide customer service at the front-of-the-house in food service establishments, catering to the needs of guests to foster repeat patronage.
5. Receive food items delivered to food service establishments, utilizing the proper methods of supply rotation to avoid spoilage.

Requirements for the Food Service Management Certificate:

[T255/20733/1307.10*/12.0504]		Units
CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
CUL 22	Restaurant and Catering Operations	3
CUL 442	Professional Cooking	4
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 428	Human Resources Management in Hospitality	3
HOTFS 431	Hospitality Marketing Management	3
HOTFS 482	Industry Internship: Hospitality Management	1
	Total units for the certificate	**32**

HOSPITALITY MANAGEMENT: HOTEL MANAGEMENT

Students who are awarded the degree in Hotel Management are prepared to enter executive training and entry-level management positions in hotels, motels, bed and breakfast operations, clubs and management companies. The curriculum focuses on the management phase of the growing hospitality industry, and is therefore well suited for those presently employed and interested in updating their skills or the opportunity for career advancement.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Work effectively as a member of a team.
2. Communicate accurately and effectively, both verbally and in writing.
3. Demonstrate the ability to develop, examine, question, and explore perspectives or alternatives to problems in hospitality operations.
4. Use critical thinking and problem solving techniques in the capacity of a training manager of a lodging property.
5. Train workers to provide consistent, quality guest services with special attention that relates to legal and ethical business practices.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S260/04801/1307.20*/52.0904]		Units
CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
CUL 22	Restaurant and Catering Operations	3
HOTFS 10	Introduction to Hospitality Management	3
HOTFS 14	Quantity Food Production Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 422	Hotel Operations	3
HOTFS 428	Human Resources Management in Hospitality	3
HOTFS 431	Hospitality Marketing Management	3
	Total units for the major	**30**

Hotel Management Certificate

Students who earn the certificate are prepared for entry-level positions that can lead to supervisory roles in a variety of lodging properties. The certificate opens doors for graduates to apply for a variety of job in the lodging industry, and on-site internships offer student access to multiple departments for on-the-job training.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Work in a variety of departments in a lodging property.
2. Work effectively and cordially with front- and back-of-the-house employees in a lodging property.
3. Supervise workers in a variety of departments in lodging facilities.
4. Provide consistent guest services as needed in multiple departments of a lodging property.
5. Perform tasks and duties as assigned across many departments of a lodging facility.

Requirements for the Hotel Management Certificate:

[L260/20735/1307.20*/52.0904]		Units
Same as the major requirements for the A.S. Degree, ***plus:***		
HOTFS 482	Industry Internship: Hospitality Management	1
	Total units for the certificate	**31**

INDUSTRIAL ELECTRICAL TECHNOLOGY

The Industrial Electrical Technology program curriculum covers electricity, magnetics, fundamentals of control systems , electrical machinery, micro processing, programmable logic controllers (PLC), DC and AC variable speed drives, and automation, including modern sophisticated concepts and practical applications. As a certificated Electrician, you will be able to maintain and repair all machinery used in the industry. Commercial Buildings Electrical Power Repairman, General Electricians, Troubleshooting Experts, and Manufacturing Technicians are usually paid hourly. Job growth is expected to be higher than the average in coming years. Most of this growth will be due to the increasing population and growing economy which lead to more construction and remodeling that involves the work of electricians. In addition, innovations in technology will create higher demand for electricians as buildings need to have electrical systems for computers, and industrial facilities are using more automated and robotic equipment. Existing buildings need to be remodeled to incorporate electronic systems for computers as well.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Troubleshoot and synthesize the knowledge, skills and abilities in order to obtain gainful employment in the field of industrial electricity, including compliance with OSHA standards.
2. Demonstrate critical thinking and problem solving appropriate within the field of industrial electricity as it relates to light and heavy industry, construction, and utility companies.
3. Communicate professionally regarding industrial electricity as it relates to programmable logic controllers (PLC).
4. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S150/07378/0934.40*/46.0301]		Units
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 411	Programmable Logic Controllers	3
IET 413	Intermediate Programmable Logic Controllers	3
IET 414	Advanced Programmable Logic Controllers	3
IET 415	Advanced Electricity Laboratory	2
IET 417	Electrical Troubleshooting	3
IET 419	DC Variable Speed Drive	1.5
IET 420	Fundamentals of Control Systems Technology	4
IET 421	AC Variable Frequency Speed Drive	1.5
IET 422	OSHA Safety Training	2
	Total units for the major	**39**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Industrial Electrical Technology Level I Certificate

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Understand the fundamental principles of electricity, industrial basic controls, and electrical motors.
2. Interpret blueprints and utilize the applications of motor controls in order to obtain gainful employment in the field of industrial electricity.
3. Interpret and apply the National Electrical Code (NEC) in order to obtain gainful employment in the field of industrial electricity.

Requirements for the Industrial Electrical Technology Level I Certificate:

[L150/99999/0934.40*/46.0301] ***(Non-transcripted)***		Units
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

Industrial Electrical Technology Level II Certificate

This certificate provides students the fundamental skills needed for employment in the electrical trades, including manufacturing, construction, industry, and utility companies. Completing the certificate requires students to form a foundation in electrical theory, circuit wiring standards, and industrial electrical controls, including troubleshooting and programmable logic controllers. Knowledge acquired throughout the certificate program ready's first time employees, as well as improves the abilities of those already in the trade.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Integrate and apply concepts and skills related to static devices and motor control system design.
2. Demonstrate the ability to translate blueprint and ladder diagrams and employ this information to program, verify and troubleshoot faults related to programmable logic controllers (PLCs).
3. Transfer these skills and abilities in order to obtain gainful employment in the field of industrial electricity.

Requirements for the Industrial Electrical Technology Level II Certificate:

[L151/15317/0934.40*/46.0301]		Units
Same requirements as for Level One Certificate, ***plus:***		16
IET 411	Programmable Logic Controllers	3
IET 413	Intermediate Programmable Logic Controllers	3
IET 415	Advanced Electricity Laboratory	2
IET 420	Fundamentals of Control Systems Technology	4
	Total units for the certificate	**28**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Industrial Electrical Technology Level III Certificate

The Industrial Electrical Technology Certificate of Achievement provides students the fundamental skills for career paths in the electrical trades, including manufacturing, construction, industry, and utility companies. Completing the certificate requirements students form a foundation in electrical theory, circuit wiring standards, and industrial electrical controls, including troubleshooting and programmable logic controllers. Courses assist students to develop communication, computer, problem-solving techniques, and teamwork skills. Knowledge acquired throughout the certificate program readies first time employees, as well as improves the abilities of those already in the trade.

Program Learning Outcomes:

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

1. Troubleshoot and synthesize the knowledge, skills and abilities in order to obtain gainful employment in the field of industrial electricity, including compliance with OSHA standards.
2. Demonstrate critical thinking and problem solving appropriate within the field of industrial electricity as it relates to light and heavy industry, construction, and utility companies.
3. Communicate professionally regarding industrial electricity as it relates to programmable logic controllers (PLC).

Requirements for the Industrial Electrical Technology Level III Certificate:

[T154/20700/0934.40*/46.0301]		Units
Same as the major requirements for the A.S. Degree.		
	Total units for the certificate	**36**

Strongly recommended:

IET 482	Internship in Industrial Electricity	1

Electromechanical Technology Level I Certificate

Program Learning Outcomes:

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

1. Understand the fundamental principles of electricity, industrial basic controls, and electrical motors.
2. Interpret blueprints and utilize the applications of motor controls in order to obtain gainful employment in the field of industrial electricity.
3. Understand the basics of hydraulic power, basic circuits, and functional circuits.

Requirements for the Electromechanical Technology Level I Certificate:

[L153/99999/0935.00*/15.0499] ***(Non-transcripted)***		Units
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**

Industrial Maintenance Mechanic

Industrial maintenance workers maintain and repair factory equipment and other industrial machinery such as conveying systems, production machinery, and packaging equipment. This certificate provides entry-level marketable skills that give the student a basic understanding of terminology, construction math, safety, tools, print reading, communication skills, industrial maintenance, electrical, and construction. Student will develop fundamental skills required to gain employment in their designated skill. Courses are based on curriculum from the National Center for Construction Education and Research (NCCER).

Program Learning Outcomes:

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

1. Understand the fundamental principles of electricity, industrial basic controls, and electrical motors.
2. Interpret blueprints and utilize the applications of motor controls in order to obtain gainful employment in the field of industrial electricity.
3. Understand the basics of hydraulic power, basic circuits, and functional circuits.

Requirements for the Industrial Maintenance Mechanic Certificate:

[B272/36355/0945.00*/15.0805]		Units
INDMM 400	Intro to Construction Safety, Trade Math, Rigging, and Tools	3
INDMM 401	Basic Communication and Employability Skills, and Core Testing	2.5
INDMM 402	Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills	3.5
INDMM 403	Trade Math and Drawings, Material Handling, and Mobile Equipment	2.5
IET 422	OSHA Safety Training	2
	Total units for the certificate	**13.5**

Industrial Maintenance Mechanic Skills Builder I Certificate (Non-Credit)

This certificate of completion introduces students to the basics necessary for entry-level employment in various fields within the broad category of industrial mechanics such as Heating, Ventilation and Air Conditioning (HVAC), Industrial Electricity (IET). Certificate covers core courses as described by the National Center for Construction Education and Research (NCCER) needed for entry-level construction and maintenance jobs: industrial mechanical math; precision tools operation and maintenance; and industrial piping, valves, bearings, couplings, seals, drives and testing. Skills obtained in each course are sequential, and build upon themselves, preparing the student for employment in the maintenance field. Courses are repeatable and do not require fees.

Program Learning Outcomes:

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

1. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder I certificate of completion, students will demonstrate critical thinking skills in troubleshooting problems with piping.
2. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder I certificate of completion, students will demonstrate critical thinking skills in troubleshooting problems with valves and bearings.
3. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder I certificate of completion, students will demonstrate critical thinking skills in troubleshooting problems with couplings, seals and drives.
4. Students will demonstrate professional communication, employing professional vocabulary expected in the filed of industrial mechanics.

Requirements for the Certificate:

[O002/36679/0945.00*/15.0805]		Units
INDMM 604	Industrial Mechanical Math and Precision Tools	0
INDMM 605	Introduction to Industrial Piping	0
INDMM 606	Introduction to Valves, Bearings and Testing	0
INDMM 607	Installation of Bearings, Couplings, Seals, and Drives	0
	Total units for the certificate	**0**

Industrial Maintenance Mechanic Skills Builder II Certificate (Non-Credit)

This certificate of completion builds upon skills developed in the Industrial Maintenance Mechanic Skills Builder I certificate. Courses are based on the National Center for Construction Education and Research curriculum and cover advanced alignment of equipment, the fundamentals of pressure, heating & cooling systems, troubleshooting pumps and gearboxes, advanced blueprint reading and introduction to supervisory skills. Skills obtained in each course are sequential, and build upon themselves, preparing the student for employment in the maintenance field.

Program Learning Outcomes:

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

1. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder II certificate of completion, students will read and interpret blueprints.
2. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder II certificate of completion, students will set baseplates and practice advanced principles of alignment.
3. Upon the successful completion of Industrial Maintenance Mechanic Skills Builder II certificate of completion, students will troubleshoot pumps and gearboxes.

Requirements for the Certificate:

[O001/36610/0945.00*/15.0805]		Units
INDMM 608	Setting Baseplates and Alignment	0
INDMM 609	Advanced Alignment	0
INDMM 610	Fundamentals of Pressure, Heating & Cooling Systems	0
INDMM 611	Troubleshooting Pumps and Gearboxes	0
INDMM 612	Advanced Blueprint Reading and Introduction to Supervisory Skills	0
INDMM 613	Advanced Mechanical Topics I	0
INDMM 614	Advanced Mechanical Topics II	0
	Total units for the certificate	**0**

INTERIOR DESIGN

The Interior Design degree 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.

Program Learning Outcomes:

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

1. Transfer to a four-year college where they may obtain a bachelor's degree in interior design.
2. Obtain career advancement in a wide variety of positions in the field of interior design.
3. Understand the social, economic, cultural, organization and technological systems that are integral parts of the interior design industry.
4. Utilize the skills included in their general education studies, in addition to the interior design training to increase opportunities for employment.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S270/04794/1302.00*/50.0408]		Units
FASHD 45	Design Fundamentals for Fashion and Interiors	3
FASHM 60	Textiles	3
ID 10	Introduction to Interior Design	3
ID 11	History of Architecture and Interiors I	3
ID 12	History of 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	Computer Drafting and Design for Interiors	3
ID 482	Industry Internship: Interior Design	1
	Total units for the major	**36**

Recommended:

ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
BUSMKT 13	Professional Selling	3
COMSTD 2	Fundamentals of Effective Speaking	3
FASHM 12	Visual Merchandising	3

Interior Design Certificate

The Interior Design certificate program prepares students for entry-level employment opportunities working with professional designers on projects in residential and commercial design. The certificate also prepares students with the knowledge and skills to pursue industry certifications for career advancement.

Program Learning Outcomes:

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

1. Develop creative and functional solutions for client's design needs for residential and commercial projects.
2. Demonstrate knowledge of historical styles of architecture, interiors and decorative arts of both western and non-western cultures.
3. Generate design drawings (by hand and computer) and color boards (showing styles and materials) in a professional manner.
4. Apply knowledge of design theory to manipulate and organize interiors and solve interior design problems.
5. Demonstrate an understanding of business practices, work ethics, professionalism, and consumer marketing principles related to the field's products and services.

Requirements for the Interior Design Certificate:

[T270/20726/1302.00*/50.0408]	Units
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. Additional requirements are necessary for individual majors. The University of California does not accept IGETC for certain majors and/or at individual colleges within a UC campus. 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. Please see a counselor for further information regarding this certificate.

- 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 2018 must follow the 2018-2019 or later IGETC requirements.)

Program Learning Outcomes:

Upon the successful completion of this program, 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 UC Certificate:
[T002/30502/4901.10/24.0101] Units

AREA 1 ENGLISH COMMUNICATION 6-9

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

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

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

AREA 2A MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING *(Required CSU/UC - 1 course)* **4-5**
Mathematics 25FA03*, 60*, 61*, 65A*, 65B, 75, 81, 85
Computer Science 4
Social Science 10FA03*
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)

A. Arts:
Art 50
Art History 1, 3, 5, 7, 9, 11
Cinema 25, 26
Dance 1
Music 2A, 2B, 4, 5, 21SP07, 22SP06, 26SP07
Theatre Arts 1, 4, 5

B. Humanities:
American Sign Language 3, 4
Arabic 3, 4
Chinese 3, 4, 18
English 1C, 32, 33, 68, 70A, 70B, 71, 74FA03, 75A, 75B, 76, 77, 79, 80A, 80B, 81
History 1, 2, 4FA03, 5, 6, 7, 9, 10, 12, 16FA03, 20, 25, 40SP06, 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
Business: Legal Studies 10
Child Development and Education 2*, 4
Communication Studies 12, 74
Economics 1*, 2, 4, 7, 8
Geography 1SP07, 3, 10, 11SP06
Gerontology 18*
History 4FA03, 5, 6, 7, 9, 10, 12, 16FA03, 17, 18, 19, 20, 37, 40SP06, 50, 51, 70, 71
Political Science 1, 2, 4, 7, 10, 21FA12, 25, 32FA12
Psychology 1, 20*, 25*, 65, 80FA15
Sociology 10, 14, 15SP05 , 16SP07, 18*, 25, 26, 32, 70, 80FA15

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.)

A. Physical Sciences:
Astronomy 26*, 35
Chemistry 7, 8SP07, 9*, 10*, 12SP07, 24A*, 24B*, 70, 75A, 75B
Earth Science 1, 1 & 1L, 5SP07, 5 & 5LSP07
Geography 2, 4, 4 & 5, 6SP05
Geology 1, 2
Physical Science 10
Physics 5*, 5 & 6*, 20A*, 20B*, 30A*, 30B*, 44*SP07, 45*, 46*, 47*

B. Biological Sciences:
Anthropology 1, 1 & 1L
Biology 1*, 2, 10*, 12, 20, 22, 23, 23 & 23L, 61, 62, 63

C. Laboratory Science:
This requirement is satisfied by completion of any course in 5A or 5B with a laboratory. Lab courses are underlined.

AREA 6 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 2	4
SPAN 2	Elementary Spanish II	4

(ASL 3 or 4, ***or*** ARABIC 3 or 4, ***or*** CHIN 3 or 4, ***or*** SPAN 3, 3SS, 4, or 4SS may be used to validate this requirement.)

Total units for the certificate **35-49**

CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION, and AMERICAN IDEALS

Not part of IGETC. May be completed prior to transfer.
At the discretion of each CSU, these courses may also count for IGETC certification.
See a counselor for details.

US 1: Historical Development of American Institutions & Ideals
History 17 or 18

US 2: U.S. Constitution and Government
Political Science 1 (also satisfies US 3)

US 3: California State and Local Government
History 37 or Political Science 1 (also satisfies US 2)

NOTE: Superscripts indicate the first term and year a course may be used to meet general education pattern requirements. For example, FA03 indicates that the course must be completed Fall 2003 or later.

* = Transfer credit may be limited by either UC or CSU, or both.

COURSES MAY COUNT IN ONLY ONE AREA EXCEPT COURSES IN AREA 6 MAY ALSO COUNT IN AREA 3B

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN JOURNALISM FOR TRANSFER

The Associate in Arts for Transfer (AA-T) degree in Journalism prepares students for transfer to four-year colleges and universities, and for eventual careers in mass media. Students learn the major theories and processes within the areas of writing, photography and publication design. Course offerings include journalism practice and theory, English, photography, communication studies, and computer skills.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four-year institution to complete their bachelor's degree. Successful completion of the Associate in Arts in Journalism for Transfer 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.

The goals and outcomes for the Journalism major include the following:

1. Prepare students for seamless transfer to a CSU to major in journalism.
2. Prepare students for advanced studies within the field of journalism.

To obtain the Journalism AA-T degree, students must:

- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:

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

1. Transfer to a CSU for completion of a major in journalism.
2. Understand the legal and ethical concerns of journalism.
3. Demonstrate objectivity, accuracy, completeness, clarity, balance, fairness in journalism.
4. 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.
5. Convey a message using words, pictures, and graphics.

Major requirements for the Associate in Arts for Transfer Degree:
[A344/32504/0602.00*/09.0401] Units

Required (9 units):

COMSTD 12	Mass Communication and Society	3
JOUR 10	Newswriting	3
JOUR 30	Student Media Practicum I	3

List A – Select one (3 units):

JOUR 11	Multimedia Reporting	3
JOUR 31	Student Media Practicum II	3

List B – Select two (6-8 units):

COMSTD 8	Fundamentals of Speech Communication	3
COMSTD 72	Logic and Argumentation	3
ECON 2	Principles of Macroeconomics (or ECON 4, Principles of Microeconomics)	3
ENGL 1B	Advanced Composition and Critical Thinking	3
PHIL 75	Symbolic Logic	3
PHOTO 10	Beginning Photography	4
PS 1	American Politics	3
PS 10	Comparative Politics	3
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4
	Total units for the major	**18-20**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**9**
Elective (CSU transferable) units	**12-14**	**10-12**
Total units required for the degree	**60**	**60**

Journalism Certificate

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 certificate is well suited for students planning to enter the fields of writing, photography, and design for publication. Course offerings include Journalism practice and theory, English, Photography, computer skills and Communication Studies.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Be prepared for an entry-level position in journalism, public relations, multimedia writing, or other related fields.
2. Understand the legal and ethical concerns of journalism.
3. Demonstrate objectivity, accuracy, completeness, clarity, balance, fairness in journalism.
4. 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.
5. Convey a message using words, pictures, and graphics.

Requirements for the Journalism Certificate:
[L336/04763/0602.00*/09.0401] Units

COMSTD 12	Mass Communication and Society	3
ENGL 1A	Composition	3
JOUR 10	Newswriting	3
JOUR 11	Multimedia Reporting (or JOUR 31, Student Media Practicum II)	3
JOUR 30	Student Media Practicum I	3
PHOTO 10	Beginning Photography (or PHOTO 7, Introduction to Digital Photography)	4

Plus a minimum of three units from the following:

ART 63	Introduction to Graphic Design	4
BRDCAST 3	Introduction to Electronic Media	3
ENGL 7E	Creative Writing: Nonfiction	3
ENGL 35	Literary Magazine Production	4
PHOTO 20	Photography for Media	4
	Total units for the certificate	**22**

ADegreeWithAGuarantee.com℠ Associate Degree for Transfer

Associate in Arts in Kinesiology for Transfer

The Associate in Arts in Kinesiology for Transfer at Chaffey College prepares students to transfer into a four-year institution to pursue a baccalaureate degree in Kinesiology, Exercise Science, or Physical Education. This major will introduce students to many areas of study including health, fitness, physical education, therapeutic/ sport medicine, and coaching/sport instruction. Curriculum in this degree will advance the knowledge through the multi-disciplinary study of human movement, exercise and the relationships between physical activity and health.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four-year institution to complete their bachelor's degree. Successful completion of the Associate in Arts in Kinesiology for Transfer 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.

The goals and outcomes for the Kinesiology for Transfermajor include the following:
1. Prepares students for seamless transfer to a CSU to complete a Kinesiology, Exercise Science or Physical Education Baccalaureate degree.
2. Introduces students to health, fitness, physical education, therapeutic/sports medicine, and coaching/sport instruction.
3. Improves and maintains a learner-centered environment for education that includes a dynamic and accessible vocational and academic program respectful of each student through varied instructional delivery methods.
4. Provides contemporary continuing education to career professionals.

To obtain the Kinesiology AA-T degree, students must:
- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate knowledge of rules, strategies, techniques, and etiquette of various activities to promote lifelong fitness.
2. Define the many health related and skill related fitness components in an exercise program that will be geared toward specific fitness goals like weight control, cardiovascular endurance, muscular development, and/or sport specific movements.
3. Identify risk factors of communicable and hypokinetic diseases and make sound nutritional choices in order to fuel the body with the necessary nutrients for various degrees of activity and weight control.
4. Recognize various career opportunities in the field of human movement.
5. Implement appropriate aerobic and anaerobic exercises and the metabolic needs for that particular activity.

Major requirements for the Associate in Arts for Transfer Degree:
[A346/33231/1270.00/31.0505] Units

Required (11 units):

KINLEC 18	Introduction to Kinesiology	3
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4

Movement-Based Courses
Select three courses (maximum of one from each category): Units

Aquatics:

KINACT 9	Swimming	1

Combatives:

KINACT 31	Introduction to Self-Defense and Personal Safety	1
KINACT 32	Beginning Jiu-Jitsu	1

Fitness:

KINACT 24	Aerobic Cross Training	1
KINACT 25	Spinning for Fitness	1
KINACT 26	Beginning Pilates Matwork	1
KINACT 28A	Beginning Yoga	1
KINACT 29A	Beginning Body Conditioning	1
KINACT 35	Cardio Fitness For Life	1

Individual Sports:

KINACT 1	Beginning Tennis	1
KINACT 2	Advanced Tennis	1
KINACT 16	Volleyball	1
KINACT 20	Basketball	1
KINACT 22	Soccer	1

List A: Select two (6 units)

CHEM 9	Health Science Chemistry (or CHEM 12, Elementary Organic and Biochemistry, 4 or CHEM 24A, General Chemistry I)	5
KINLEC 16	First Aid	3
PHYS 20A	Algebra/Trigonometry College Physics I (or PHYS 45, Physics for Scientists and Engineers I, 5)	4
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4
	Total units for the major	**21-24**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**10**	**10**
Elective (CSU transferable) units	**9-12**	**7-10**
Total units required for the degree	**60**	**60**

KINESIOLOGY / PHYSICAL EDUCATION

A Physical Education Associates Degree prepares students with an understanding of kinesiology, health promotion, and the mechanics of human bodily movement. Courses prepare students to be physical activity specialists who pursue careers in fitness, health, education, and recreation centers. Kinesiology studies human anatomy and physiology and the mechanics of body movement both theoretically and in practice through physical activities. Consideration has been given to transfer requirements of local colleges and universities.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Implement appropriate aerobic and anaerobic exercises and the metabolic needs for that particular activity.
2. Define the many health related and skill related fitness components in an exercise program that will be geared toward specific fitness goals like weight control, cardiovascular endurance, muscular development, and/or sport specific movements.
3. Utilize components of the wellness model, self-management skills and the different factors that will assist in behavior modification.
4. Effectively communicate in a variety of competitive and noncompetitive environments.
5. Demonstrate knowledge of rules, strategies, techniques, and etiquette of various activities to promote lifelong fitness.
6. Identify risk factors of communicable and hypokinetic diseases and design appropriate nutritional plans for various degrees of activity and weight control.
7. Recognize various career opportunities in the field of human movement.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:
[S345/36629/0835.00/31.0501] Units

BIOL 1	General Biology (or BIOL 20, Human Anatomy **or** BIOL 424 Anatomy and Physiology, 3 and BIOL 424L Anatomy and Physiology Laboratory, 1)	4
KINLEC 15	Diet and Fitness	3
KINLEC 18	Introduction to Kinesiology	3

Plus six units from the following: 6
BIOL 22
CHEM 10
KINLEC 2, 11, 14, 16, 17, 24, 32
NF 5

Plus three units from the following: 3
KINACT 1, 2, 9, 16, 17, 20, 22, 23, 24, 25, 26, 28A, 28B, 29A, 29B, 29C, 31, 32, 35
KINTM 1, 1A, 2, 2A, 3, 3A, 4, 5, 6, 6A, 7, 8, 9, 11, 14, 15, 16, 18, 19, 27, 41, 42, 44, 45, 47, 48, 49, 51, 54, 55, 56A, 56B, 57A, 57B, 59, 60, 60A, 61A, 62, 62A, 64, 65, 65A, 66, 66A, 67A, 69

Total units for the major **19**

Athletic Training Certificate

The Athletic Training Certificate prepares students for entry-level employment assisting an athletic trainer or as a physical therapy aide in high school, college, private practice or clinical settings. The certificate also provides courses to prepare students for continued study in the field of athletic training with the goal of attaining a career in fields such as athletic trainer, athletic rehabilitation, or physical therapy. Consideration has been given to transfer requirements of Athletic Training Education programs at local colleges and universities.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Understand the principles and protocols of athletic training during sports activities with an emphasis on prevention, care, evaluation, treatment, and rehabilitation.
2. Effectively communicate in a variety of competitive and noncompetitive environments.
3. Recognize various career opportunities in the field of human movement and pursue entry-level employment as a physical therapy aide or assisting an athletic trainer.

Requirements for the Athletic Training Certificate:

[E375/99999/1228.00*/51.0913] ***(Non-transcripted)***		Units
KINLEC 2	Introduction to Athletic Training	3
KINLEC 19	Practical Applications in Athletic Training I	2
KINLEC 21	Practical Applications in Athletic Training II	2
KINLEC 22	Practical Applications in Athletic Training III	2.5

Plus eight units from the following:

BIOL 1	General Biology	4
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4
	Total units for the certificate	**17.5**

LAW: PATHWAY TO LAW SCHOOL

(See Business)

MANAGEMENT, MARKETING, AND MERCHANDISING

(See Business)

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN MATHEMATICS 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.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 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-Breadth) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern general education requirements.

Program Learning Outcomes:

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

1. Develop the ability to reason mathematically in preparation for subsequent studies in mathematically related fields.
2. Develop the ability to reason mathematically to gain an appreciation for the usefulness of mathematics.
3. Demonstrate mathematical skills that prepare for participation in all domains of society: civic, economic, and political.

Major requirements for the Associate in Science Transfer (AS-T) Degree:

[S291/30717/1701.00/27.0101]		Units
Required Core		
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
List A - Any one course (4 units)		
MATH 81	Linear Algebra	4
MATH 85	Differential Equations	4
List B - Any one course (3 - 5 units)		
Any List A course not used above, or:		
CISPROG 1	Introduction to Computer Programming	3
ENGIN 30	Engineering Application of Digital Computation	3
PHYS 45	Physics for Scientists and Engineers I	5
STAT 10	Elementary Statistics	4
	Total units for the major	**20-22**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**7**	**7**
Elective (CSU transferable) units	**8-10**	**6-8**
Total units required for the degree	**60**	**60**

MODERN LANGUAGES

(See Chinese, Sign Language and Spanish)

ADegreeWithAGuarantee.com℠
Associate Degree for Transfer

ASSOCIATE IN ARTS IN MUSIC FOR TRANSFER

The Music program of study prepares students for transfer to four-year colleges and universities and for careers in music, music education, and related fields. Students learn the major theories and artistic movements in music from the ancient to the modern world, and evaluate the influences that social, political, and religious institutions have in the creation of music. The program covers technical skills and concepts and technologies involved in the creation of music. Music history, theory disciplines, and practices are reviewed. The program emphasizes critical thinking in the creation, analysis, and interpretation of music. Students should consult with the intended transfer institution to determine the appropriate courses to complete at Chaffey. 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 Music degree 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 music.

The goals and outcomes for the Music major include the following:

1. Prepare students for seamless transfer to a CSU to complete a Music Baccalaureate degree.
2. Provide students with a core body of knowledge in music, with advanced topics that provide breadth of knowledge, build on the core, and expose students to current and historical music .
3. Prepare students for advanced studies within the field of Music.

To obtain the Music A.A.-T degree, students must complete the following:

1. A minimum of 22 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
2. 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
3. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Engage creativity and develop original thinking in the study of music.
2. Communicate in speech and writing about the history, theories, disciplines, and practices of traditional art and popular music forms.
3. Recognize diverse individuals, social forces, and musical styles of the world's cultures through the study of music.
4. Apply critical thinking in the analysis, composition, and interpretation of music.
5. Be empowered to engage in self-directed musical practice and performance.

Major requirements for the Associate in Arts for Transfer Degree:

[A305/33233/1004.00/50.0901]		Units
Required Core (16 units)		
MUSIC 5	Music Theory and Musicianship I	4
MUSIC 6	Music Theory and Musicianship II	4
MUSIC 7	Music Theory and Musicianship III	4
MUSIC 8	Music Theory and Musicianship IV	4
Plus 2 units (0.5 units per semester) of Applied Music Units:		
MUSIC 58	Applied Music	0.5
Plus 4 to 6 units from the following (may be taken up to 4 times):		
MUSIC 75	Concert Choir	1
MUSIC 76	Chamber Choir	1.5
MUSIC 77	Community Concert Band	1
MUSIC 78	Jazz Band	1

Note: 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 5, MUSIC 35 (advisory), applied music (Music 58), and an ensemble performance class (MUSIC 75, 76, 77, or 78) should commence the first semester.

Additional course recommendations: Music 2A and Music 2B

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

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**6**	**6**
Elective (CSU transferable) units	**5-7**	**3-5**
Total units required for the degree	**60**	**60**

MUSIC - COMMERCIAL

The Commercial Music Associate Degree is designed to give students a two-year foundation in professional and commercial music concepts and practices, with an emphasis on theory and vocational applications. Successful completion of the program as shown, along with the General Education requirements, may also enable students to transfer to a four-year college or university.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Know and apply technical skills, concepts, and technologies in the creation of commercial music.
2. Apply critical thinking in the creation, analysis, and interpretation of commercial music.
3. Understand fundamental business mechanisms in the commercial music industry and their implications for career development in the field.
4. Engage creativity in the study of commercial music, developing original thinking.
5. Have greater confidence in their own potential to express themselves creatively through music.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S305/04779/1005.00*/10.0203]		Units
MUSIC 5	Music Theory and Musicianship I	4
MUSIC 6	Music Theory and Musicianship II	4
MUSIC 10	Songwriting and Commercial Harmony	3
MUSIC 15	Introduction to the Music Business	3
MUSIC 16	Introduction to Recording Arts	3
MUSIC 17	Electronic Music	3
MUSIC 18	Computer-Assisted Recording and Editing	3
Plus one course from the following:		
MUSIC 21	History of Jazz	3
MUSIC 22	History and Survey of Rock Music	3
	Total units for the major	**26**

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 Public Health. 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).

Enrollment information for the NA program is available online at www.chaffey.edu/healthsciences.

Enrollment in the NA program is subject to completion of the following requirements:
1. Admission to Chaffey College.
2. Criminal background screening.
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 provided on the above referenced website.
5. Submission of health form, laboratory results, and appropriate CPR card to the Nursing Assistant Program.
6. The student must be at least 16 years of age, and "can comprehend English at a sixth grade level". Chaffey College's English assessment requires a raw score of 56 points or higher to meet this requirement.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate the skills and knowledge needed to pass the California state nursing assistant certification examination.
2. Perform basic nursing and personal care skills for residents from diverse and multicultural backgrounds.
3. Use critical thinking as a basis for effective decision-making.
4. List and discuss various career opportunities available to them through professional development.
5. Promote resident's rights and independence.
6. Communicate effectively and with residents, families and members of the health care team.

Requirements for the Chaffey College NA Certificate:

[E234/99999/1230.30*/51.3902] ***(Non-transcripted)***		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).

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate skills that foster critical thinking and reflection appropriate to a Home Health Aide environment.
2. Demonstrate personal care skills necessary for working in the patient's home, assisted living, independent living, and hospice environments.
3. Demonstrate professional communication in the patient's home, in assisted living, independent living, and hospice environments.

Requirements for the Chaffey College NA/HHA Certificate:

[E235/99999/1230.80*/51.2602] ***(Non-transcripted)***		Units
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 495	College Reading and Writing (or ESL 475, Fundamentals of College Reading and Writing for ESL Students)	4

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 495 via the Chaffey assessment process, or completion of English 675 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 prior October 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 prior March 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.

Program Learning Outcomes:

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

1. Demonstrate the knowledge and skills necessary to provide safe and effective nursing care.
2 Pass the NCLEX State Board Examination.
3. Identify vital questions, problems or issues and communicate effectively with other members of the health care team.
4. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S315/04789/1230.20*/51.3901]		Units
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.

Nursing: Vocational (VN) Certificate

Program Learning Outcomes:

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

1. Demonstrate the knowledge and skills necessary to provide safe and effective nursing care.
2. Pass the NCLEX State Board Examination.
3. Identify vital questions, problems or issues and communicate effectively with other members of the health care team.

Requirements for the Nursing: Vocational (VN) Certificate:

[T315/20722/1230.20*/51.3901] Units

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 Accrediting Commission for Education in Nursing, Inc., 3343 Peachtree Road N.E., Suite 850, Atlanta Georgia 30326; phone: (404) 975-5000; fax: (404) 975-5020; website: www.acenursing.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 www.rn.ca.gov/applicants/lic-exam and www.rn.ca.gov/enforcement/convictions for more 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 believes learning is facilitated when students are actively involved in the learning process and assume responsibility for their own learning.

Information about the program prerequisites – those requirements that must be completed prior to applying to the ADN program – can be obtained from our website (www.chaffey.edu/healthsciences/nursing/nursingadn), the Counseling Department, the Health Sciences Office (HS-145), or from attending an ADN information session offered the first Thursday of every month. The listed criteria are 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 Health Sciences Office (HS-145), or download it from the website. Six to eight weeks prior to the application period should be allowed for obtaining the information needed in these instructions. Application forms for admission to the ADN program are available at www.chaffey.edu/healthsciences/nursing/nursingadn 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. If students are not selected, they may reapply the next semester.

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 Associate's 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 provide evidence of physical and emotional health as determined by a satisfactory health examination by a licensed health care provider, 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

Program Learning Outcomes:

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

1. Achieve 90% or higher on the National Council Licensure Examination (NCLEX) by demonstrating appropriate analytical nursing skills, critical thinking abilities, and communication.
2. Demonstrate the components of the delivery of care: coordination, delegation, and prioritization to meet the needs of simulated and actual patients and their families, serving as clients' advocate.
3. Communicate effectively with patients, families, peers, and other members of the health team.
4. Practice and demonstrate, within the ethical and legal framework of nursing, personal accountability for own actions and professional growth.
5. Utilize the nursing process to provide appropriate care for actual and simulated patients that recognizes threats to physiological, psychological, spiritual, developmental, and socio-cultural needs.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S310/04788/1230.10*/51.3801]		Units
NURADN 6**	Clinical Nursing Skills	1.5
NURADN 14	Nursing Process 1	4
NURADN 14L	Nursing Process 1 Laboratory	3.5
NURADN 26	Maternal-Newborn Nursing	2
NURADN 26L	Maternal-Newborn Nursing Laboratory	1.5
NURADN 27	Nursing Process 2	4
NURADN 27L	Nursing Process 2 Laboratory	3
NURADN 34	Nursing Process 3	4
NURADN 34L	Nursing Process 3 Laboratory	3
NURADN 38	Family-Child Nursing	2
NURADN 38L	Family-Child Nursing Laboratory	1.5
NURADN 45	Nursing Process 4	4
NURADN 45L	Nursing Process 4 Laboratory	3.5
NURADN 48	Mental Health and Psychiatric Nursing	2
NURADN 48L	Mental Health and Psychiatric Nursing Laboratory	1
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.

ADN Advanced Placement

Prospective students for advanced placement must be transferring from another nursing program or have at least one year nursing experience as an LVN in a healthcare setting. Acceptance for advanced placement is contingent on available space in the program. To progress in the program advanced placement students must earn a minimum grade of C/pass in all nursing and other required courses. The LVN to RN 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 conviction, substantially related to nursing practice. For more information, see www.rn.ca.gov/applicant/lic-exam and www.rn.ca.gov/enforcement/convictions.

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."
4. Minimum one year of experience as a LVN in a healthcare setting.

Program Learning Outcomes:
Upon the successful completion of a VN program and this degree, students should be able to:
1. Achieve 90% or higher on the National Council Licensure Examination (NCLEX) by demonstrating appropriate analytical nursing skills, critical thinking abilities, and communication.
2. Apply components of the delivery of care: coordination, delegation, and prioritization to meet the needs of simulated and actual patients and their families.
3. Communicate effectively with patients, families, peers, and other members of the health team.
4. Practice and demonstrate within the ethical and legal framework of nursing, personal accountability for own actions and professional growth.
5. Utilize the nursing process to provide appropriate care for actual and simulated patients that recognizes threats to physiological, psychological, spiritual, developmental, and socio-cultural needs.

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

[S312/07384/1230.10*/51.3801]		Units
NURADN 3	Transition in Nursing	1.5
NURADN 3L	Transition in Nursing Laboratory	0.5
NURADN 34	Nursing Process 3	4
NURADN 34L	Nursing Process 3 Laboratory	3
NURADN 45	Nursing Process 4	4
NURADN 45L	Nursing Process 4 Laboratory	3.5
NURADN 48	Mental Health and Psychiatric Nursing	2
NURADN 48L	Mental Health and Psychiatric Nursing Laboratory	1
NURADN 50	Professional Issues in Nursing	1
	Total units for the major:	**20.5**

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.
5. Minimum one year of experience as a LVN in a healthcare setting.

Program Learning Outcomes:
Upon the successful completion of this non-degree option, students should be able to:
1. Demonstrate analysis and critical reflection appropriate in the field of nursing.
2. Demonstrate communication and problem solving appropriate in the field of nursing.
3. Plan and prepare for employment and career advancement in the field of nursing.
4. Recognize the need for, and implement ethical decision-making.

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 34	Nursing Process 3	4
NURADN 34L	Nursing Process 3 Laboratory	3
NURADN 45	Nursing Process 4	4
NURADN 45L	Nursing Process 4 Laboratory	3.5
NURADN 48	Mental Health and Psychiatric Nursing	2
NURADN 48L	Mental Health and Psychiatric Nursing Laboratory	1
NURADN 50	Professional Issues in Nursing	1
	Total units:	**27.5**

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.

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN NUTRITION AND DIETETICS FOR TRANSFER

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 Associate in Science for Transfer in Nutrition and Dietetics is intended for transfer to California State Universities in the major of Nutrition and Dietetics. 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 Nutrition and Dietetics 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 a related discipline.

To obtain the Nutrition and Dietetics AS-T degree, students must complete:
A) A minimum of 18 semester units in the major with a grade of C or better while maintaining a grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
B) 60 semester CSU-transferable units following the California State University-General Education Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, 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.
6. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

Major requirements for the Associate in Science for Transfer Degree:

[S242/35762/1306.00*/19.0501]		Units
Required core (16 units)		
BIOL 23	General Microbiology	3
BIOL 23L	General Microbiology Laboratory	2
CHEM 24A	General Chemistry I	5
NF 15	Nutrition I: Introduction to Nutrition Science	3
PSYCH 1	Introduction to Psychology	3
List A – Select one course (4-5 units)		
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4
CHEM 75A	Organic Chemistry I	5
SCSCI 10	Statistics for Social Science	4
STAT 10	Elementary Statistics	4
List B (3 units)		
CUL 17	Principles of Food Preparation	3
	Total units for the major	**23-24**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**13**	**16**
Elective (CSU transferable) units	**12-13**	**13-14**
Total units required for the degree	**60**	**60**

Nutrition and Food Certificate

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.

Program Learning Outcomes:

Upon the successful completion of this certificate, 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.

Requirements for the Nutrition and Food Certificate:

[L241/20732/1306.00*/19.0501]		Units
BIOL 14	Health Science	3
BIOL 424	Anatomy and Physiology	3
COMSTD 8	Fundamentals of Speech Communication	3
GERO 404	Health and Wellness for Older Adults	3
KINLEC 17	First Aid and Emergency Response to Community Disasters	3
NF 5	Nutrition for Life (or NF 15, Nutrition I: Introduction to Nutrition Science)	3
NF 22	Nutrition and the Active Person	3
NF 27	Healthy Cooking	2
	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 MATH-410 as determined by the Chaffey assessment process, or successful completion of 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) certificate prior to clinical internship (PHARMT 482). Certificate may be the American Heart Association "Healthcare Provider with AED" or the American Red Cross "Professional Rescuer with AED". The CPR card must be updated annually. Details about times and locations of CPR classes 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 college Counseling Department to schedule a course evaluation.
F. Students are strongly advised to be able to accurately keyboard at a rate of 35 wam or higher.

Program Learning Outcomes:

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

1. Demonstrate knowledge of human anatomy, physiology, and pharmacology.
2. Demonstrate knowledge of federal/state laws, regulations, ethical and professional conduct in a variety pharmacy practice settings.
3. Demonstrate the correct processing and dispensing of prescriptions/medication orders including compounding sterile and non-sterile products.
4. Perform pharmaceutical calculations essential to the duties of pharmacy technicians in a variety pharmacy practice settings.
5. Demonstrate skills that promote personal, interpersonal, foundational, and professional knowledge in capacities of analysis, critical reflection, career development, and global and community awareness.
6. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S322/15524/1221.00*/51.0805]		Units
PHARMT 401	Pharmacology of the Body Systems I	3
PHARMT 402	Pharmacology of the Body Systems II	3
PHARMT 403	Principles of Community Pharmacy Practice	1.5
PHARMT 404	Principles of Institutional Pharmacy Practice	1.5
PHARMT 405	Sterile Products	2
PHARMT 410	Over-the-Counter Products	2
PHARMT 415	Pharmaceutical Calculations	2
PHARMT 421	Community Pharmacy Operations	3
PHARMT 421L	Community Pharmacy Operations Laboratory	1
PHARMT 431	Institutional Pharmacy Operations	3
PHARMT 431L	Institutional Pharmacy Operations Laboratory	1
PHARMT 482	Clinical Externship	4
	Total units for the major	**27**

Pharmacy Technician Certificate

Program Learning Outcomes:

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

1. Demonstrate the knowledge of human anatomy, physiology, and pharmacology.
2. Demonstrate knowledge of federal/state laws, regulations, ethical and professional conduct in a variety pharmacy practice settings.
3. Demonstrate the correct processing and dispensing of prescriptions/medication orders including compounding sterile and non-sterile products.
4. Perform pharmaceutical calculations essential to the duties of pharmacy technicians in a variety pharmacy practice settings.
5. Demonstrate skills that promote personal, interpersonal, foundational, and professional knowledge in capacities of analysis, critical reflection, career development, and global and community awareness.

Requirements for the Pharmacy Technician Certificate:

[T322/20719/1221.00*/51.0805]		Units
Same as the major requirements for the A.S. Degree		
	Total units for the certificate	**27**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN PHILOSOPHY FOR TRANSFER

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

The Associate in Arts for Philosophy for Transfer (AA-T) degree is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four year institution to complete their bachelor's degree. Successful completion of the transfer degree in Philosophy 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 philosophy.

The goals and outcomes for the Philosophy major include the following:

1. Prepare students for seamless transfer to a CSU to complete a Philosophy baccalaureate degree.
2. Prepare students for advanced studies within the field of Philosophy.

To obtain the Philosophy AA-T degree, students must:

- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:

Upon the successful completion of this degree, 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.
5. Demonstrate original thought and development in philosophical writing.

Major requirements for the Associate in Arts for Transfer Degree

[A336/32183/1509.00/38.0101]		Units
Required – Select two (6 units):		
PHIL 70	Introduction to Philosophy (or PHIL 72, Seminar in Ethics)	3
PHIL 75	Symbolic Logic	3
List A – Select one (3 units):		
The course not used above, or:		
PHIL 76	Critical Thinking	3
PHIL 77	History of Ancient Philosophy	3
PHIL 78	History of Philosophy: Modern	3
List B – Select two (6 units):		
Any List A course not already used, and/or:		
HIST 5	Early Western Civilizations	3
HIST 6	Modern Western Civilizations	3
PHIL 80	Introduction to Religion	3
List C – Select one (3 units):		
Any List A or List B course not already used, or:		
PHIL 71	Philosophy of Feminism	3
PHIL 73	Seminar in Contemporary American Philosophy	3
PHIL 79	Philosophy of Consciousness	3
PHIL 81	Introduction to Eastern Philosophy	3
PHIL 82	Introduction to Monotheistic Religions: Judaism/Christianity/Islam	3
	Total units for the major	**18**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**12**	**15**
Elective (CSU transferable) units	**17**	**18**
Total units required for the degree	**60**	**60**

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Understand and evaluate a variety of religious texts.
2. Identify the major themes in religions and place theories and perspectives within their historical context.
3. Articulate and critique major religious theories and perspectives.
4. Utilize the tools of logic in critiquing and developing religious perspectives.
5. Demonstrate original thought and development in philosophical writing.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:

[A385/07390/1510.00*/38.0201]		Units
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 Ancient Philosophy	3
PHIL 78	History of Philosophy: Modern	3

Plus six units from the following or from approved special topics:
Anthropology 3
Biology 1, 2, 10
English 68, 70A, 70B, 71, 75A, 75B, 76, 79, 81
Political Science 2
Psychology 1, 5
Sociology 10, 16

Total units for the major **24**

PHOTOGRAPHY

The Photography programs emphasize 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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate critical thinking skills required for transfer for completion of bachelor's degree in Photography.
2. Demonstrate skills of analysis and critical reflection required for transfer for completion of bachelor's degree in Photography.
3. Demonstrate innovative problem solving required for transfer for completion of bachelor's degree in Photography.
4. Demonstrate professional communication required for transfer for completion of bachelor's degree in Photography.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:

[A340/04783/1012.00*/10.0201]		Units
ART 10	Fundamentals of Design in Two Dimensions (or ART 63, Introduction to Graphic Design, or ART 14, Introduction to Drawing, 3)	4
ARTH 19	Contemporary Art: 1945-Present (or ARTH 5, Survey of Western Art from Renaissance to Contemporary)	3
PHOTO 1	History of Photography	3
PHOTO 7	Introduction to Digital Photography (or PHOTO 10, Beginning Photography)	4
PHOTO 9	Digital Imaging (or PHOTO 11, Intermediate Photography)	4
PHOTO 12	Studio Lighting	4
PHOTO 13	Fine Art Photography	4
PHOTO 20	Photography for Media	4
PHOTO 50	Introduction to Color Photography	4

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

Still Photography Certificate

This certificate prepares students for employment in the expanding and ever changing photographic profession. In addition to teaching job skills the program develops the creative and critical thinking potential of students. The program also offers those already have experience in photography, opportunities to update both technical and aesthetic skills. Students have hands-on experience in our state of the art facility.

Program Learning Outcomes:
Upon the successful completion of this certificate, students should be able to:
1. Demonstrate analysis, critical reflection and problem solving skills.
2. Foster capacities of career development in a globally diverse job market.
3. Demonstrate knowledge of appropriate photographic equipment and software appropriate for competitive employment in the field of still photography.
4. Articulate and express themselves and their idea/concepts through the use of the appropriate photograph technologies required for competitive employment in the field of still photography.
5. Select and use correct photographic technologies to express their ideas/concepts required for competitive employment in the field of still photography.

Requirements for the Still Photography Certificate:

[T340/20716/1012.00*/10.0201]		Units
BUSMGT 45	Small Business Ownership and Management	3
PHOTO 1	History of Photography	3
PHOTO 7	Introduction to Digital Photography (or PHOTO 10, Beginning Photography)	4
PHOTO 9	Digital Imaging (or PHOTO 11, Intermediate Photography)	4
PHOTO 12	Studio Lighting	4
PHOTO 13	Fine Art Photography	4
PHOTO 20	Photography for Media	4
PHOTO 50	Introduction to Color Photography	4
PHOTO 429	Wedding, Quinceañera, and Event Photography	4

Plus one course from the following:

ART 10	Fundamentals of Design in Two Dimensions	4
ART 63	Introduction to Graphic Design	4

Plus one course from the following:

PHOTO 430	Fine Art Photography Portfolio	4
PHOTO 436	Studio Lighting Portfolio	4
PHOTO 438	Photography for Media Portfolio	4
PHOTO 439	Wedding, Quinceañera, and Event Photography Portfolio	4

Total units for the certificate **42**

PHYSICAL EDUCATION / COACHING / ATHLETIC TRAINING

(See Kinesiology)

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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Apply basic physics concepts of symbolism, language, and physical laws to describe the fundamental properties of nature.
2. Apply chemical and physical concepts, symbolism, language, atomic structure, and use of periodic table to describe the changes that matter undergoes and the applications of chemistry.
3. Apply experimental techniques to the laboratory environment as demonstrated by safe handling and disposal of chemicals, proper use of lab materials, evaluating and validating scientific data, and using proper laboratory etiquette.
4. Provide technical information in a clear and concise manner to demonstrate effective written and oral communication skills for chemical and physical concepts, results of laboratory experiments, and articles in the general public scientific literature.

Requirements for the Associates in Science Degree:
[S351/18435/1901.00/40.0101] = Transfer Units
[S352/18777/1901.00/40.0101] = 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.
Astronomy 26, 35
Chemistry 24A, 24B, 70, 75A, 75B
Computer Science 1, 4
Earth Science 1, 1L, 5, 5L
Engineering 11, 26, 30, 50, 60, 71
Geography 4, 5
Geology 1, 2
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.

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Associate Degree for Transfer

ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER

The Associate in Science for Transfer (AS-T) degree in Physics prepares students for transfer to four-year colleges and universities to obtain a baccalaureate degree in Physics. The Physics AS-T curriculum provides students a basis for understanding the physical concepts and skills required to attain upper division status at a four-year college or university, and also provides many of the prerequisite courses for engineering majors.

The program is suited to the needs of students who will complete their education at Chaffey College with an associate degree, as well as those students who will complete their Chaffey associate degree and then transfer to a four-year institution to complete their bachelor's degree. Successful completion of the transfer degree in Physics 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 physics.

The goals and outcomes for the physics major include the following:
1. Prepare students for seamless transfer to a CSU to complete a baccalaureate degree in physics.
2. Prepare students for advanced studies within the field of physics.

To obtain the Physics AS-T degree, students must:
- Complete all major requirements listed below with grades of C or better in each course.
- Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
- Complete 60 semester CSU-transferable units using the California State University General Education-Breadth (CSU GE-Breadth) OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Apply concepts in physics, physics symbolism and language, and mathematical skills to solve problems in physics.
2. Demonstrate skill in scientific communication (both written and oral) and apply these skills to physical concepts, describing results of laboratory experiments, and providing technical information in a clear and concise manner.
3. Use experimental techniques in the laboratory environment to obtain accurate and precise data, to evaluate and validate scientific data, to correctly use scientific instruments, and use proper laboratory etiquette.

Major requirements for the Associate in Science for Transfer Degree

[S356/32347/1902.00/40.0801]		Units
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
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	**28**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**7**	**7**
Elective (CSU transferable) units	**2**	**0**
Total units required for the degree	**60**	**60**

ADegreeWithAGuarantee.com℠ Associate Degree for Transfer

ASSOCIATE IN ARTS IN POLITICAL SCIENCE 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 CSU 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-Breadth), or the Intersegmental General Education Transfer Curriculum (IGETC).

Program Learning Outcomes:

Upon the successful completion of this degree, 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

[A361/36531/2207.00/45.1001]		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
STAT 10,	Elementary Statistics (or SCSCI 10, Statistics for Social Science, 4)	4
List B – Any two courses (6-7 units)		
Any List A course not used above, and/or:		
PS 3	California Politics and Culture	3
PS 21	Urban Politics	3
PS 25	Latino Politics	3
PS 32	Law and Society	3
PSYCH 80	Research Methods in Psychology (or SOC 80, Introduction to Research Methods in Sociology, 4)	4
	Total units for the major	**18-20**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**12**	**12**
Elective (CSU transferable) units	**16-17**	**14-15**
Total units required for the degree	**60**	**60**

ADegreeWithAGuarantee.com℠ Associate Degree for Transfer

ASSOCIATE IN ARTS IN PSYCHOLOGY 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).

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate familiarity with major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
3. Respect and use critical and creative thinking, skeptical inquiry, and the scientific approach.
4. Understand and apply psychological principles to personal, social, and organizational issues.
5. Weigh evidence, tolerate ambiguity, act ethically, and reflect other values underpinning psychology as a science.
6. Demonstrate information competence and the ability to use computers and other technology for many purposes.
7. Communicate effectively in both oral and written formats.
8. Recognize, understand, and respect the complexity of sociocultural and international diversity.
9. Develop insight into one's own and others' behavior and mental processes and apply effective strategies for self-management and self-improvement.
10. Emerge from the major with realistic ideas about how to use psychological knowledge, skills, and values in various occupations and in graduate or professional school.

Major requirements for the Associate in Arts for Transfer Degree

[A366/31115/2001.00/42.0101]		Units
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)		
Any List A course not used above or:		
PSYCH 5	Personal and Social Awareness	3
PSYCH 55	Abnormal Psychology	3
	Total units for the major	**20**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**12**
Elective (CSU transferable) units	**12**	**13**
Total units required for the degree	**60**	**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 department's website at www.chaffey.edu/radtec. Go to this website and click on the application form checklist and Information Packet for the Prospective Radiologic Technology Student. Application criteria are subject to change. The Radiologic Technology program is a high-unit program with more than 60 semester units.

Applicants to the Radiologic Technology program must meet the following criteria:
1. Eligibility for admission to Chaffey College.
2. International students' transcripts must have AERC, IERF or approved agency evaluation.
3. Minimum age of 18 years (per California Code of Regulations, Title 17 Public Health, and Code of Federal Regulations, Title 10).
4. Completion of the following courses with a minimum GPA of 2.0, or courses in progress at the time of application:
   a. MATH 420 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 high school chemistry or physics. (If high school courses are used to meet these requirements, high school transcripts must be submitted for evaluation.)
   c. BIOL 20 (or BIOL 424 and 424L) completed within five (5) years of application submission date.
   d. BIOL 30

Notes:
1. Students are admitted to the Radiologic Technology program on a point system.
2. Required courses listed under number four 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 2.8 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 the designated entity determined by the program. 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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Operate digital and conventional x-ray equipment, exposing and processing images.
2. Be clinically competent in radiation protection practices, positioning patients and patient care.
3. Demonstrate ethics, professionalism, critical thinking, and communicate effectively as a Radiologic Technologist.
4. Be eligible for licensure as a Radiologic Technologist.
5. Demonstrate academic skills that prepare them to participate in all domains of society: civically, economically, and politically.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S375/04792/1225.00*/51.0911]		Units
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 41	Radiographic Clinical Education II	7
RADTEC 51*	Radiographic Clinical Education III	4.75
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 71	Radiographic Clinical Education V	10
RADTEC 77	Radiographic Pathology	3
RADTEC 82*	Radiographic Clinical Education VI	4
RADTEC 85*	Radiographic Review and Exam Preparation	2
RADTEC 470	Venipuncture for Imaging Professionals	1
RADTEC 470L	Venipuncture Laboratory for Imaging Professionals	0.5
	Total units for the major	**68.25**

As of Fall 2017, all general education coursework and required graduation competencies for the associate degree must be in progress or have been completed at the time of the RT application submission.

*RADTEC-51 and 55 are offered during the 1st summer of the program; RADTEC-82 and 85 are offered during the 2nd summer.

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.

Program Learning Outcomes:

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

1. Conduct business research, analyze, and interpret the findings.
2. Apply the conceptual framework of real estate transactions in business situations.
3. Demonstrate an understanding of the legal and ethical environment of real estate and make appropriate decisions.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Science Degree:

[S381/14400/0511.00*/52.1501]		Units
BUSL 50	Legal Aspects of Real Estate	3
RE 10	Real Estate Principles	3
RE 15	Real Estate Practice	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
BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSL 28A	Business Law I	3
BUSL 28B	Business Law II	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	Internet Technologies	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*/52.1501]	Units
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:

[E383/99999/0511.00*/52.1501] ***(Non-transcripted)***		Units
RE 10	Real Estate Principles	3
Plus two courses from the following:		
BUSL 50	Legal Aspects of Real Estate	3
RE 15	Real Estate Practice	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.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Successfully engage in conversation strategies in ASL using basic receptive and expressive skills at deaf community.
2. Demonstrate familiarity with the history of American Deaf Culture.
3. Demonstrate familiarity with important social and political issues and behaviors related to American Deaf community.
4. Distinguish the language and culture between Deaf and hearing Americans.
5. Develop basic skills and knowledge about the Deaf community and apply that skill and knowledge in higher education or training programs to be ASL interpreters or Educators of Deaf children.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:

[A403/30544/0850.00/16.1601]		Units
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 Biological Anthropology	3
COMSTD 14	Oral Interpretation of Literature	3
COMSTD 74	Intercultural Communication	3
ED 10	Elementary Classroom Fieldwork	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.

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN SOCIAL JUSTICE STUDIES FOR TRANSFER

The Associate in Arts in Social Justice Studies for Transfer degree is a study in the field of social justice. Whereas sociology is the study of society, the social construction of reality and social interaction with an emphasis on how social structure creates inequality based on group membership, such as ethnicity, class and gender, social justice is an interdisciplinary field of study that permits students to focus on the intersection of gender, ethnicity/race, class, and sexual orientation, as pertaining to issues of politics, economics, environment, and education. Students may study social justice issues in local, national, and international arenas, examining social movements and social change so that they may become more informed citizens and community leaders.

The Associate in Arts in Social Justice Studies for Transfer is intended for transfer to California State Universities in the following majors: Africana/African American Studies; Arabic Language, Literature and Culture; Asian/Asian American Studies; Chicano/Chicana Studies; Chicano and Latino Studies; Diversity Studies; Ethnic Studies; Gender, Ethnicity & Multicultural Studies; Gender and Women's Studies; Gender Studies; Interdisciplinary Studies - Critical Race, Gender & Sexuality Studies; Labor/Labor and Employment Studies; Latina/Latino/Latin American Studies; Lesbian, Gay, Bisexual and Transgender Studies; Liberal Studies, Border Studies or Interdisciplinary Studies in Culture & Society Option; Mexican-American Studies; Modern Jewish Studies; Multicultural and Gender Studies; Multicultural Studies; Native American Studies; Near and Middle Eastern Studies; Negotiation, Conflict Resolution and Peacebuilding; Social Science with Emphasis in Islamic and Arabic Studies; Sociology, Concentration in Women, Gender and Sexuality Studies or Critical Race Studies or Inequalities and Diversity Option; Women's, Gender, and Sexuality Studies; Women's Studies.

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 Social Justice 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 a related discipline.

To obtain the Social Justice Studies AA-T degree, students must complete:
A) A minimum of 18 semester units in the major with a grade of C or better while maintaining a grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
B) 60 semester CSU-transferable units following the California State University-General Education Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern. No more than 60 semester units are required.

Program Learning Outcomes:
1. Recognize the connections between social structure and the individual in society.
2. 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.
3. Understand and demonstrate the impact of social action on the social structures of society.
4. Recognize the categories of discrimination and their effects, including but not limited to racism, sexism, heterosexism, and classism.
5. Identify societal granting of unearned privilege.

Major requirements for the Associate in Arts for Transfer Degree:

[A402/35827/2201.30/50.0299]		Units
Required core (9 units)		
One course from the following:		
SOC 15	Ethnic and Race Relations: U.S. and Global Perspectives (or HIST 19, History of Ethnic Relations in the United States)	3
SOC 33	Introduction to Social Justice Studies	3
Plus one course from the following:		
SOC 30	Introduction to LGBTQ Studies	3
SOC 32	Introduction to Women Studies	3
Plus one course from the following or any required core course not already used above:		
ENGL 74	Asian-American Literature	3
ENGL 76	African-American Literature	3
HIST 12	Asian American History	3
HIST 50	African-American History I	3
HIST 51	African-American History II	3
HIST 70	Chicanos: The Common History of Mexico and the US	3
HIST 71	Chicanos: The Chicano Minority in the United States	3
SOC 25	Introduction to Chicano/Latino Studies in the United States	3

List A – Select three courses (9-11 units) from at least two of the following areas. Courses already used in the required core may not be used to fulfill List A requirements.

Area 1: History or Government		
HIST 12	Asian American History	3
HIST 50	African-American History I	3
HIST 51	African-American History II	3
HIST 70	Chicanos: The Common History of Mexico and the US	3
HIST 71	Chicanos: The Chicano Minority in the United States	3
PS 25	Latino Politics	3
Area 2: Arts and Humanities		
ENGL 74	Asian-American Literature	3
Area 3: Social Science		
ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
GEOG 10	Cultural Geography of North America	3
Area 4: Quantitative Reasoning and Research Methods		
SOC 80	Introduction to Research Methods in Sociology	4
SCSCI 10	Statistics for Social Science	4
Area 5: Major Preparation		
Any course from the require core list not already used.		
	Total units for the major	**18**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**18**	**18**
Elective (CSU transferable) units	**21-23**	**19-21**
Total units required for the degree	**60**	**60**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN SOCIOLOGY 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).

Program Learning Outcomes:

Upon the successful completion of this degree, 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. 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.

Major requirements for the Associate in Arts for Transfer Degree:
[A401/31204/2208.00/45.1101] Units

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)
Any List A and List B courses not used above, and/or:

ANTHRO 3	Introduction to Social and Cultural Anthropology	3
SOC 18	Sociology of Aging	3

Total units for the major **19-21**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**12**	**15**
Elective (CSU transferable) units	**14-16**	**15-17**
Total units required for the degree	**60**	**60**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN SPANISH FOR TRANSFER

The Associate in Arts in Spanish for Transfer degree will prepare students for upper division coursework in the study of 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.

The Associate in Arts in Spanish for Transfer degree 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 Spanish 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 Spanish.

The goals and outcomes for the Spanish major include the following:
1. Prepare students for seamless transfer to a CSU to complete a Spanish Baccalaureate degree.
2. Provide students with a core body of knowledge in the study of Spanish, with advanced topics that provide breadth of knowledge, build on the cultural and linguistic study of Spanish as a Modern Language.
3. Prepare students for advanced studies within the field of Spanish.

To obtain the Spanish A.A.-T degree, students must complete the following:
1. A minimum of 18 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
2. 60 semester CSU-transferable units using the California State University-General Education-Breadth pattern (CSU-GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
3. No more than 60 semester units are required.

Program Learning Outcomes:
Upon the successful completion of this degree, students should be able to:
1. Demonstrate familiarity with the geography of the countries and regions where the target Spanish is spoken.
2. Students should be able to identify specific music, art, literature, and/or cultural traditions of Spain and Latin America.
3. Successfully engage in conversation strategies in Spanish.
4. Identify important cultural and /or historical figures of the Hispanic world.
5. Recognize and use grammatical structures in Spanish.

Major requirements for the Associate in Arts for Transfer Degree
[A406/33227/1105.00/16.0905] Units

Core (16 units):

SPAN 1	Elementary Spanish I	4
SPAN 2	Elementary Spanish II	4
SPAN 3	Intermediate Spanish I (or SPAN 3SS, Spanish for Heritage Speakers I)	4
SPAN 4	Intermediate Spanish II (or SPAN 4SS, Spanish for Heritage Speakers II)	4

** If a student places out of any core course(s) and is not awarded units for that course, the student will need to take additional units from List A to compensate*

List A: Select one (3 units)

ENGL 77	Latino Literature	3
HIST 70	Chicanos: The Common History of Mexico and the US	3
HIST 71	Chicanos: The Chicano Minority in the United States	3
SOC 25	Introduction to Chicano/Latino Studies in the United States	3
SOC 26	Introduction to Latin American Societies	3
SPAN 8	Survey of Hispanic Literature: 1700-Present	3
SPAN 13	Survey of Mexican Literature	3
SPAN 14	Latin American Literature	3

Total units for the major **19**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**9**	**9**
Elective (CSU transferable) units	**13**	**11**
Total units required for the degree	**60**	**60**

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Associate Degree for Transfer

ASSOCIATE IN ARTS IN THEATER ARTS 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).

Program Learning Outcomes:

Upon the successful completion of this degree, 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.
4. Transfer to a CSU as a Theatre major.

Major requirements for the Associate in Arts for Transfer Degree:

[A410/31337/1007.00/50.0501]		Units
Required (9 units)		
THEATRE 1	Introduction to Theatre (or THEATRE 4, Theatre History: Ancient to 1700)	3
THEATRE 10	Beginning Acting	3
THEATRE 50	Main Stage Production Workshop I	3
List A – Any three courses (9 units)		
THEATRE 7	Theatrical Script Analysis	3
THEATRE 12	Intermediate Acting	3
THEATRE 30	Stagecraft	3
THEATRE 32	Theatre Design – Lighting	3
THEATRE 40	Stage Costuming	3
THEATRE 42	Theatrical Makeup	3
	Total units for the major	**18**

	IGETC	CSUGE
General Education	**37**	**39**
Total units that may be double-counted	**3**	**6**
Elective (CSU transferable) units	**8**	**9**
Total units required for the degree	**60**	**60**

THEATRE - PERFORMANCE

The Associate in Arts in Theatre Performance degree prepares students to develop performance skills. If transfer to a CSU or theatre arts is the desired educational goal, the Associate in Arts in Theatre for Transfer (AA-T Theatre Arts) should be considered as an alternative route. The Theatre Performance degree is focused more on performance aspects, whereas the AA-T degree provides a broader coverage of the basic theory and principles of theatre arts. The Theatre Performance degree provides students with both the theory and practical experience necessary for employment in beginning levels of professional theatre. Various productions are offered to provide students with a broad range of practical training.

Program Learning Outcomes:

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

1. Explore the variety of job opportunities in the professional and academic worlds of theatrical entertainment.
2. Recognize the aesthetics of design and performance.
3. Analyze performance and technical aspects of a theatrical production.
4. Demonstrate a character driven performance.

To obtain an Associate's Degree, students must complete both the major requirements below and the graduation requirements listed on page 38.

Major requirements for the Associate in Arts Degree:

[A415A/04780/1007.00/50.0501]		Units
THEATRE 8	Voice and Movement for the Actor	3
THEATRE 10	Beginning Acting	3
THEATRE 12	Intermediate Acting	3
THEATRE 14	Stylized Acting	3
THEATRE 18	Seminar in Television Production: Acting Techniques	3
THEATRE 35	Musical Theatre Performance I	3
THEATRE 50	Main Stage Production Workshop - Rehearsal and Performance	3
Plus a choice of elective:		
THEATRE 2	Theatrical Dance	3
THEATRE 7	Theatrical Script Analysis	3
THEATRE 20	Directing for the Stage I	3
THEATRE 37	Musical Theatre Performance II	3
THEATRE 57	Community Outreach Theatre	3
THEATRE 62	Showcase Development Workshop	1
	Total units for the major	**22-24**

Technical Theatre

The Technical Theatre Certificate of Career Preparation is designed to prepare students for occupational competency as a theatre technician; theatre manager in educational, community, and resident theatre venues; theme parks, television, and motion picture studios. Technical theatre technicians may work on set construction, theatrical carpentry, sound systems, lighting design, light board operation, stage lighting, scenery costumes, props, and special effects.

Program Learning Outcomes:

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

1. Demonstrate skills that foster career development in the area of technical theatre.
2. Develop a fundamental knowledge of the origins of theatre.
3. Recognize the aesthetics of design.
4. Critically analyze and appraise a theatrical performance and technical aspects of the production.

Requirements for the Technical Theatre Certificate

[E415/99999/1006.00*/50.0502] ***(Non-transcripted)***		Units
THEATRE 30	Stagecraft	3
THEATRE 32	Theatre Design – Lighting	3
THEATRE 36	Stage Management	3
THEATRE 40	Stage Costuming (or THEATRE 42, Theatrical Makeup)	3
THEATRE 50	Main Stage Production Workshop I (or THEATRE 51, Main Stage Production Workshop II)	3
THEATRE 55	Technical Theatre in Production	2
	Total units for the certificate	**17**

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.

Program Learning Outcomes:

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

1. Develop college-level communication skills; visual, written and oral.
2. Develop college-level critical thinking and information competency skills.
3. Develop community and global awareness and responsibility.
4. Increase their personal, academic and career development.

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 required in one Area of Emphasis with two or more courses in one discipline.
- Courses selected may also be used to fulfill general education areas; refer to each transfer institution policy.
- All courses 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**

AREAS OF EMPHASIS

Arts and Humanities:

[A301/18041/4903.10/24.0103]

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**
Arabic	**1, 2, 3, 4**
Art	**10, 12, 14, 16, 18, 20, 44, 63**
Art History	**3, 5, 7, 9, 11, 19**
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
French	**1, 2**
History	**1, 2, 4, 7, 16, 20, 40**
Humanities	**5, 6, 20**
Interior Design	11, 12
Music	**2A, 2B, 4, 5, 6, 7, 8, 21, 22, 26**
Philosophy	**70, 72, 73, 75, 76, 77, 78, 80, 81, 82**
Photography	**1, 7, 9, 10**
Spanish	**1, 2, 3, 3SS, 4, 4SS, 8, 13, 14, 16**
Theatre	**1, 4, 5, 10, 12**

Social & Behavioral Sciences:

[A302/18042/4903.30/24.0103]

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.

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
Criminal Justice	**1**
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, 19, 20, 21, 25, 40, 50, 51, 70, 71**
Political Science	**1, 2,** 3, **4, 7, 10, 21, 25, 32**
Psychology	**1,** 5, **20, 21, 25, 41, 65, 80**
Social Science	**10, 17**
Sociology	**10, 14, 15, 16, 18, 25, 26, 70, 80**

Mathematics & Science:

[A303/18043/4902.00/30.0101]

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.

Anthropology	**1** or **1+1L**
Astronomy	**26, 35**
Biology	**1, 2, 3, 10, 12, 14, 20, 22 23** or **23+23L, 61, 62, 63**
Chemistry	**7, 8, 9, 10, 12, 24A, 24B, 70, 75A, 75B**
Computer Science	**1, 2, 3, 4**
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**
Mathematics (beyond Intermediate Algebra)	**4, 25,** 31, **61, 65A, 65B, 75, 81, 85**
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**

Business & Technology

[A304/18044/4999.00/30.9999]

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**
Automotive Technology	10
Broadcasting	3, 55, 60, 62
Business	**10**
Business: Legal Studies	**28A, 28B**
Business: Management	11, **40**
Business and Office Technologies	61, 64A
Computer Information Systems	**1,** 4
CIS: Programming	**1, 3**
Computer Science	**1, 2, 3**
Criminal Justice	**1, 2, 4,** 51
Drafting	20, 21
Economics	**2, 4**
Fashion Design	40, 61, 65
Fashion Merchandising	**10,** 11, 15, **60**
Hotel and Food Service Management	10, 17, 18, 21, 22
Interior Design	10, 21
Mathematics	**3, 60**
Nutrition and Food	**5, 15**
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 2018, Spring 2019, and Summer 2019 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 certificates.

500-599
Non degree applicable foundational and college preparatory courses are not part of the associate degrees nor 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

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.

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.

Limitations on Enrollment
Some courses have limitations on enrollment. These limitations may require corequisites (concurrent enrollment in other courses), prerequisites (successful completion of other courses or specified assessment scores for English, math, and/or English as a second language), performance criteria, health and safety conditions, or prior acceptance into specified programs. Students not meeting the conditions imposed by these requirements may be unable to register for or may be dropped from any class for which requirements have not been met. 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.

University of California credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus.

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 is not intended for student use. An asterisk (*) following the number indicates a vocational education discipline.

ACCOUNTING - ACCTG

ACCTG-1A FINANCIAL ACCOUNTING (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Advisory: CIS-1 Introduction to Computer Information Systems or BUSOT-63 Microsoft Office Excel - Comprehensive
Development and communication of financial information that is useful to investors, creditors, and others to make decisions. Course material covered includes the accounting environment, accounting cycle, application of generally accepted accounting principles, ethics, financial statements, operating, investing, and financing activities.
(C-ID ACCT 110) *TOP Code: 0502.00 - Accounting*

ACCTG-1B MANAGERIAL ACCOUNTING (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Advisory: CIS-1 Introduction to Computer Information Systems Or experience using spreadsheets.
Prerequisite: ACCTG-1A Financial Accounting
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 cost terms and concepts, cost behavior, cost control, cost-volume-profit analysis, profit planning and performance analysis in manufacturing & service environments.
(C-ID ACCT 120) TOP Code: 0502.00 – Accounting

ACCTG-70 COST ACCOUNTING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: ACCTG-1B Managerial Accounting
Fundamentals of cost accounting including theoretical concepts, terminology, planning, controlling, and costing for products, services, and customers. Using cost accounting theoretical concepts, students will perform comparative analyses related to product costing for manufacturing, merchandising, and service companies. Students will also evaluate both quantitative and qualitative data to assist management with strategic decision-making, planning, and control.
TOP Code: 0502.00 - Accounting

ACCTG-430 ACCOUNTING FOR GOVERNMENTAL AND NOT-FOR-PROFIT ORGANIZATIONS (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ACCTG-1A Financial Accounting
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.
TOP Code: 0502.00 - Accounting

ACCTG-435 PAYROLL ACCOUNTING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: ACCTG-1A Financial Accounting ACCTG-480 Applied Accounting I or ACCTG-481 Applied Accounting II
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.
TOP Code: 0502.00 - Accounting

ACCTG-460 COMMERCIAL ACCOUNTING SOFTWARE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: ACCTG-1A Financial Accounting CIS-1 Introduction to Computer Information Systems
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.
TOP Code: 0502.00 - Accounting

ACCTG-480 APPLIED ACCOUNTING I (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0502.00 - Accounting

ACCTG-481 APPLIED ACCOUNTING II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ACCTG-480 Applied Accounting I
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.
TOP Code: 0502.00 - Accounting

ACCOUNTING AND FINANCIAL PLANNING - ACCTGFS

ACCTGFS-440 INTRODUCTION TO FINANCIAL PLANNING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0504.00 - Banking and Finance

ACCTGFS-442 FUNDAMENTALS OF FINANCE AND INVESTING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0504.00 - Banking and Finance

ACCTGFS-453 U.S. AND CALIFORNIA INCOME TAX PREPARATION (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0502.10 - Tax Studies

ACCTGFS-465 FINANCIAL ACCOUNTING FOR THE NON-ACCOUNTING MAJOR (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0502.00 - Accounting

AMERICAN SIGN LANGUAGE - ASL

ASL-1 ELEMENTARY AMERICAN SIGN LANGUAGE (4)
Lecture 64 - 76 hours. Laboratory 192 - 228 hours.
Grading: Letter Grade (CSU; UC)
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. 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 ASL.

ASL-2 ELEMENTARY AMERICAN SIGN LANGUAGE (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ASL-1 Elementary American Sign Language 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. Ten hours of supplemental learning in a Success Center that supports this course is required.

ASL-3 INTERMEDIATE AMERICAN SIGN LANGUAGE (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ASL-2 Elementary American Sign Language 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. Ten hours of supplemental learning in a Success Center that supports this course is required.

ASL-4 INTERMEDIATE AMERICAN SIGN LANGUAGE (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ASL-3 Intermediate American Sign Language
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. Ten hours of supplemental learning in a Success Center that supports this course is required.

ASL-18 INTRODUCTION TO DEAF STUDIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ASL-1 Elementary American Sign Language
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.

ANTHROPOLOGY - ANTHRO

ANTHRO-1 INTRODUCTION TO BIOLOGICAL ANTHROPOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Eligibility for ENGL-1A as determined by the Chaffey assessment process.
This course introduces the concepts, methods of inquiry, and scientific explanations for biological evolution and their application to the human species. Issues and topics will include, but are not limited to, genetics, evolutionary theory, human variation and bio cultural adaptations, comparative primate anatomy and behavior, and the fossil evidence for human evolution. The scientific method serves as foundation of the course. (C-ID ANTH 110)

ANTHRO-1L LABORATORY FOR BIOLOGICAL ANTHROPOLOGY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Corequisite: ANTHRO-1 Introduction to Biological Anthropology (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.
(C-ID ANTH 115 L)

ANTHRO-2 INTRODUCTION TO ARCHAEOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Other: Eligibility for ENGL-1A as determined by the Chaffey assessment process.
This course is an introduction to the study of concepts, theories, data and models of anthropological archaeology that contribute to our knowledge of the human past. The course includes a discussion of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. (C-ID ANTH 150)

ANTHRO-3 INTRODUCTION TO SOCIAL AND CULTURAL ANTHROPOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Other: Eligibility for ENGL-1A as determined by the Chaffey assessment process.
This course explores how anthropologists study and compare human culture. Cultural anthropologists seek to understand the broad arc of human experience focusing on a set of central issues: how people around the world make their living (subsistence patterns); how they organize themselves socially, politically and economically; how they communicate; how they relate to each other through family and kinship ties; what they believe about the world (belief systems); how they express themselves creatively (expressive culture); how they make distinctions among themselves such as through applying gender, racial and ethnic identity labels; how they have shaped and been shaped by social inequalities such as colonialism; and how they navigate culture change and processes of globalization that affect us all. Ethnographic case studies highlight these similarities and differences, and introduce students to how anthropologists do their work, employ professional anthropological research ethics and apply their perspectives and skills to understand humans around the globe. May be offered as an Honors course. (C-ID ANTH 120)

ARABIC - ARABIC

ARABIC-1 ELEMENTARY MODERN STANDARD ARABIC (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
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. Ten hours of supplemental learning in a Success Center that supports this course is required for reinforcement of language skills. Corresponds to the first year of high school Arabic.

ARABIC-2 ELEMENTARY MODERN STANDARD ARABIC (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ARABIC-1 Elementary Modern Standard Arabic 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. Ten hours of supplemental learning in a Success Center that supports this course is required for reinforcement of language skills. Corresponds to the second year of high school Arabic.

ARABIC-3 INTERMEDIATE MODERN STANDARD ARABIC (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ARABIC-2 Elementary Modern Standard Arabic or 2 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. Ten hours of supplemental learning in a Success Center that supports this course is required.
TOP Code: 1112.00 - Arabic

ARABIC-4 INTERMEDIATE MODERN STANDARD ARABIC (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ARABIC-3 Intermediate Modern Standard Arabic
Continued study of Modern Standard Arabic leading to a more accurate understanding and use of the language through placing equal 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.

ART - ART

ART-10 FUNDAMENTALS OF DESIGN IN TWO DIMENSIONS (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression. (C-ID ARTS 100)

ART-12 FUNDAMENTALS OF DESIGN IN THREE DIMENSIONS (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ART-10 Fundamentals of Design in Two Dimensions
Introduction to the fundamentals of design in three-dimensions with applications in a variety of sculptural media. Emphasis on the basic elements and organizing 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, innovative techniques, and manipulation of media in the development of three-dimensional projects.
(C-ID ARTS 101) TOP Code: 1002.00 - Art (Painting, Drawing, and Sculpture)

ART-14 INTRODUCTION TO DRAWING (3)
Lecture 24 - 29 hours. Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU; UC)
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 media.
(C-ID ARTS 110)

ART-15 COLOR THEORY (3)
Lecture 24 - 29 hours. Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU; UC)
A study of the principles, theories, and applications of additive and subtractive color in two dimensions. Topics include major historical and contemporary color systems, production of projects in applied color, and the elements of design as they apply to color. (C-ID ARTS 270)

ART-16 INTRODUCTION TO PAINTING (3)
Lecture 24 - 29 hours. Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ART-14 Introduction to Drawing or ART-10 Fundamentals of Design in Two Dimensions
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. (C-ID ARTS 210)

ART-18 INTRODUCTION TO CERAMICS (3)
Lecture 24 - 27 hours. Laboratory 72 - 81 hours.
Grading: Letter Grade (CSU; UC)
Introduction to materials, tools, and processes used in making pottery and other ceramic art. Student learns use of potter's wheel, hand building, glazing techniques, and traditional ceramics terminology as well as contemporary concepts of fired clay as art.
TOP Code: 1002.30 - Ceramics

ART-20 CERAMIC SCULPTURE (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to 3 dimensional design, sculptural processes, concepts, and materials with the emphasis on clay.
TOP Code: 1002.20 - Sculpture

ART-30 FIGURE DRAWING (3)
Lecture 24 - 29 hours. Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ART-14 Introduction to Drawing
Drawing the human form from the model with a focus on structure, anatomy, and its expressive design with particular emphasis on descriptive, interpretive, and contemporary approaches to drawing the figure as well as conceptual strategies. Includes exploration of various methods, techniques, and media in life drawing.
(C-ID ARTS 200) TOP Code: 1002.10 - Painting and Drawing

ART-32 INTERMEDIATE DRAWING (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ART-14 Introduction to Drawing
Exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of color media, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. Students encouraged to develop work for a portfolio. (C-ID ARTS 205)

ART-34 INTERMEDIATE PAINTING (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ART-10 Fundamentals of Design in Two Dimensions
Prerequisite: ART-16 Introduction to Painting
Continued study of painting in acrylic media. Emphasis placed on solving complex formal and conceptual problems. Individual research in contemporary painting practices. Students encouraged to develop work for a portfolio.
TOP Code: 1002.10 - Painting and Drawing

ART-35 INTERMEDIATE CERAMICS (3)
Lecture 24 - 27 hours. Laboratory 72 - 81 hours.
Grading: Letter Grade
Prerequisite: ART-18 Introduction to Ceramics
Projects designed to further the student's ability to understand and manipulate clay and glazes at the intermediate level. Use of different types of kiln firings, as well as techniques and vessels appropriate for 2nd semester studies. This is primarily dealing with fabrication on the wheel, but also may include slip casting projects and beginning glaze experimentation/mixing.
TOP Code: 1002.30 - Ceramics

ART-40 ADVANCED CERAMICS (3)
Lecture 24 - 27 hours. Laboratory 72 - 81 hours.
Grading: Letter Grade
Advisory: ART-35 Intermediate Ceramics
Prerequisite: ART-20 Ceramic Sculpture
Exploration of more in depth wheel and off-wheel sculptural projects. Attention is given towards the development of personal aesthetic and conceptual focus. Designed to prepare students for portfolio development.
TOP Code: 1002.30 - Ceramics

ART-44 MIXED-MEDIA STUDIO AND THEORY (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade
Advisory: ART-12 Fundamentals of Design in Three Dimensions
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 and may include fiber, metal, wood, plastic, and found objects. Emphasis on technical processes, conceptual strategies, and personal expression.
TOP Code: 1002.00 - Art (Painting, Drawing, and Sculpture)

ART-50 INTRODUCTION TO SCULPTURE (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade
Advisory: ART-12 Fundamentals of Design in Three Dimensions
Introduction to three-dimensional sculptural principles, techniques, and concepts utilizing a wide range of materials and practices in three and four dimensions. Various sculpture methods are practiced with attention to creative self-expression and historical context.
TOP Code: 1002.20 - Sculpture

ART-62A ILLUSTRATION I (3) [CX]
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: ART-16 Introduction to Painting or ART-10 Fundamentals of Design in Two Dimensions
Prerequisite: ART-14 Introduction to Drawing
Introduction to the field of illustration. Emphasis on the development of basic skills in traditional media and understanding fundamental concepts of visual communication.
TOP Code: 1013.00 - Commercial Art

ART-62B ILLUSTRATION II (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: ART-62A Illustration I
Techniques and concepts in different major areas of illustration. Emphasis on developing creative problem-solving skills to effectively communicate ideas and concepts using traditional media.
TOP Code: 1030.00 - Graphic Art and Design

ART-63 INTRODUCTION TO GRAPHIC DESIGN (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
An Introduction to visual communications in the field of graphic design. The course includes: concept development, the creative design process, production, and presentation techniques through the development of design projects on various media using Adobe Photoshop and Illustrator. Design and production skills including beginning computer software skills.

Students develop conceptual and technical abilities to amplify content through composition, image, typography, symbolism and experimentation. Emphasis will be placed on the application of basic design principles to graphic design problems in visual communications. Design solutions will explore the potential of strategy, concept, and design utilizing composition, layout, illustration, photography, typography, and symbology. Exercises emphasize the different aspects of analytical and creative design through typical media, for example: a brochure, poster, or advertising billboard.

Topics include: Fundamental studies in the history, theories, techniques, and practices of professional graphic design, developing graphic design projects for traditional and emerging technologies.
This course aligns with ARTS 250
TOP Code: 0614.60 - Computer Graphics and Digital Imagery

ART-73 TYPOGRAPHY AND LAYOUT (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ART-63 Introduction to Graphic Design or ART-82 Introduction to Digital Media
Introduction to the principles and practice of the most universally important skills in the design field. Typography and page composition for all design contexts. Projects are directed toward both print media and screen-based projects presentations.

ART-82 INTRODUCTION TO DIGITAL MEDIA (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ART-10 Fundamentals of Design in Two Dimensions And basic keyboarding skills are recommended.
Introduction to design and development of time based digital media. Course will cover motion graphics, video, animation, sound, social media and web uploading using Adobe After Effects, Premiere Pro, Photoshop, and Illustrator.

ART-83 WEB DESIGN (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: ART-82 Introduction to Digital Media
Prerequisite: ART-63 Introduction to Graphic Design
Introduction to design and production of Websites using Adobe Muse, Animate, Flash, Photoshop and Illustrator. Topics include dynamic typography, interface design, streaming video, web animation, social media integration, and portfolio production for the web.

ART-89 STUDENT INVITATIONAL EXHIBITION (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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 1st. Portfolios and applications are due early November.
Honors course for highly motivated studio art, digital media, and photography students who meet portfolio requirements. This course involves 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 collaboration 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.
TOP Code: 1001.00 - Fine Arts, General

ART-98ABC INDEPENDENT STUDY: ART (1 - 3)
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Instructor signature is required for registration.
Course is designed for the capable, highly-motivated art student who wishes to explore and develop an independent project in the visual arts. Student and instructor must reach agreement concerning the topic and scope of the project prior to student's registration. Critical thinking and technical skills are expected.

ART-407 HISTORY OF DESIGN (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

ART-484 MOTION GRAPHIC ANIMATION (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ART-63 Introduction to Graphic Design or ART-82 Introduction to Digital Media
Introduction motion graphics animation for design production. Course will cover the use of Adobe After effects as it applies to motion graphics, visual effects, compositing, and animation. Topics include, motion typography, stop motion, reel production, timing, organization and workflow management.

ART-474 IDENTITY SYSTEM DESIGN (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ART-73 Typography and Layout
The creation of visual identity programs, also known as branding, provides integrated graphic and typographic systems for identifying businesses and organizations in all media and communication contexts. It explains the formal and conceptual organizing considerations that effective branding systems are built on, from initial visual research and concept generation, to final implementation. This course is a final portfolio development class for all Digital Media certificate and degree programs.

ART-478 ILLUSTRATION ON THE COMPUTER (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ART-82 Introduction to Digital Media or ART-63 Introduction to Graphic Design
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.
TOP Code: 0614.60 - Computer Graphics and Digital Imagery

ART-482 EDITING DIGITAL MEDIA (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: ART-82 Introduction to Digital Media or ART-63 Introduction to Graphic Design
Introduction to editing techniques for digital media production. Course will cover the use of Adobe Premiere Pro in conjunction with digital SLR's and digital audio field recorders. Topics include the history and theories of sound, film, and video art, process and production of time-based media, reel production, timing, organization and workflow management.

ART-488 PORTFOLIO AND PRESENTATION (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: and Completion of a substantial number of required courses in an art, graphic communication, or visual communications major or certificate.
Limitation on Enrollment (e.g. Performance tryout or audition): Instructor signature must be obtained prior to enrollment in this course.
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.

ART HISTORY - ARTH

ARTH-3 SURVEY OF WESTERN ART FROM PREHISTORY THROUGH THE MIDDLE AGES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.
(C-ID ARTH 110)

ARTH-5 SURVEY OF WESTERN ART FROM RENAISSANCE TO CONTEMPORARY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the architecture, sculpture, and art of past cultures of the Western World from 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. *(C-ID ARTH 120)*

ARTH-7 ARTS OF AFRICA, OCEANIA, AND INDIGENOUS NORTH AMERICA (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of visual and material culture within the historical context of selected civilizations of the South Pacific islands, sub-Saharan Africa, and indigenous North America from ancient to modern times. *(C-ID ARTH 140)*

ARTH-9 ART OF THE ANCIENT AMERICAS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of visual and material culture within the historical context of selected ancient American civilizations in Mexico, Central America, and South America up to European contact. *(C-ID ARTH 145)*

ARTH-11 SURVEY OF ASIAN ARTS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the art, architecture, religion, and history of India, south and southeast Asia, China, Korea, and Japan from prehistory to modern times. 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.
(C-ID ARTH 130) TOP Code: 1001.00 - Fine Arts, General

ARTH-19 CONTEMPORARY ART: 1945-PRESENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course focuses on the major artistic developments in the United States and Europe from the end of World War II to the present. Tracing the shift away from traditional painting and sculpture to new mediums including performance, video, installation and photography, this course examines these art practices in the context of historical events and cultural phenomena including the Cold War and Vietnam Wars, the expansion of mass media and consumerism, the emergence of social liberation movements (including Civil Rights, Feminist, and Chicano), and the globalization of the world economies and art networks.

ASTRONOMY - ASTRON

ASTRON-26 STARS AND GALAXIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Overview of the universe beyond our solar system. Understand progressively larger structures in Astronomy, such as stars, galaxies, and extra-galactic structures by understanding the processes that shape them. Use observations (from telescopes, spacecraft, neutrino and gravity wave detectors, etc.) the scientific method, and basic physical concepts. Briefly consider relativity, black holes, spacetime, and the history and fate of the universe.
TOP Code: 1911.00 - Astronomy

ASTRON-27 LIFE IN THE UNIVERSE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Study of extraterrestrial life in the Universe. Includes scientific methods for finding extraterrestrial life, the conditions and processes relevant to life in the Universe, and the origin and evolution of life on Earth.
TOP Code: 1911.00 - Astronomy

ASTRON-35 PLANETS AND THE SOLAR SYSTEM WITH LAB (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

AUTOMOTIVE TECHNOLOGY - AUTOTEC

AUTOTEC-10 Service and Repair (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Introduction to the automotive service industry. Basic principles of the operation of engines, transmissions, driveline, steering, suspension and braking systems, and heating and air conditioning systems. Scheduled and preventative automotive maintenance and minor services are performed. Students also develop a written career plan, outlining their educational, certification, and licensing goals.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-15 Auto Electricity and Electronics (2) [CX]
Lecture 24 - 29 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Basic automotive electricity and electronics. Diagnosis of typical automotive electrical concerns using wiring diagrams/schematics and various testers. Emphasis on the use of digital multimeters for troubleshooting. Foundation course for electricity and electronics subject matter found in other automotive technology courses.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-407 Introduction to Hybrid Vehicles (2.5)
Lecture 24 - 27 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A and AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-455 General Automotive Technician B - 2 years or more of related professional work experience.
An introduction to the operational theory, maintenance, and other service requirements for gasoline-electric hybrid vehicles. Safety requirements specific to hybrid vehicles are stressed.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-416 Basic Automotive Air Conditioning Systems (2) [CX]
Lecture 24 - 27 hours. Laboratory 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A and AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-455 General Automotive Technician B
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-417 Brakes (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: AUTOTEC-10 Service and Repair and AUTOTEC-15 Auto Electricity and Electronics
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-418 Suspension and Steering Systems (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: AUTOTEC-10 Service and Repair and AUTOTEC-15 Auto Electricity and Electronics
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-422 Fuel, Ignition, and Emission Control Systems (5) [CX]
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A and AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-429 Advanced Automotive Electrical Systems or AUTOTEC-455 General Automotive Technician B
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-423 Engine Management Systems and Drivability (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-422 Fuel, Ignition, and Emission Control Systems or AUTOTEC-455 General Automotive Technician B
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-427 Engine Operation and Service (5) [CX]
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-429 ADVANCED AUTOMOTIVE ELECTRICAL SYSTEMS (4) [CX]
Lecture 40 - 48 hours. Laboratory 72 - 86 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-455 General Automotive Technician B
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-430 ENGINE REBUILDING - UPPER ENGINE (5)
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-431 ENGINE REBUILDING - LOWER ENGINE (5)
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-432 MANUAL AND AUTOMATIC TRANSMISSIONS, TRANSAXLES AND DRIVE TRAINS (5) [CX]
Lecture 48 - 54 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A and AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-429 Advanced Automotive Electrical Systems or AUTOTEC-455 General Automotive Technician B
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 exam.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-435 HIGH PERFORMANCE ENGINE REBUILDING AND BLUEPRINTING (5)
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: AUTOTEC-430 Engine Rebuilding - Upper Engine and AUTOTEC-431 Engine Rebuilding - Lower Engine
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-443 ENGINE AND EMISSION CONTROL TRAINING LEVEL 1 (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AUTOTEC-10 Service and Repair or AUTOTEC-450 General Automotive Technician A and AUTOTEC-15 Auto Electricity and Electronics or AUTOTEC-455 General Automotive Technician B
The Engine and Emission Control Training is intended to provide students with fundamental knowledge of engine and emission control theory, design, and operation. Students who successfully complete this training will have met the first step of the Bureau of Automotive Repair's (BAR) training requirements for inexperienced or minimally experienced candidates for the Smog Check Inspector License.
Candidates for the Smog Check Inspector license who do not meet BAR specified requirements must complete this training before proceeding to Level 2 Smog Check Training. Candidates who meet the BAR specified requirements are not required to complete this training.
BAR specified requirements: Possess ASE A6, A8, and L1 certification; or possess an AA/AS degree or Certificate in automotive technology and have 1 year experience; or have 2 years' experience and have completed BAR specified training.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-450 GENERAL AUTOMOTIVE TECHNICIAN A (12)
Lecture 144 - 171 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0948.00 - Automotive Technology

AUTOTEC-455 GENERAL AUTOMOTIVE TECHNICIAN B (12)
Lecture 144 - 171 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0948.00 - Automotive Technology

AVIATION MAINTENANCE TECHNOLOGY - AMT

AMT-15 INTRODUCTION TO AVIATION MAINTENANCE FOR AIRFRAME AND POWERPLANT (14)
Lecture 144 - 162 hours. Laboratory 240 - 270 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0950.00 - Aeronautical and Aviation Technology

AMT-16A AVIATION MATERIALS, PROCESSES, INSPECTIONS & REGULATIONS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
General aeronautics laboratory course to fulfill FAA practical aeronautical applications in aerodynamics, FAA and manufacturer's publications, aircraft materials and processes, blueprint reading, aircraft servicing and mathematics.
TOP Code: 0950.00 - Aeronautical and Aviation Technology

AMT-16B AVIATION SCIENCE (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
General aeronautics laboratory course to fulfill FAA practical aeronautical applications in physics, weight and balance, electricity and mathematics.
TOP Code: 0950.00 - Aeronautical and Aviation Technology

AMT-25 POWERPLANT: AIRCRAFT RECIPROCATING ENGINES (7)
Lecture 72 - 81 hours. Laboratory 120 - 135 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Theory, fundamentals, construction, maintenance, and operation of reciprocating and turbojet aircraft engines. Related training for the FAA powerplant maintenance technician's license. Lab emphasizes reciprocating engine overhaul, repair, installation and operation.

AMT-26 POWERPLANT: ENGINE INSTRUMENTATION, LUBRICATION, ELECTRICAL (7)
Lecture 72 - 81 hours. Laboratory 120 - 135 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Aircraft reciprocating engine instrumentation, lubrication systems, electrical and ignition systems. Lab emphasizes reciprocating engine instrumentation and ignition systems overhaul, repair, installation and operation.

AMT-27 POWERPLANT: RECIPROCATING ENGINE FUEL & AUXILIARY SYSTEMS (7)
Lecture 72 - 86 hours. Laboratory 120 - 143 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Aircraft reciprocating engine fuel, propeller, and auxiliary systems overhaul, repair, installation, and operation. Lab emphasizes engine induction, cooling, and exhaust systems.

AMT-28A POWERPLANT: RECIPROCATING ENGINE INSPECTION (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-25 Powerplant: Aircraft Reciprocating Engines (May be taken previously)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Powerplant laboratory course to fulfill FAA practical applications relating to aircraft reciprocating engine inspection, air worthiness directives, and type certificate data sheet compliance. Projects include reciprocating engine on wing inspection (50 and 100 hour) for continued air worthiness and air worthiness directive and type certificate data sheet compliance.

AMT-28B POWERPLANT: ELECTRICAL SYSTEMS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-26 Powerplant: Engine Instrumentation, Lubrication, Electrical
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Powerplant laboratory course to fulfill FAA practical applications relating to aircraft powerplant electrical systems. Projects include engine starters, generators and their controls.

AMT-28C POWERPLANT: TURBINE ENGINE AUXILIARY SYSTEMS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-27 Powerplant: Reciprocating Engine Fuel & Auxiliary Systems
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Powerplant laboratory course to fulfill FAA practical applications relating to aircraft turbine engine auxiliary systems. Projects include turbine engine indicating, ignition, lubrication and fuel systems.

AMT-35 AIRFRAME STRUCTURES: FABRICATION, INSPECTION AND REPAIR (7)
Lecture 72 - 81 hours. Laboratory 120 - 135 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Aircraft metallic and non-metallic structural fabrication, inspection, and repair methods. Related training for FAA airframe maintenance technician's license. Lab emphasizes sheet metal fabrication and repair, composite structures inspections, welding, and alignment of airframe structures.

AMT-36 AIRFRAME PRIMARY SYSTEMS (7)
Lecture 72 - 81 hours. Laboratory 120 - 135 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Aircraft electrical, hydraulic and landing gear systems. Related training for FAA airframe maintenance technician's license. Lab emphasizes electrical and hydraulic landing gear systems, lighting systems.

AMT-37 AIRFRAME SECONDARY SYSTEMS (7)
Lecture 72 - 81 hours. Laboratory 120 - 135 hours.
Grading: Letter Grade (CSU)
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Ice and rain protection systems; fire warning and extinguishing systems; pressurization systems; cockpit instrument systems; avionics systems; oxygen system inspection; antiskid warning systems; door warning lights; interior light systems. Related training for FAA airframe maintenance technician's license. Lab emphasizes Ice and rain protection systems; fire warning and extinguishing systems; pressurization systems; cockpit instrument systems; avionics systems; oxygen system inspection; antiskid warning systems; door warning lights; interior light systems.

AMT-38A AIRFRAME STRUCTURE: STRUCTURE FABRICATION (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-35 Airframe Structures: Fabrication, Inspection and Repair
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Airframe laboratory course to fulfill FAA practical applications relating to fabricating airframe structural components, paint application techniques, and inspections of painted surfaces.

AMT-38B AIRFRAME STRUCTURE: HYDRAULIC SYSTEMS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-36 Airframe Primary Systems
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Airframe laboratory course to fulfill FAA practical applications relating to inspection, operation, and repair of aircraft hydraulic landing gear systems.

AMT-38C AIRFRAME STRUCTURE: AIRCRAFT SECONDARY SYSTEMS AND COMPONENTS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: AMT-37 Airframe Secondary Systems
Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant
Airframe laboratory course to fulfill FAA practical applications relating to the proper inspection, operation, and repair of fire-warning/fire extinguishing systems, ice warning systems, and anti-skid systems.

AMT-400 AIRCRAFT ELECTRICAL AND AVIONICS THEORY, REPAIR AND TROUBLESHOOTING (5)
Lecture 64 - 76 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: AMT-37 Airframe Secondary Systems
This class is a skills building course in the field of Aviation Maintenance Technology. It builds upon the skills and knowledge of the general aviation and airframe programs of study. This course covers the theory, inspection, repair and the diagnosis of modern aircraft electrical/avionics systems. Emphasis placed on electrical wiring interface system (EWIS), communication, navigation and data transmission systems used on general and commercial aviation, drones, and unmanned aerial vehicles (UAVs). This course content provides the knowledge to pass the NCATT (National Center for Aerospace and Transportation Technologies) AET (Aircraft Electronics Technician) test and receive the AET certification. The NCATT curriculum is the recognized leading standard in this area. The aviation industry and our advisory committee has identified the need for aviation technicians to have this advanced knowledge beyond the FAA AMT requirements.
TOP Code: 0950.40 - Aircraft Electronics (Avionics)

BIOLOGY - BIOL

BIOL-1 GENERAL BIOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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.

BIOL-2 ENVIRONMENTAL BIOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.
TOP Code: 0301.00 - Environmental Science

BIOL-3 CALIFORNIA NATURAL HISTORY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

BIOL-10 CONCEPTS IN BIOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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.
TOP Code: 0401.00 - Biology, General

BIOL-12 INTRODUCTION TO HUMAN GENETICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

BIOL-14 HEALTH SCIENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Human health and wellness. Topics include mental health, nutrition, abuse of drugs, alcohol and tobacco, sexually transmitted diseases and other communicable and non-communicable diseases, physical fitness, and many other aspects of positive health. May satisfy the health education unit requirement for a teaching credential in the state of California.

BIOL-20 HUMAN ANATOMY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition Eligibility for English 1A as determined by the Chaffey assessment process.
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or ENGL-495 College Reading and Writing
A systematic study of the microscopic and macroscopic structures of the human body, from cellular to organ system levels of organization. Emphasis on cell structures, integumentary, skeletal, muscular, respiratory, cardiovascular, nervous, sensory, digestive, urinary, endocrine, and reproductive systems. Includes considerations of pathologies and disorders of these systems. This course is a CalState/UC transferable course which is intended for biology, general education, kinesiology and health related majors. (C-ID BIOL 110B)

BIOL-22 HUMAN PHYSIOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: BIOL-20 Human Anatomy and CHEM-9 Health Science Chemistry or CHEM-10 Introductory Chemistry 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. The course includes the study of the physiological principles, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system, and organism level. The Lab emphasizes experimentation and scientific reasoning. (C-ID BIOL 120 B)

BIOL-23 GENERAL MICROBIOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: BIOL-22 Human Physiology or BIOL-61 Introduction to Cell and Molecular Biology
Introduction to microbiology, with strong emphasis on microorganisms pathogenic to humans. Topics include microbial morphology, genetics, taxonomy, and metabolism; infectious disease process; mechanisms of controlling microbes; and immunology.

BIOL-23L GENERAL MICROBIOLOGY LABORATORY (2)
Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU; UC)
Corequisite: BIOL-23 General Microbiology (may be taken previously).
Introduction to microbiology laboratory techniques. Methods of culturing, staining, biochemically analyzing, and classifying microorganisms.

BIOL-30 BEGINNING MEDICAL TERMINOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

BIOL-61 INTRODUCTION TO CELL AND MOLECULAR BIOLOGY (5)
Lecture 64 - 72 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or or eligibility for Math 25 as determined by the Chaffey assessment process MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra and CHEM-10 Introductory Chemistry or completion of 1-year of high school chemistry
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. (C-ID BIOL 190)

BIOL-62 BIOLOGY OF ORGANISMS (5)
Lecture 48 - 54 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: BIOL-61 Introduction to Cell and Molecular Biology
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. (C-ID BIOL 140)

BIOL-63 EVOLUTIONARY ECOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: BIOL-61 Introduction to Cell and Molecular Biology
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. (C-ID BIOL 130 S, when combined with BIOL 62)
TOP Code: 0401.00 - Biology, General

BIOL-92A-H SPECIAL TOPICS: BIOLOGY (1)
Lecture 16 - 18 hours.
Grading: Letter Grade (CSU)
Other: Requisites may be imposed for topics that call for specific preparation.
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.
TOP Code: 0401.00 - Biology, General

BIOL-92LA-H SPECIAL TOPICS LABORATORY: BIOLOGY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Other: Requisites may be imposed for topics that call for specific preparation.
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. No individual topic subject may be repeated.
TOP Code: 0401.00 - Biology, General

BIOL-98ABC INDEPENDENT STUDY: BIOLOGY (1 - 3)
Grading: Letter Grade (CSU)
Advisory: Students should have completed a transfer level course in biology
Limitation on Enrollment (e.g. Performance tryout or audition): Instructor signature is required for registration.
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.
TOP Code: 0401.00 - Biology, General

BIOL-424 ANATOMY AND PHYSIOLOGY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BIOL-30 Beginning Medical Terminology
Human anatomy and physiology with emphasis on the structures and functions of the organ systems. Course is primarily intended for students entering related vocational programs.

BIOL-424L ANATOMY AND PHYSIOLOGY LABORATORY (1)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BIOL-30 Beginning Medical Terminology
Corequisite: BIOL-424 Anatomy and Physiology (may be taken previously).
Laboratory investigation of anatomy and physiology of organ systems from cell through system levels. Course is primarily intended for students entering related vocational programs.

BROADCASTING - BRDCAST

BRDCAST-3 INTRODUCTION TO ELECTRONIC MEDIA (3)
Lecture 48 - 54 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (CSU)
This course introduces the history, structure, function, economics, content and evolution of radio, television, film, the Internet, and new media, including traditional and mature formats. The social, political, regulatory, ethical and occupational impact of the electronic media are also studied.

BRDCAST-55 BEGINNING AUDIO PRODUCTION (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
This course serves as an introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Principles of digital audio production, digital recording, microphone use and placement, sound effects, audio mixing and sound design and aesthetics. Practical experience with microphones, multi-track digital audio recording and mixing, editing, mastering and control-board cueing. Digitizing and mixing compact disc, DVD, audio/video, and analog sources with music, spoken word, voice-over narration, and sound effects. Integration of sound design in motion pictures, television and the media arts. General F.C.C. rules and regulations pertinent to the broadcast industry. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. (C-ID FTVE 120)

BRDCAST-60 BEGINNING SINGLE CAMERA PRODUCTION (3) [CX]
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Knowledge of Macintosh computer keyboarding is recommended.
The course provides an introduction to the theory, terminology, and operation of high definition single camera video production, including composition and editing techniques, camera operation, portable lighting, video recorder operation, audio control and basic editing. This course focuses on the aesthetics and fundamentals of scripting, producing, directing on location, postproduction, and exhibition/distribution. Overview of crew positions and production protocols for Electronic Field Production (EFP), Electronic News Gathering (ENG), commercial, public service announcement, and short dramatic stories. (C-ID FTVE 130)

BRDCAST-62 BEGINNING TV STUDIO PRODUCTION (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Possession of basic computer skills.
This course introduces theory, terminology and operation of a multi-camera television studio and control room. Topics include studio signal flow, directing, theory and operation of camera and audio equipment, switcher operation, fundamentals of lighting, graphics, video control and video recording and real-time video production.
Additional topics include: lighting board operation, video signal engineering, multi-camera line switching techniques for live broadcasts. 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. (C-ID FTVE 135)

BRDCAST-67 BEGINNING RADIO PRODUCTION (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Introductory course in theory and application of audio production techniques for radio. Students will gain a basic understanding of audio equipment in both live and pre-recorded broadcasting. This includes recording equipment, mixers, digital audio production, radio program formats, broadcast writing and announcing skills.
Production of various live radio broadcasts on Chaffey College radio, and automated media programming. Application of radio production techniques in audio board operation, produce Internet audio/radio streaming audio, digital multi-track recording, mixing and editing. Study of current FCC rules and regulations. Students examine and explore radio programming concepts, focusing on aesthetics, creating content, announcing, and produce weekly radio broadcasts. (C-ID FTEV 125)

BRDCAST-70 POSTPRODUCTION FOR BROADCASTING & CINEMA (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

BRDCAST-74 HIGH DEFINITION CINEMATOGRAPHY (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Basic computer skills are recommended.
Visual theory, techniques, and methodology of high-definition cinematography applied to the production of dynamic television stories. Integration of Advanced Television Systems Committee (ATSC) broadcast technologies with widescreen videography. Emphasis on aesthetic enhancements in the writing, production and editing of single camera produced stories. Students collaboratively produce and/or edit a high-definition video project.

BUSINESS - BUS

BUS-10 Introduction to Business (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
A survey in business providing a multidisciplinary examination of how culture, society, economic systems, legal, international, political, financial institutions, and human behavior interact to affect a business organization's policy and practices within the U.S. and a global society. Demonstrates how these influences impact the primary areas of business including: organizational structure and design; leadership, human resource management, organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, financial practices; the stock and securities market; and therefore affect a business ability to achieve its organizational goals. (C-ID BUS 110)

BUS-49 Business Decisions Using Basic Quantitative Tools (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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 course work. Students must supply their own business calculator.

BUS-60 Business Ethics (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Exploration of various theories and commonly occurring business ethics issues. Systems approaches for making business decisions that are responsible, practical, and defendable. Benefits of implementing value-based business strategies to achieve competitive advantage and profits. Course focus is on systemic implementation of ethical and socially responsible tools, and the integration of ethics into workplace operations.
TOP Code: 0506.00 - Business Management

BUS-61 Introduction to Global Business (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Overview of global business concepts and decision-making, with an emphasis on cultural differences. Analyze the social, cultural, legal, environmental, political, technological, and competitive trends within international business and examine the operation and performance of multinational corporations.
TOP Code: 0508.00 - International Business and Trade

BUS-88 Business Communication (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: ENGL-1A Composition
Study and application of the principles of ethical and effective business communication. Emphasis on planning, organizing, composing and revising business documents and presentations using word processing software for written documents, and presentation-graphics software to create and deliver professional-level oral reports. Stress on development of writing fluency, professional tone and use of proper grammar in routine business communications, including letters, memoranda, business reports (both written and oral), and e-mail. Introduction to business research and the job application process. (C-ID BUS 115)

BUS-496ABCD Internships in Business (1 - 4)
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of Business program coordinator is required for registration.
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. Occupational work experience courses may be repeated any number of times and in any unit combination not exceeding eight units per semester and sixteen units total for all types of work experience instruction.

BUSINESS LEGAL STUDIES - BUSL

BUSL-10 Introduction to Law and the Legal Process (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for ENGL-1A as determined by the Chaffey assessment.
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or ENGL-495 College Reading and Writing
Exploration of the roles of the law, the courts, and the participants in our legal system. Examination of legal institutions and practices. Analysis of substantive laws -- from torts and contracts to consumer protection and civil rights -- and their effects. Consideration of the impact of individual plaintiffs, defendants, lawyers and jurists on the law and our legal system.
TOP Code: 1401.00 - Law, General

BUSL-28A Business Law I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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, tort law, constitutional law, tort law, agency, business organizations, and criminal law as applied to business.
(C-ID BUS 125) TOP Code: 0505.00 - Business Administration

BUSL-28B Business Law II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: BUSL-28A Business Law I
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.
TOP Code: 0505.00 - Business Administration

BUSL-50 Legal Aspects of Real Estate (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: RE-10 Real Estate Principles
Introductory course to acquaint students with current California real estate law, with emphasis on its application in real estate brokerage, legal, and related fields. Course is applicable toward the educational requirements for broker's license and real estate salesperson's license.
TOP Code: 0511.00 - Real Estate

BUSL-400 INTRODUCTION TO PARALEGAL STUDIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

BUSL-401 LEGAL RESEARCH AND WRITING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSL-400 Introduction to Paralegal Studies and BUSOT-455 Fundamentals of English for Business and
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.

BUSL-402 CIVIL LITIGATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSL-400 Introduction to Paralegal Studies and BUSL-28A Business Law I
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.

BUSL-403 EVIDENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSL-400 Introduction to Paralegal Studies
Prerequisite: BUSL-28A Business Law I
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.

BUSL-404 LAW OFFICE OPERATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60B Microsoft Office Word - Expert and BUSL-400 Introduction to Paralegal Studies
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.

BUSL-405 LEGAL DOCUMENT PREPARATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-40A Beginning Computer Keyboarding
Creation of legal documents using word processing software. Focus on creation of litigation documents, correspondence, contracts, memoranda, and other legal documents. Creation of pleading captions, tables of contents, tables of authorities, pleading paper, headers, footers, office forms, etc. Students will also learn to edit, format, proof, save, and print legal documents.
TOP Code: 1402.00 - Paralegal

BUSL-406 ADVANCED LEGAL RESEARCH AND WRITING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSL-401 Legal Research and Writing
Advanced legal research, writing, and analysis for the paralegal. This course builds on the skills acquired in BUSL 401. Students will refine legal analysis and citation skills, conduct legal research, and prepare sophisticated legal documents. Projects may include memoranda of points and authorities, office memoranda, client letters, briefs, motions, stipulations, judicial orders, and contracts.
TOP Code: 1402.00 - Paralegal

BUSL-407 CRIMINAL LAW & PROCEDURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Basic principles of criminal and criminal procedure law for the paralegal. Study of the constitutional, statutory and rule-based issues that arise in criminal law and the formal processing of criminal cases. Topics include: the elements of common law felonies and misdemeanors, the principal defenses to criminal charges, key provisions of the Fourth, Fifth, Sixth, and Fourteenth Amendments, the pretrial and trial process, sentencing, appeals, and remedies for constitutional violations. These topics are examined from the perspectives of lawyers, paralegals, and jurists on criminal law and the criminal procedure law.
TOP Code: 1402.00 - Paralegal

BUSL-408 BANKRUPTCY AND DEBTOR/CREDITOR RELATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSL-28A Business Law I
Fundamentals of debt and debtor creditor relations, including debt creation, secured transactions, liens, and debt collection. Study of federal Bankruptcy Law and Bankruptcy procedures, including discharge, and reorganization. The paralegal's role in Bankruptcy Law practice.
TOP Code: 1402.00 - Paralegal

BUSL-409 FAMILY LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Basic principles of California family law for the paralegal. Topics include rights of parents and minor children, adoption, divorce, child custody, visitation, marital property rights, spousal and child support, family law litigation.
TOP Code: 1402.00 - Paralegal

BUSL-410 INTERNATIONAL BUSINESS LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUS-61 Introduction to Global Business
Legal aspects and ramifications of international trade. Multinational enterprises, sovereignty, technology transfer, arbitration, negotiation and diplomacy.
TOP Code: 0508.00 - International Business and Trade

BUSL-411 ESTATE PLANNING AND PROBATE LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Fundamentals of estate planning and probate law for paralegals. Topics include estate planning, intestate succession, wills, trusts, community property, joint tenancy, guardianships and conservatorships, and powers of attorney.
TOP Code: 1402.00 - Paralegal

BUSL-412 IMMIGRATION LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSL-400 Introduction to Paralegal Studies
Fundamentals of Immigration Law for Paralegals. Topics include client selection and interviewing, temporary and permanent visas, residency, preferences, asylum, citizenship, courts, agencies, immigration forms, and ethical issues for paralegals in immigration practice.
TOP Code: 1402.00 - Paralegal

BUSL-413 WORKERS' COMPENSATION LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSL-28A Business Law I
Fundamentals of Workers' Compensation law for the paralegal. Topics include types of injuries and benefits, claims, medical treatment, benefits, litigation, appeals, settlement, and the paralegal's role in a workers' compensation practice.
TOP Code: 1402.00 - Paralegal

BUSL-435 THE LAW OF MARKETING AND BUSINESS COMPETITION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSL-28A Business Law I
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.
TOP Code: 0509.00 - Marketing and Distribution

BUSINESS AND OFFICE TECHNOLOGIES - BUSOT

BUSOT-40A BEGINNING COMPUTER KEYBOARDING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Beginning course in computer keyboarding with mastery of the alphabetic and numeric keyboard and correct touch-typing techniques. Introduction to the personal computer, word processing, disk management, and formatting of basic business correspondence.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-40B COMPUTER KEYBOARDING: SPEED AND ACCURACY DEVELOPMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding or Equivalent Experience - (e.g., high school coursework or experience in a certain profession)
Develop computer literacy. Analyze, evaluate, and improve keyboarding speed and accuracy using correct keyboarding techniques. Intense review of letters, numbers, symbols, 10-key, and the production of basic reports, business letters, and memoranda.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-50 FILING AND RECORDS MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0514.40 - Office Management

BUSOT-60A MICROSOFT OFFICE WORD - SPECIALIST (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding
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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-60B MICROSOFT OFFICE WORD - EXPERT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding
Limitation on Enrollment (e.g. Performance tryout or audition): and Equivalent full-year high school or a full-semester college course, or Word Specialist MOS Certification.
Prerequisite: BUSOT-60A Microsoft Office Word - Specialist or
A hands-on approach to advanced formatting features of Microsoft Word: Customizing and streamlining using macros, building blocks, quick parts, autocorrect, themes, styles, and templates; creating multiple-page business documents using tabling features, indexes, page numbering, tables and charts, and reference citations; and using reviewing tools for adding comments and tracking in shared documents. Computer assignments are a required part of this course.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-61 MICROSOFT OFFICE POWERPOINT (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding and BUSOT-60A Microsoft Office Word - Specialist
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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-62 MICROSOFT OFFICE OUTLOOK (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding or - A minimum keyboarding speed of 20 words per minute.
Hands-on introduction to 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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-63 MICROSOFT OFFICE EXCEL - COMPREHENSIVE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-40A Beginning Computer Keyboarding and BUSOT-60A Microsoft Office Word - Specialist
This module integrates the spreadsheet application (MS Excel) into the MS Office suite, 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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-64 MICROSOFT OFFICE ACCESS-COMPREHENSIVE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSOT-63 Microsoft Office Excel - Comprehensive
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. 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.

BUSOT-400 JOB SEARCH AND INTERVIEWING TECHNIQUES (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60A Microsoft Office Word - Specialist
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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-410 MS PUBLISHER COMPREHENSIVE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60A Microsoft Office Word - Specialist
This hands-on course covers full-featured desktop publishing software and introduces the beginning and advanced concepts. Emphasis is in desktop publishing for business, featuring terminology, software, hardware, catalogs, magazines, editing, printing text, tables, graphics, style sheets and master pages, special effects, templates, scanned images, and formatting and managing long documents.

BUSOT-452 OFFICE FINANCIAL BOOKKEEPING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Bookkeeping procedures to broaden the skills of the office professional in 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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-455 FUNDAMENTALS OF ENGLISH FOR BUSINESS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-460 PROOFREADING: TEXT-EDITING SKILLS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60A Microsoft Office Word - Specialist and Or concurrent enrollment in BUSOT-455 Fundamentals of English for Business
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.
TOP Code: 0514.00 - Office Technology/Office Computer Applications

BUSOT-462 DIGITAL TRANSCRIPTION AND VOICE RECOGNITION SOFTWARE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-40A Beginning Computer Keyboarding and BUSOT-60A Microsoft Office Word - Specialist and Or concurrent enrollment in BUSOT-460 Proofreading: Text-Editing Skills
Development of a marketable skill in digital 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.

BUSOT-470 OFFICE SYSTEMS AND PROCEDURES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60A Microsoft Office Word - Specialist and
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.
TOP Code: 0514.40 - Office Management

BUSOT-471 ADMINISTRATIVE OFFICE MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-60A Microsoft Office Word - Specialist BUSOT-40B Computer Keyboarding: Speed and Accuracy Development
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.
TOP Code: 0514.40 - Office Management

BUSOT-475 MEDICAL OFFICE PROCEDURES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BIOL-30 Beginning Medical Terminology BUSOT-40A Beginning Computer Keyboarding or BUSOT-40B Computer Keyboarding: Speed and Accuracy Development and BUSOT-470 Office Systems and Procedures
A focus on the career of a medical front office assistant. Topics include: meeting the patient, scheduling appointments, EHR (Electronic Healthcare Records), storage, management, healthcare coding, billing, telemedicine, collection, financial records, reimbursement medical law, ethics, HIPAA (Privacy & Security), data entry using flow sheets, anatomical drawings, accreditation regulation, and quality improvement.

BUSINESS AND OFFICE TECHNOLOGIES: MEDICAL CODING AND BILLING - BUSOTMD

BUSOTMD-408 CODING OF BODY SYSTEMS FOR MEDICAL BILLING AND CODING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BIOL-30 Beginning Medical Terminology
This course is designed for individuals pursuing careers in medical administration. The purpose of this course is to learn the appropriate medical codes and terminology assigned to body systems. Medical coders apply case scenario coding and management of medical record abstracting.
TOP Code: 1223.10 - Health Information Coding

BUSOTMD-410 CPT CURRENT PROCEDURAL TERMINOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BIOL-30 Beginning Medical Terminology
Procedural Coding class presents an overview of nomenclature and classification systems, with focus on coding clinical and procedural information from medical records. Introduction to the Common Procedural Terminology contains instruction in coding procedures, sequencing and coding conventions. Review of procedural codes by procedure or service, organ or other anatomic site, condition, synonyms, eponyms, and abbreviations. Coding software applications is introduced.

BUSOTMD-420 BASIC ICD-10-CM CODING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: BUSOTMD-408 Coding of Body Systems for Medical Coding and Billing (may be taken previously).
Prerequisite: BIOL-30 Beginning Medical Terminology
Beginning coding class presents overview of nomenclature and classification systems, with focus on coding outpatient and inpatient clinical information from medical records. Introduction to the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM); contains instruction in coding diagnoses, outpatient and inpatient, sequencing and coding conventions. Review of complications and co-morbidities. Coding software applications introduced.

BUSOTMD-430 INTERMEDIATE LEVEL ICD-10-CM, ICD-10-PCS CODING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSOTMD-410 Basic CPT-4 Coding and BUSOTMD-420 Basic ICD-9-CM Coding
Advanced coding class addressing more complex issues related to ICD-10-CM coding, and ICD-10-PCS coding. Focus on using actual medical records in applying learning at a higher coding skill level. Computerized encoders and groupers emphasized. Coding software application introduced. Ambulatory Patient Classifications (APCs) and Resource-Based Relative Value Scales (RBRVs) also covered.

BUSOTMD-440 MEDICAL BILLING, REIMBURSEMENT, AND COMPLIANCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: BUSOTMD-430 Intermediate Level ICD-9-CM and CPT4 Coding
Comprehensive study of medical claim forms for payment and reimbursement for all types of payers, as well as translating medical procedures, prescriptions, and diagnoses into a code within the healthcare industry. Coursework taught from the practitioner's perspective, focuses on skills and coding competencies used with updated curriculum covering the latest coding standards such as ICD-10-CM, CPT, and HCPCS.

BUSINESS: MANAGEMENT - BUSMGT

BUSMGT-11 RETAIL MERCHANDISING AND MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Role of retailing in serving the needs of the community. Analysis of consumer needs, store location, financial requirements, and legal process of starting a retail operation. Planning for store layout, merchandise mix, vendor negotiation, pricing, displaying, advertising, selling, and controlling of merchandise.

BUSMGT-13 SUPPLY CHAIN MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0510.00 - Logistics and Materials Transportation

BUSMGT-14 TRANSPORTATION MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0510.00 - Logistics and Materials Transportation

BUSMGT-40 INTRODUCTION TO MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0506.00 - Business Management

BUSMGT-42 HUMAN RESOURCE MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUSMGT-40 Introduction to Management
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.

BUSMGT-44 INTRODUCTION TO HUMAN RELATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Assists the individual in the business organization in understanding the group and individual dynamics, perception, conflict, motivation, leadership, influence, and authority relationships and the causation of behavior.

BUSMGT-45 SMALL BUSINESS OWNERSHIP AND MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

BUSMGT-48 QUALITY MANAGEMENT PRINCIPLES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
For individuals who want to understand and improve existing processes. Implementation of continuous improvement and the understanding of the various quality philosophies and tools. Basic principles, objectives, and policies of a Quality Management program.

BUSMGT-430 WAREHOUSE MANAGEMENT AND MATERIAL HANDLING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade
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.

BUSMGT-440 PRINCIPLES OF LEADERSHIP (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
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.

BUSMGT-436 INTRODUCTION TO LOGISTICS MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0510.00 - Logistics and Materials Transportation

BUSMGT-466 INTRODUCTION TO PROJECT MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
A comprehensive, integrative understanding of effectively and efficiently defining, planning, scheduling, budgeting, managing risk, and executing major projects in order to increase an organization's competitive advantage.
TOP Code: 0506.30 - Management Development and Supervision

BUSMGT-470 ESSENTIALS OF FACILITIES MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
A study of the basic concepts that describe the field of facility management and how it can be of value to an organization. This course reviews a leader's role in tactical planning for how to schedule and accomplish daily facility management tasks that support the operation of an organization's facilities.
TOP Code: 0506.30 - Management Development and Supervision

BUSMGT-480 PRINCIPLES OF SUPERVISION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSMGT-40 Introduction to Management or BUSMGT-48 Quality Management Principles or BUS-60 Business Ethics
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.

BUSINESS: MARKETING - BUSMKT

BUSMKT-13 PROFESSIONAL SELLING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Concepts and techniques used to sell ideas, products and services, especially the psychological and social aspects of persuasion. Effective tactics in prospecting, pre-approach 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.
TOP Code: 0509.40 - Sales and Salesmanship

BUSMKT-40 MARKETING PRINCIPLES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: BUS-10 Introduction to Business
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.
TOP Code: 0509.00 - Marketing and Distribution

BUSMKT-402 INTRODUCTION TO IMPORT/EXPORT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUS-61 Introduction to Global Business 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.
TOP Code: 0508.00 - International Business and Trade

BUSMKT-405 INTERNATIONAL MARKETING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUS-61 Introduction to Global Business 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.

BUSMKT-55 ADVERTISING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

CHEMISTRY - CHEM

CHEM-7 CHEMISTRY IN EVERYDAY LIFE WITH LAB (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Completion of Math 520 or Math 420 or Math 450 or eligibility for Math 25.
Prerequisite: or 1-year high school algebra MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
General Education science course designed for non-science major students who are seeking a lab science course. The course is an 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 will provide hands-on activities to teach laboratory skills and support the concepts presented in the lecture.

CHEM-8 CHEMISTRY IN SOCIETY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: and Completion of Math 420 or Math 450 or eligibility for Math 25 ENGL-495 Fundamentals of College Reading and Writing or ENGL-495 College Reading and Writing
Prerequisite: or 1 year high school algebra MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
General Education science course designed for non-science major students who are seeking a science course without a lab. The course is an 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. (C-ID CHEM 100)

CHEM-9 HEALTH SCIENCE CHEMISTRY (5)
Lecture 64 - 76 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Completion of Math 25
Prerequisite: or Eligibility for Math 25 MATH-425 Intermediate Algebra or MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra
This course is for students completing a certificate program or associate degree in a health science such as Vocational Nursing, Radiological Technology, and Associate Degree Nursing. The course is an introduction to the principles of chemistry including inorganic chemistry, organic chemistry, and biochemistry. Topics covered include measurements, properties and classification of matter, atomic structure, bonding and nomenclature, chemical equations, stoichiometry, gas laws, solutions, acids, bases and pH, equilibrium, nuclear chemistry, and organic and biochemical structure and reactions. Laboratory work will provide hands-on activities to teach laboratory skills and support the concepts presented in the lecture. This course is not intended for science majors.

CHEM-10 INTRODUCTORY CHEMISTRY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Completion of Math 450 or Math 420 and MATH 420B or eligibility for Math 25.
Prerequisite: or 1 year of high school algebra - or Eligibility for MATH 450 or MATH 420 and MATH 420B as determined by the Chaffey assessment process MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
Introduction to the principles of chemistry with an emphasis on measurements, atomic and molecular structure, classification of matter, nomenclature, stoichiometry, chemical equations, gas laws, solutions and acid-base chemistry. Laboratory activities emphasize proper techniques, safety procedures, and experimental exercises in support of lecture content. (C-ID CHEM 102)

CHEM-12 ELEMENTARY ORGANIC AND BIOCHEMISTRY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: CHEM-10 Introductory Chemistry
This course is primarily intended for transfer students pursing degrees in health science areas such as bachelor degrees in Nursing, Dental Hygiene, Dietitian, and other health science related degrees. The course is a survey of organic chemistry and biochemistry with a focus on biological applications and an emphasis on cellular and organism chemistry. Topics covered include organic functional groups, nomenclature, structure and reactions of organic compounds, structure and biological importance of carbohydrates, lipids, amino acids, proteins, nucleic acids, DNA, and RNA. Laboratory work will provide hands-on activities to teach laboratory skills and support the concepts presented in the lecture. This course is not intended for science majors.

CHEM-24A GENERAL CHEMISTRY I (5)
Lecture 48 - 54 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Completion or concurrent enrollment of Math 25.
Prerequisite: CHEM-10 Introductory Chemistry and or completion of 1-year of high school chemistry MATH-425 Intermediate Algebra or MATH-450 Intermediate Algebra: A Critical Thinking Approach or eligibility for Mathematics 25 as determined by the Chaffey Assessment MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra
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. (C-ID CHEM 102)

CHEM-24B GENERAL CHEMISTRY II (4)
Lecture 48 - 54 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MATH-25 College Algebra Completion or concurrent enrollment
Prerequisite: CHEM-24A General Chemistry I
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.

CHEM-70 QUANTITATIVE ANALYSIS (4)
Lecture 32 - 36 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHEM-24B General Chemistry II
Quantitative Analysis is for science majors and meets the requirements for chemistry majors, pre-med students, and pre-dentistry students. Topics include: Introduction to the methods of gravimetric, volumetric, electrochemical techniques, separation techniques, and instrumental analysis. Parallels the quantitative analysis usually offered in the sophomore year in most four-year colleges and universities.

CHEM-75A ORGANIC CHEMISTRY I (5)
Lecture 64 - 72 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHEM-24B General Chemistry II
This is the first semester in a year-long course in organic chemistry designed for students majoring in science and engineering. Topics cover major classes of organic compounds: aliphatic hydrocarbons; alkyl halides; alcohols; and ethers. This includes nomenclature, structure and stereochemistry, properties, reactions, mechanisms, and spectroscopy. Laboratory provides hands-on activities on the basic techniques of organic chemistry including synthesis, separation, purification, and analysis by using various spectroscopic methods. (C-ID CHEM 150)

CHEM-75B ORGANIC CHEMISTRY II (5)
Lecture 64 - 72 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHEM-75A Organic Chemistry I
This course is a continuation of Chem 75A expanding the study of organic chemistry to include aromatic compounds, introduction to organometallic compounds, aldehydes and ketones, carboxylic acids and their derivatives, enolates, amines, and introduction to biochemistry. Topics include nomenclature, structure and stereochemistry, properties, reactions, and mechanisms. Laboratory work emphasizes the techniques of organic synthesis, purification, qualitative analysis, and analysis by using various spectroscopic methods.

CHILD DEVELOPMENT AND EDUCATION - CDE

CDE-1 PRINCIPLES & PRACTICES IN EARLY CHILDHOOD EDUCATION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Developmentally appropriate practices applied to programs, environments, emphasizing the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative, and intellectual development for all children. This course includes a review of the historical roots of early childhood programs and the evolution of the professional practices promoting advocacy, ethics, and professional identity.
(C-ID ECE 120) TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-2 CHILD GROWTH AND DEVELOPMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Proof of negative tuberculosis test within the past 12 months may be required for some site visits.
This introductory course examines the major physical, psychosocial, and cognitive/language developmental milestones for children, both typical and atypical, from conception through adolescence. There will be an emphasis on interactions between maturational processes and environmental factors. While studying developmental theory and investigative research methodologies, students will observe children, evaluate individual differences and analyze characteristics of development of various stages.
(C-ID CDEV 100) TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-3 OBSERVATION AND ASSESSMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play, and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored.
(C-ID ECE 200) TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-4 CHILD, FAMILY, AND COMMUNITY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
An examination of the developing child in a societal context focusing on the interrelationship of family, school, and community and emphasizing historical and socio-cultural factors. The processes of socialization and identity development will be highlighted, showing the importance of respectful, reciprocal relationships that support and empower families.
(C-ID CDEV 110) TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-5 HEALTH, SAFETY AND NUTRITION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health safety and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children.
(C-ID ECE 220) TOP Code: 1305.40 - Preschool Age Children

CDE-6 TEACHING IN A DIVERSE SOCIETY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Proof of a negative tuberculosis test within the past 12 months may be required for some site visits.
Examination of the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms, and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Course includes self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, media and schooling.
(C-ID ECE 230) TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-7 CURRICULUM DEVELOPMENT: THE CREATIVE ARTS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.
TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-8 CURRICULUM DEVELOPMENT: MATH AND SCIENCES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Proof of 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.
TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-23 INTRODUCTION TO CHILDREN WITH SPECIAL NEEDS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Proof of negative tuberculosis test within the past 12 months may be required for some site visits.
Prerequisite: CDE-2 Child Growth and Development
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.
TOP Code: 1305.20 - Children with Special Needs

CDE-24 INTRODUCTION TO CURRICULUM THEORY (2)
Lecture 32 - 38 hours.
Grading: Letter Grade (CSU)
Corequisite: CDE-24W Practicum I: Supervised Occupational Work Experience and
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative tuberculosis test within the past 12 months is required AND - students must present proof of immunization for measles, pertussis and influenza administered within the previous 12 months.
Prerequisite: CDE-1 Principles & Practices in Early Childhood Education and CDE-2 Child Growth and Development and CDE-3 Observation and Assessment and CDE-4 Child, Family, and Community and
Principles of early childhood growth and development as they apply to appropriate curriculum design. Curriculum planning of cognitive, physical, social, emotional, cultural, creative, and language arts lesson plans for developmentally appropriate environments.
(C-ID ECE 130, when combined with CDE-24W)

CDE-24W PRACTICUM I: SUPERVISED OCCUPATIONAL WORK EXPERIENCE (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter Grade (CSU)
Corequisite: CDE-24 Introduction to Curriculum Theory and
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative tuberculosis test within the past 12 months is required AND - students must present proof of immunization for measles, pertussis and influenza administered within the previous 12 months.
Other: 60 hours unpaid supervised practicum in various community child development programs.
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. (C-ID ECE 130, when combined with CDE-24)

CDE-25 ADVANCED CURRICULUM THEORY (2)
Lecture 32 - 38 hours.
Grading: Letter Grade (CSU)
Corequisite: CDE-25W Practicum II: Supervised Occupational Work Experience and
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative tuberculosis test within the past 12 months is required AND - students must present proof of immunization for measles, pertussis and influenza administered within the previous 12 months.
Prerequisite: CDE-24 Introduction to Curriculum Theory and CDE-24W Practicum I: Supervised Occupational Work Experience and CDE-1 Principles & Practices in Early Childhood Education and CDE-2 Child Growth and Development and CDE-4 Child, Family, and Community
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. (C-ID ECE 210, when combined with CDE-25W)

CDE-25W PRACTICUM II: SUPERVISED OCCUPATIONAL WORK EXPERIENCE (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter Grade (CSU)
Corequisite: CDE-25 Advanced Curriculum Theory
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative tuberculosis test within the past 12 months is required AND - students must present proof of immunization for measles, pertussis and influenza administered within the previous 12 months. Other: 60 hours supervised practicum in various community child development programs.
Prerequisite: CDE-1 Principles & Practices in Early Childhood Education and CDE-2 Child Growth and Development and CDE-4 Child, Family, and Community and CDE-24 Introduction to Curriculum Theory and CDE-24W Practicum I: Supervised Occupational Work Experience
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.
(C-ID ECE 210, when combined with CDE-25)

CDE-415 DYNAMICS OF PLAY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-416 BRAIN RESEARCH AND THE IMPLICATIONS FOR CLASSROOM TEACHING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CDE-2 Child Growth and Development - 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.
TOP Code: 1305.00 - Child Development/Early Care and Education

CDE-430A INFANT AND TODDLER: GROUP CAREGIVING I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CDE-2 Child Growth and Development - 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.

CHINESE - CHIN

CHIN-1 ELEMENTARY MANDARIN CHINESE I (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Introduction to Mandarin Chinese, taught within the context of Chinese culture. Introduction to the customs, cultural practices, and geography of China through lectures, films, web activities, and reading assignments. Focus on the four major skills of language learning - listening comprehension, speaking, reading, and writing - and the grammar and vocabulary necessary to acquire these skills. 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.

CHIN-2 ELEMENTARY MANDARIN CHINESE II (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHIN-1 Elementary Mandarin Chinese I 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.

CHIN-3 INTERMEDIATE MANDARIN CHINESE I (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHIN-2 Elementary Mandarin Chinese II or
This course is the 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 is required in the Success Center that supports this course.

CHIN-4 INTERMEDIATE MANDARIN CHINESE II (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHIN-3 Intermediate Mandarin Chinese I
This course is the 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 is required in the Success Center that supports this course.

CHIN-18 CHINESE CIVILIZATION AND CULTURE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course is a general introduction to the basic components of Chinese culture as it has developed over the last five thousand years. Topics to be addressed will include the major philosophical thoughts of Taoism, Confucianism, and Buddhism; practices to promote health such as the Martial Arts, Kong Fu, herbal medicine, and acupuncture; customs and festivals like the Chinese Lunar New Year's Day and the Mid-Autumn Moon holiday; their varying and diverse culinary habits, and their rich and illustrious art forms of poetry, painting, and calligraphy. Both historical developments and contemporary tribulations will be examined, through selected readings, movies, video clippings, field trips, as well as class discussions in different formats. This course does not presume prior knowledge of China or the Chinese language.

CINEMA - CINEMA

CINEMA-20 SCREENWRITING - CINEMA (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Comprehensive overview of scriptwriting for motion pictures and cinematic 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. Various screenwriting software applications are utilized to format, chart, outline, storyboard, and write dynamic stories for motion pictures and cinematic formats.

CINEMA-22 INTRODUCTION TO MEDIA WRITING (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Basic keyboarding.
Basic introductory course in writing for film, television, documentary and electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction screenplays for informational and entertainment purposes in television and electronic media. Includes a writing evaluation component as a significant part of the course requirement.

CINEMA-25 SURVEY OF WORLD CINEMAS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Historical introduction of motion pictures as an art form, through the study and viewing of international cinematic works. Development of motion pictures as an evolving art and its influence on cinematic story-telling and related visual media. Focus is on the methods of decoding universal signs, symbols, metaphors, and the semiotics of motion picture imagery. Examines the impact of significant producers, directors, writers, cinematographers, and cinematic innovations.

CINEMA-26 SURVEY OF AMERICAN CINEMA (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Analysis and discussion of the portrayals of African Americans, Asians, Latinos, Native Americans and other American national cultures including representations of class, gender and issues of diversity. Historical overview on the birth of American cinema, silent movie classics, silent comedies and story structure of the Hollywood hero. General topics are: the studios, directors, stars, westerns, musicals, gangster, science fiction, film noir, animation and independent features and short movies.

CINEMA-30 BEGINNING MOTION PICTURE PRODUCTION (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
This course provides an introduction to the theory, terminology, and process of motion picture production for film and television. Topics include basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, and editing.
Classic movie making techniques are combined with digital and/or Pro 8mm cameras and other technologies to achieve a 'cinematic look' to assigned projects. (C-ID FTVE 150)

CINEMA-80 PRODUCING FOR BROADCAST AND CINEMA (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
An in-depth exploration and discussion on producing content for the broadcast and cinema industries. Topics include various programming in the broadcasting, motion picture, corporate and entertainment industry. Students create professional cover letter and resume. Prepares students to plan and achieve educational and career goals in broadcasting, motion picture, media and entertainment industry.

CINEMA-96 INTERNSHIPS IN CINEMA, TELEVISION OR RADIO (3)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Pass/No-Pass (CSU)
Prerequisite: CINEMA-30 Beginning Motion Picture Production or CINEMA-80 Producing for Broadcast and Cinema or BRDCAST-55 Beginning Audio Production or BRDCAST-60 Beginning Single Camera Production or BRDCAST-62 Beginning TV Studio Production or BRDCAST-67 Beginning Radio Production or BRDCAST-70 Postproduction for Broadcasting & Cinema or BRDCAST-74 High Definition Cinematography
Supervised field experience in motion pictures, television, radio, cable station, or other business related to the field of broadcasting and cinema. Course is designed to apply knowledge and learn new skills outside of the normal classroom environment. Placement is initiated by student and arranged through the instructor. Participation requirements may vary with internship field work and job duties. One course unit will equal 60 hours of volunteer/unpaid work OR one unit will equal 75 hours of paid work, with a maximum of 8 units per semester. Students may earn up to a total of 16 semester credit hours. Student repetition is allowed per Title 5 section 55253.

COMMUNICATION STUDIES - COMSTD

COMSTD-2 FUNDAMENTALS OF EFFECTIVE SPEAKING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Assessment Level: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English 495 or English as a Second Language 475.
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. (C-ID COMM 110)

COMSTD-4 FUNDAMENTALS OF INTERPERSONAL COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: ENGL-1A Composition
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. (C-ID COMM 130)

COMSTD-6 FUNDAMENTALS OF SMALL GROUP COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Principles of communication in a variety of group contexts. Theory, application, and evaluation of group communication processes, including problem solving, conflict management, decision-making, and leadership. 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. (C-ID COMM 140)

COMSTD-8 FUNDAMENTALS OF SPEECH COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This introductory communication course focuses on the basic foundations of interpersonal communication, small group communication and public speaking. Students will be introduced to the breadth of the communication discipline. Additionally, students will examine and practice human communication principles and theories, at a basic level, to develop critical thinking and communication competencies in a variety of contexts. (C-ID COMM 115)

COMSTD-12 MASS COMMUNICATION AND SOCIETY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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. (C-ID JOUR 100)

COMSTD-14 ORAL INTERPRETATION OF LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Theoretical and practical experience in the oral interpretation of prose, poetry, and dramatic literature. In-depth study of the oral and analytical skills required to perform literature and of the critical skills required to evaluate oral interpretation performance. Recommended for students of speech communication studies, theatre, English, and the teaching professions. (C-ID COMM 170) *TOP Code: 1506.00 - Speech Communication*

COMSTD-72 LOGIC AND ARGUMENTATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
The study of argumentation as an oral and written skill with an emphasis on the principles of critical thinking and sound reasoning. Examination of quality and types of evidence, identification of faulty and misleading arguments, and development of techniques for defending and refuting arguments. Social and political issues are the basis for research, analysis, and evaluation. (C-ID COMM 120)

COMSTD-74 INTERCULTURAL COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Assessment Level: Eligibility for ENGL 1A Composition Eligibility for English 1A as determined by the Chaffey assessment process
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. (C-ID COMM 150)

COMSTD-76 GENDER AND COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: COMSTD-8 Fundamentals of Speech Communication and ESL-475 Fundamentals of College Reading and Writing for ESL Students - Eligibility for English 1A as determined by the Chaffey assessment process.
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.

COMSTD-78 FAMILY COMMUNICATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: or Eligibility for Engl-1A as determined by the Chaffey Assessment process ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

COMPUTER INFORMATION SYSTEMS - CIS

CIS-1 INTRODUCTION TO COMPUTER INFORMATION SYSTEMS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware and software components. (C-ID IT IS 120)

CIS-4 FUNDAMENTALS OF MICROSOFT WINDOWS (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 0702.00 - Computer Information Systems

CIS-15 MICROSOFT ACCESS DATABASE DESIGN AND DEVELOPMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-1 Introduction to Computer Information Systems
Microsoft Access database design and development for database administrators responsible for company-wide database access and control.

CIS-50 INTRODUCTION TO COMPUTER NETWORKS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-1 Introduction to Computer Information Systems
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. It uses the OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Preparation for the CompTIA Network+ certification exam. (C-ID ITIS 150)
TOP Code: 0708.10 - Computer Networking

CIS-68 INTERNET TECHNOLOGIES (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (CSU)
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.

CIS-420 COMPUTER SECURITY BASICS (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 0701.00 - Information Technology, General

CIS-421 SOCIAL MEDIA TECHNOLOGY (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Social Media technologies enable individuals to create, collaborate, and share information with audiences of all sizes. Students will explore the possibilities and limitations of social media in the business and Career and Technical Education environments and will gain hands-on experience with several forms of social media technology. Those who complete this course will also learn to use social media productively and have a framework for understanding and evaluating new tools and platforms.

CIS-431 PROJECT MANAGEMENT FOR INFORMATION TECHNOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CIS-1 Introduction to Computer Information Systems
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.
TOP Code: 0707.20 - Database Design and Administration

CIS-435 FUNDAMENTALS OF MICROSOFT VISIO (1.5)
Lecture 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CIS-1 Introduction to Computer Information Systems
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.

CIS-460 FUNDAMENTALS OF CODING (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
A foundation for exploring what coding is, why it is needed, and how it is used in controlling digital technology such as creating computer software, apps, Websites, and the interfacing of devices for the Internet of Things (IoT). Topics include introduction to coding concepts and terminology, types of programming languages, logic, syntax, debugging, hardware, documentation, Internet of Things (IoT), careers in programming, and others.

CIS-496ABCD INTERNSHIPS IN COMPUTER INFORMATION SYSTEMS (1 - 4)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of the Computer Information Systems Program Coordinator is required.
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.

COMPUTER INFORMATION SYSTEMS: GAME DEVELOPMENT - CISGAME

CISGAME-1 FUNDAMENTALS OF GAME DEVELOPMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CIS-1 Introduction to Computer Information Systems
Introduction to the principles of interactive 2D and 3D game development. Work in teams to development game concepts and build prototypes. Topics include: history, hardware, graphics, sound, game genres, design elements, game generation software, game programming, artificial intelligence, and available careers in game development
TOP Code: 0707.00 - Computer Software Development

CISGAME-2 FUNDAMENTALS OF GAME DEVELOPMENT II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CISGAME-1 Fundamentals of Game Development
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; testing; and identifying and fixing bugs.

CISGAME-403 FUNDAMENTALS OF GAME PROGRAMMING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CISGAME-1 Fundamentals of Game Development
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.
TOP Code: 0707.10 - Computer Programming

CISGAME-420 MOBILE/WEB GAME DEVELOPMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CISGAME-1 Fundamentals of Game Development
Programming and Design for mobile and web games. Topics include: fundamentals of games and logic, game development, positioning and movement of elements, Development and comparison of Web tools and mobile emulators, collision detection and reaction, graphics, sound, animations, and testing and debugging projects.
TOP Code: 0707.10 - Computer Programming

COMPUTER INFORMATION SYSTEMS: HARDWARE AND SUPPORT - CISHDSP

CISHDSP-40 MICROCOMPUTER HARDWARE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-1 Introduction to Computer Information Systems
This course provides an introduction to the computer hardware and software skills needed to help meet the growing demand for entry-level ICT professionals. The fundamentals of computer hardware and software as well as advanced concepts such as security, networking, and the responsibilities of an ICT professional will be introduced. 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. Preparation for the CompTIA A+ certification exams.

COMPUTER INFORMATION SYSTEMS: INTERNET AND WEB DEVELOPMENT - CISIWEB

CISIWEB-72 WEB PAGE DEVELOPMENT AND PUBLISHING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: CIS-68 Using the Internet
Basic web page development using HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets). Topics include web site planning, responsive Web page creation, hyperlinks, formatting, graphics, multimedia, tables, scripting, dynamic page creation, and Web publishing.
TOP Code: 0707.10 - Computer Programming

CISIWEB-74 CREATING DYNAMIC WEB CONTENT USING JAVASCRIPT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CISIWEB-72 Web Page Development and Publishing
Creating dynamic multimedia content using Javascript, HTML5, CSS, Canvas, and JQuery. Topics include: integrating JavaScript and HTML, coding, testing, debugging, enhancing the use of images, media, and Web Page objects; and developing online dynamic content and client-side Web applications

CISIWEB-424 WORDPRESS WEB DEVELOPMENT (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CIS-68 Using the Internet
Development of Websites using the WordPress Content Management System (CMS). Includes wordpress.com and wordpress.org, WordPress codex, installation, using the dashboard, navigation, themes, plugins, widgets, organizing content, multimedia, blogs, security, Search Engine Optimization (SEO), troubleshooting, modifying with HTML and CSS, and other topics.

COMPUTER INFORMATION SYSTEMS: NETWORKING - CISNTWK

CISNTWK-11 MICROSOFT NETWORK SERVER (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-50 Introduction to Computer Networks
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.

CISNTWK-12 INTRODUCTION TO NETWORK SECURITY ADMINISTRATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-50 Introduction to Computer Networks
An introduction to the fundamental principles and topics of Information Technology Security and Risk Management at the organizational level. It addresses hardware, software, processes, communications, applications, and policies and procedures with respect to organizational Cybersecurity and Risk Management. Preparation for the CompTIA Security+ certification exams.

CISNTWK-20 INTRODUCTION TO CYBERSECURITY: ETHICAL HACKING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CIS-50 Introduction to Computer Networks and CISNTWK-12 Introduction to Network Security Administration
This course introduces the network security specialist to the various methodologies for attacking a network. Students will be introduced to the concepts, principles, and techniques, supplemented by hands-on exercises, for attacking and disabling a network within the context of properly securing a network. The course will emphasize network attack methodologies with the emphasis on student use of network attack techniques and tools and appropriate defenses and countermeasures.

CISNTWK-413 TCP/IP (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CIS-50 Introduction to Computer Networks
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.
TOP Code: 0708.10 - Computer Networking

COMPUTER INFORMATION SYSTEMS: PROGRAMING - CISPROG

CISPROG-1 INTRODUCTION TO COMPUTER PROGRAMMING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CIS-1 Introduction to Computer Information Systems
Introduction to the principles of computer programming. Topics include the program development life cycle, control structures, syntax and object-oriented programming development. A popular object oriented programming language will be used. (C-ID COMP 112)
TOP Code: 0707.10 - Computer Programming

CISPROG-5 PROGRAMMING WITH PYTHON (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CISPROG-1 Introduction to Computer Programming
Beginning computer application design and construction concepts using Python
programming language. Course includes fundamental concepts of control structures, data structures, and object-oriented programming.

COMPUTER INFORMATION SYSTEMS: PROGRAMMING - CISCO

CISCO-1 CISCO INTERNETWORKING I (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU)
Advisory: CIS-1 Introduction to Computer Information Systems 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. Meets latest CCNA certification requirements.

CISCO-2 CISCO INTERNETWORKING II (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU)
Advisory: CISCO-1 Cisco Internetworking I Or equivalent experience.
Second in a four-course sequence that qualifies students to take the newest Cisco CCENT and CCNA examinations. Topics include: implementing LAN and WAN connectivity using routers and switches, IPv4/IPv6 addressing, network security, access-lists, network protocols such as RIP/EIGRP/OSPF, and troubleshooting. Students gain skills through configuring Cisco devices and managing the software. Comprehensive review of all topics covered in Cisco I and 2.

CISCO-3 CISCO INTERNETWORKING III (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU)
Advisory: CISCO-2 Cisco Internetworking II Or equivalent experience.
Third in a four-course sequence that qualifies students to take the newest Cisco CCNA examination. Topics include: intermediate switching and routing; configuration of routers and switches for wired and wireless networks; Virtual LANs (VLANs), Virtual Trunking Protocol (VTP), Spanning Tree Protocol (STP); advanced IP addressing techniques; Variable Length Subnet Masking (VLSM); intermediate routing protocols such as multi area OSPF, Hot Standby Routing (HSRP), network security/troubleshooting and management issues. Meets latest CCNA certification requirements.

CISCO-4 CISCO INTERNETWORKING IV (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU)
Advisory: CISCO-3 Cisco Internetworking III Or equivalent experience.
Final course in a four-course sequence that qualifies students to take the newest Cisco CCNA examination. Topics include: Network Design/Security policies; advanced LAN/WAN/Wireless technologies; IP addressing techniques; Quality of Service, Monitoring, Troubleshooting, Network Programming, Cloud and Virtualization. Comprehensive review of all topics covered in Cisco I, II, III, and IV courses in preparation for the newest CCNA certification exam.

CISCO-415 CISCO INTERNETWORKING V (4)
Lecture 64 - 76 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-4 Cisco Internetworking IV Or equivalent training/experience.
CCNP ROUTE, Implementing Cisco IP Routing. Course of a three course prep sequence for the newest CCNP examinations. Topics include: CCNA review, overview of converged and scalable routed internetworks. Advanced routing principles/protocols such as EIGRP, multi area OSPF, and BGP for enterprise ISP connectivity. Route features, optimization, manipulating, updates, redistribution, filtering, multi-casting, security and advanced IPv4/IPv6 address management.

CISCO-416 CISCO INTERNETWORKING VI (4)
Lecture 64 - 72 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-2 Cisco Internetworking II or equivalent experience
CCNA Security equips students with the knowledge and skills needed to prepare for the latest CCNA Security certification and entry-level security specialist careers. This course is a hands-on, career-oriented e-learning solution that emphasizes practical experience. Network threats are identified and appropriate technologies such as virtual private networks, firewalls, intrusion prevention/cryptographic systems and security protocols are discussed and used to mitigate.

CISCO-417 CISCO INTERNETWORKING VII (4)
Lecture 64 - 76 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-4 Cisco Internetworking IV Or equivalent training/experience.
CCNP SWITCH, Implementing Cisco Switched Networks. Course of a three course prep sequence for the newest CCNP examinations. Topics include, CCNA review, 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, security issues, port security, root guard, mac flooding, rogue devices, and spoofing. Implement support for wireless and voice over IP (VOIP).

CISCO-418 CISCO INTERNETWORKING VIII (4)
Lecture 64 - 76 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-3 Cisco Internetworking III Or equivalent training/experience.
CCNA Collaboration; voice, video, data and mobile applications implementation in a network. Topics include implementing and optimizing converged networks.
Implement and troubleshoot Cisco Unified Communication and Collaboration, TelePresence, and Digital Media Player in different business video solution a rchitectures. Administrator/end user interfaces, telephony/mobility features, and Cisco UC solutions maintenance.

CISCO-419 CISCO INTERNETWORKING IX (4)
Lecture 64 - 76 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-4 Cisco Internetworking IV or equivalent training/experience
CCNP TSHOOT. Course in a three course prep sequence for the newest CCNP examinations. Extensive CCNA/CCNP review. Skills include monitoring, troubleshooting and maintaining enterprise routed and switched IP networks using technology based practices. Prepares student for the latest externally administered Cisco CCNA Route/Switch and CCNP TSHOOT exams.

CISCO-420 CISCO INTERNETWORKING X (4)
Lecture 64 - 72 hours.
Grading: Letter Grade and Pass/No-Pass
(Degree-applicable)
Advisory: CISCO-2 Cisco Internetworking II Or equivalent experience
Cisco Health Information Networking; equips students with knowledge that can be applied toward entry-level specialist careers in healthcare information/communication technology (ICT) and networking.

COMPUTER SCIENCE - COMPSCI

COMPSCI-1 PROGRAMMING CONCEPTS AND METHODOLOGY I (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: CISPROG-1 Introduction to Computer Programming
Introduces the discipline of computer science using a high level language, utilizing programming and practical hands-on problem solving. Topics include: hardware, software, computer architecture, memory and registers, input-output data operations, storage, information control, problem solving, and Object Oriented Programming. First course in a sequence of courses that is compliant with the standards of the Association for Computing Machinery (ACM) (C-ID COMP 122)

COMPSCI-2 PROGRAMMING CONCEPTS AND METHODOLOGY II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: COMPSCI-1 Programming Concepts and Methodology I
Application of software engineering techniques to the design and development of large programs; data abstraction and structures and associated algorithms (C-ID COMP 132)

COMPSCI-3 COMPUTER ARCHITECTURE AND ORGANIZATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: COMPSCI-1 Programming Concepts and Methodology I
The organization and behavior of real computer systems at the assembly-language level. The mapping of statements and constructs in a high-level language onto sequences of machine instructions is studied, as well as the internal representation of simple data types and structures. Numerical computation is examined, noting the various data representation errors and potential procedural errors. (C-ID COMP 142)

COMPSCI-4 DISCRETE STRUCTURES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-61 Pre-Calculus and COMPSCI-1 Programming Concepts and Methodology I
Fundamental topics for Computer Science, such as logic, proof techniques, set theory, introduction to computer programming, basic counting rules, relations, functions and recursion, graphs and probability trees.
TOP Code: 0706.00 - Computer Science (transfer)

COOPERATIVE EDUCATION - COOPED

COOPED-497ABCD COOPERATIVE EDUCATION: GENERAL WORK EXPERIENCE
(1 - 4)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.
Grading: Letter Grade (Degree-applicable)
Other: Must be employed or have an internship.
Supervised employment which is intended to assist students in achieving job-related learning objectives and acquiring desirable work habits, attitudes, and career awareness. The work experience need not be related to the students' educational goals. Career and professional development include knowledge, judgments, skills and attitudes essential for success in the world of work, and achievement of job related learning objectives. One course unit will equal 60 hours of volunteer/unpaid work experience OR one unit will equal 75 hours of paid work experience, with a maximum of 6 units per semester. Students may earn up to a total of 16 semester credit hours for all types of work experience instruction.
TOP Code: 4932.00 - General Work Experience

CRIMINAL JUSTICE - CJ

While many of the Criminal 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.

CJ-1 INTRODUCTION TO THE CRIMINAL JUSTICE SYSTEM (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces which have shaped those principles and approaches. Although justice structure and process is examined in a cross cultural context, emphasis is placed on the US justice system, particularly the structure and function of US police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies.
(C-ID AJ 110)

CJ-2 CONCEPTS OF CRIMINAL LAW (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CJ-1 Introduction to the Criminal Justice System
Historical development of criminal law, philosophy of law and constitutional provisions, definitions, classification of crime and the application to the criminal justice system. Legal research, study of case law, methodology, and concepts of law as a social force. This course is approved for C-ID AJ-120.

CJ-3 CRIMINAL COURT PROCESS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CJ-1 Introduction to the Criminal Justice System
Step-by-step examination of the criminal prosecution process from pre-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. This course is approved for C-ID AJ-122.

CJ-4 COMMUNITY AND THE JUSTICE SYSTEM (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade
This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics may
include the consensus and conflicting values in Culture, Religion, and Law. Roles of justice system agencies and practitioners, focusing on the interrelationships between the various agencies and their interaction with a diverse multicultural population. Analysis of the differences between community-oriented and problem-solving policing, with emphasis on the resultant public perception and effectiveness of law enforcement actions. This course aligns with C-ID AJ-160.

CJ-5 LEGAL ASPECTS OF EVIDENCE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CJ-1 Introduction to the Criminal Justice System
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. This course aligns with C-ID AJ-124.

CJ-6 JUVENILE PROCEDURES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: CJ-1 Introduction to the Criminal Justice System
This course is an examination of the origin, development, and organization of the Juvenile Justice System as it evolved in the American Justice System. The course explores the theories that focus on Juvenile Law, courts and processes, and the constitutional protections extended to juveniles administered in the American Justice System. This course also includes evaluation of factors that contribute to delinquency, as well as those that aid in its prevention/repression. C-ID AJ-220.

CJ-7 CRIMINAL INVESTIGATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CJ-1 Introduction to the Criminal Justice System
This course addresses the techniques, procedures, and ethical issues in the investigation of crime, including organization of the investigative process, crime scene searches, interviewing and interrogating, surveillance, source of information, utility of evidence, scientific analysis of evidence and the role of the investigator in the trial process. This course also includes the fundamentals of investigation: collection and preservation of physical evidence, scientific aids, modus operandi, sources of information, fingerprints, polygraphs, follow-up, and case preparation. C-ID AJ-140.

CJ-8 CRIMINOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: CJ-1 Introduction to the Criminal Justice System
Sociological analysis of crime, criminal behavior, and the criminal justice system. Explores the history and social construction of crime and criminality and examines the definition of crime and its violations as well as the laws and methods used to control criminal behavior. Discuss measurement of crime and basic theoretical explanations of criminal behavior. C-ID SOCI-160.

CJ-9 CRIME SCENE MANAGEMENT AND FORENSIC EVIDENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: CJ-1 Introduction to the Criminal Justice System
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. C-ID AJ-150.

CJ-10 VIOLENCE IN AMERICA (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.
TOP Code: 2105.10 – Corrections

CJ-51 INTRODUCTION TO CORRECTIONS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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, clients, 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. This course aligns with C-ID AJ-200.

CJ-52 CONTROL AND SUPERVISION OF INMATES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

CJ-53 CORRECTIONAL LAW (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: CJ-51 Introduction to Corrections
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 versus the need to protect society.

CJ-54 PUBLIC RELATIONS AND CORRECTIONS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Various aspects of public relations and methods of communication with the public concerning correctional goals and concepts. Survey of problems and methods of improving attitudes toward correctional programs. Relations with criminal justice agencies including law enforcement and other government organizations, prison-prevention groups, and job-placement services. Designed for both pre-service and in-service personnel.

CJ-55 CRIME AND DELINQUENCY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: CJ-51 Introduction to Corrections
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.

CJ-56 CORRECTIONAL INTERVIEWING AND COUNSELING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

CJ-57 PROBATION AND PAROLE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Overview of the history and philosophical foundations of probation and parole in the United States. Organization and operations of probation and parole agencies as particular segments of the criminal justice system. Probation as part of the judicial process, and parole as part of the corrections system. Theoretical concerns exemplified in probation and parole supervision, as well as the practical aspects of probation and parole services. Review and evaluation of community-based corrections and the programs included in response to criminal behavior. Issues and problems relating to the pre-sentence 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.

CJ-58 ETHNIC GROUP RELATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

CJ-408 PATROL OPERATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CJ-1 Introduction to the Criminal Justice System
Responsibilities, techniques, and methods of police patrol. Topics include: purpose and types of patrol, communications, observations, tactics, recording, courtroom testimony, and community relations.

CJ-410 NARCOTICS AND VICE INVESTIGATION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

CJ-412 WRITING FOR CRIMINAL JUSTICE PROFESSIONALS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: BUSOT-455 Fundamentals of English for Business or ESL-551 English as a Second Language V or
Assessment Level: Or eligibility for ENGL-495 or ESL-475 as determined by the Chaffey assessment process.
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 & 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.

CJ-413 POLICE SUPERVISION, LEADERSHIP AND MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: CJ-408 Patrol Operations
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.

CJ-459 WOMEN AND THE CRIMINAL JUSTICE SYSTEM (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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 profession.

CULINARY ARTS - CUL

CUL-15 SANITATION, SAFETY, AND EQUIPMENT MANAGEMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a current negative tuberculosis test is required.
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 of workers, 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 Serv-Safe having regulatory oversight in food service workplaces. (C-ID HOSP 110)
TOP Code: 1307.10 - Restaurant and Food Services and Management

CUL-17 PRINCIPLES OF FOOD PREPARATION (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Other: Proof of a current negative tuberculosis test is required.
Prerequisite: CUL-15 Sanitation, Safety, and Equipment Management
Principles and techniques in professional food preparation, including science and technology of the kitchen, food service safety and sanitation policies and procedures, recipe specifications, and kitchen equipment use and maintenance. This course also covers nutritional components of foods under review. These components include the digestion, absorption and metabolism of nutrients. Culinary concepts include as mise en place, dry and moist cookery, appropriate use of produce, dairy and dry goods, and sustainability using local sourcing. Includes hands-on professional food preparation techniques with an emphasis on collaboration and teamwork.
TOP Code: 1306.30 - Culinary Arts

CUL-22 RESTAURANT AND CATERING OPERATIONS (3)
Lecture 16 - 19 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a current negative tuberculosis test is required.
Prerequisite: CUL-17 Principles of Food Preparation
Planning, marketing, organization, execution and food preparation for a restaurant or a catered banquet. Acting as managers, chefs, and crew, students will produce menus and cook a variety of dishes for different styles of catered events. Students will utilize the professional and technical presentation methods used for plated meals, buffet luncheons, and passed hors d'oeuvres.
TOP Code: 1307.10 - Restaurant and Food Services and Management

CUL-440 INTRODUCTION TO BAKING (4)
Lecture 16 - 19 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a current negative tuberculosis test is required.
This course covers fundamental baking skills for students who intend to specialize in baking and pastry making for commercial production. Production of yeast and quick breads, cakes, cookies, pies, and pastries, as well as decorating and icings are undertaken. Gourmet baked items and pastries are produced in a time-restricted quality-minded setting. This course is for students pursuing a career in culinary arts/culinary management. Aligned with C-ID CULI 180X

CUL-441 ADVANCED PROFESSIONAL BAKING (4)
Lecture 16 - 19 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a current negative tuberculosis test is required.
Prerequisite: CUL-440 Introduction to Baking
Advanced baking and patisserie techniques including advanced formulas. Explore advanced fundamentals techniques in baking and patisserie. Examine how a formula works including changes of yields and altering percentages of ingredients in formulas to produce desired results are stressed.
Introduction to hot, cold, and frozen desserts with concentration on the composition of restaurant style plated desserts. Topics include traditional composed desserts, modern menu fusion, international/ethnic and classical dessert combinations.
TOP Code: 1306.30 - Culinary Arts

CUL-442 PROFESSIONAL COOKING (4)
Lecture 16 - 18 hours. Laboratory 144 - 162 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CUL-17 Principles of Food Preparation
Beginning through intermediate 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; Foundations, principles and practical skills focusing on meat, poultry, fish and shellfish; 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. Examination of the history and modern interpretations of the art of garde manger, including hors doeuvres, pates, terrines, and charcuterie. Kitchen safety and sanitation rules are revisited and practiced.
TOP Code: 1306.30 - Culinary Arts

CUL-443 ARTISAN BREADS (4)
Lecture 16 - 19 hours. Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a current negative tuberculosis test is required.
Prerequisite: CUL-440 Introduction to Baking
Artisan Breads provides students with the information, tools, and instruction to gain proficiency in preparation of a variety of artisan breads. This course will also focus on international breads with an evaluation of bread and yeast products from throughout the world. Emphasis is placed on learning to mix, ferment, shape, bake, and store hand-crafted breads. Students focus on traditional fermentation, as well as the science of the ingredients. Students learn assembly and speed necessary to increase their proficiency in meeting production deadlines with quality products.
TOP Code: 1306.30 - Culinary Arts

CUL-444 WORLD CUISINE (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CUL-17 Principles of Food Preparation
This course will introduce students to cuisines found throughout the World. Culinary history and general characteristics that have influenced the development of each region's cuisine will be studied. This includes the geography, climate, religion and trade that have played a role in the development of distinct international cuisines. Specific areas of instruction will include the identification of ingredients and equipment related to each region or cuisine.
TOP Code: 1306.30 - Culinary Arts

CUL-445 CAKE DECORATING, PASTRY ART, AND CHOCOLATES (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: CUL-441 Advanced Professional Baking
Course presents a variety of preparation techniques that emphasize the fundamentals of the American and European style of cake decoration and commercial culinary practices. Course introduces fundamental techniques in chocolate production, including candies, confections and desserts.

DANCE - DANCE

DANCE-1 SURVEY OF DANCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students - Eligibility for ENGL-1A as determined by the Chaffey assessment process
A conceptual and historical study of dance from antiquity to the present emphasizing the cultural and historical development of dance as a theatrical art and social form. This non-studio course includes lectures, readings, and films.

DANCE-2 THEATRICAL DANCE (3)
Lecture 48 - 54 hours. Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 of dance theory and understanding the importance of control, coordination, balance, strength, and conscious development of movement habits.

DANCE-7A BALLET IA (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Skill acquisition and practice of fundamental classical ballet barre and center technique at the beginning level. Study of ballet theory, history, and vocabulary.

DANCE-7B BALLET IB (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-7A Ballet IA
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Skill improvement in fundamental classical ballet barre and center technique at the advanced beginning level. Continued study of ballet theory, history, and vocabulary.

DANCE-8A BALLET IIA (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-7B Ballet IB
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Skill improvement and added complexity in classical ballet barre and center technique. Development and practice of intermediate skill level combinations with modifications and complications. Continued study of ballet theory, history, and vocabulary.

DANCE-8B BALLET IIB (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-8A Ballet IIA
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Skill improvement in increasingly complex classical ballet barre and center technique. Further development and practice of intermediate/advanced skill level combinations with modifications and complications. Continued study of theory, history, and vocabulary.

DANCE-10A JAZZ DANCE IA (1)
Lecture 48 - 54 hours. Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

DANCE-10B JAZZ DANCE IB (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-10A Jazz Dance IA or
Limitation on Enrollment (e.g. Performance tryout or audition): level placement pending instructor approval
Further development of jazz dance skills and vocabulary at the advanced beginning level emphasizing technique and both classical and contemporary styles. Application of skills through more complex, enhanced warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; and choreographed combinations.

DANCE-12 INTRODUCTION TO DANCE (3)
Lecture 48 - 54 hours. Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course introduces students to dance as a performance art through lecture and activity including fundamental movement techniques in ballet, modern dance and jazz/vernacular dance forms, historical study of these dance genres, basic composition, and appreciation for dance as a performing art through film and attendance of live dance production.
TOP Code: 1008.00 - Dance

DANCE-20A MODERN DANCE IA (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction of basic modern dance skills and vocabulary emphasizing technique and creativity, and drawing upon fundamental classical modern styles, as well as post-modern and contemporary styles. Introduction of modern dance theory, history, and criticism. Application of skills through warm-ups; center-floor strength, flexibility, body control techniques; and traveling techniques progressing to choreographed combinations.

DANCE-20B MODERN DANCE IB (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-20A Modern Dance IA or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Further development of modern dance skills and vocabulary at the advanced beginning level emphasizing technique and creativity, and drawing upon classical and post-modern styles, as well as contemporary styles. Further analysis of modern dance theory, history, and criticism, and application of skills through more complex, enhanced warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; and choreographed combinations.

DANCE-25 DANCE CONDITIONING AND SOMATIC TECHNIQUES (2)
Lecture 16 - 19 hours. Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Dance conditioning and somatic techniques emphasizing alignment/placement dynamics, core stabilization, flexibility, strength, and efficiency for the dancer. May include Pilates, Alexander Technique, and other disciplines. Basic dance-related anatomical analysis of movement and mind-body connection through dance-conditioning system of floor mat work.

DANCE-30A TAP DANCE IA (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Introduction of basic tap dance skills and vocabulary emphasizing technique, styles, and rhythms through warm-ups, travelling techniques, and choreographed combinations.

DANCE-30B TAP DANCE IB (1)
Lecture 32 - 36 hours. Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-30A Tap Dance IA or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
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.

DANCE-40A MODERN DANCE IIA (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-20B Modern Dance IB or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Intermediate-level modern dance skills and vocabulary with additional development and complexity emphasizing expanded technical and artistic range and expression, and drawing upon classical, post-modern, and contemporary styles. In-depth analysis of modern dance theory, history, and criticism. Continued refinement of skills through more complex warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; and lengthier choreographed combinations.

DANCE-40B MODERN DANCE IIB (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-40A Modern Dance IIA
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Advanced-level modern dance skills and vocabulary emphasizing technical mastery and deep artistic range and expression, and drawing upon classical, post-modern, and contemporary styles. In-depth analysis and synthesis of modern dance theory, history, and criticism. Mastery of skills and professionalism through complex, stylized warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; improvisation; and lengthy choreographed combinations.

DANCE-42 DANCE PRODUCTION I (3)
Lecture 48 - 54 hours. Studio 144 - 171 hours.
Grading: Letter Grade (CSU; UC)
Limitation on Enrollment (e.g. Performance tryout or audition): Audition to determine technical proficiency in various dance styles.
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 in ensemble roles.

DANCE-44 DANCE PRODUCTION II (3)
Studio 144 - 171 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-42 Dance Production I
Limitation on Enrollment (e.g. Performance tryout or audition): Audition to determine technical proficiency in various dance styles.
Course provides continued theatrical dance performing experience in a fully-produced dance concert production. Intermediate/advanced-level performance skills emphasizing technical mastery and deep artistic range and expression. Students will perform more complex choreography, multiple roles, and principal roles including solo, demi solo and small group, as well as ensemble, roles in faculty, guest professional, and advanced student dance works.

DANCE-50A JAZZ DANCE IIA (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-10B Jazz Dance IB or
Limitation on Enrollment (e.g. Performance tryout or audition): level placement pending instructor approval.
Intermediate-level jazz dance skills and vocabulary with additional development and complexity emphasizing expanded technical and artistic range and expression, and drawing upon both classical and contemporary styles. Continued refinement of skills through more complex warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; and lengthier choreographed combinations.

DANCE-50B JAZZ DANCE IIB (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-50A Jazz Dance IIA or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
Advanced-level jazz dance skills and vocabulary emphasizing technical mastery and artistic range and expression, and drawing upon both classical and contemporary jazz styles. Mastery of skills and professionalism through complex, stylized warm-ups; center-floor strength, flexibility, body control techniques; traveling techniques; and choreographed combinations.

DANCE-60A TAP DANCE IIA (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-30B Tap Dance IB or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
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.

DANCE-60B TAP DANCE IIB (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: DANCE-60A Tap Dance IIA or
Limitation on Enrollment (e.g. Performance tryout or audition): Level placement pending instructor approval.
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.

DANCE-400 HIP HOP DANCE (1)
Studio 32 - 36 hours.
Grading: Letter Grade (CSU; UC)
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, and critical viewing and analysis of Hip Hop dance choreography.

DANCE-420 SOCIAL DANCE (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Basic technique and styles of American and Latin ballroom dance with an emphasis on partnering skills, footwork, rhythms, musicality, and performance. Dance styles may include Salsa, Tango, Rumba, Bachata, Cha-Cha, Samba, Swing, Waltz, Foxtrot, and Night Club 2-Step.

DANCE-450 STUDENT CHOREOGRAPHY FOR PERFORMANCE (0.75)
Studio 36 - 41 hours.
Grading: Letter Grade (CSU; UC)
Limitation on Enrollment (e.g. Performance tryout or audition): Audition to determine dance technical proficiency. Have completed some Chaffey dance technique courses or equivalent technical dance skills experience, and approval of instructor for choreographers and/or dancers.
This course provides practical experience for students to present their own original choreography for public performance and/or perform advanced student choreography in an in-studio setting. Students work with exploratory dance forms, cast their own dances, and manage their rehearsal schedules in preparation for performance in an in-studio dance production. Hours are arranged in the dance room. This course will only be offered in the fall semester.

DENTAL - DENTAL

DENTAL-400 DENTAL ASSISTING CORE SCIENCES (6) [CX]
Lecture 64 - 72 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
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.
TOP Code: 1240.10 - Dental Assistant

DENTAL-410 DENTAL ASSISTING PRECLINICAL SCIENCES (6) [CX]
Lecture 48 - 54 hours. Laboratory 144 - 162 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: DENTAL-400 Dental Assisting Core Sciences
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.
TOP Code: 1240.10 - Dental Assistant

DENTAL-420 RADIOGRAPHY FOR DENTAL ASSISTANTS (6) [CX]
Lecture 48 - 54 hours. Laboratory 144 - 162 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: DENTAL-400 Dental Assisting Core Sciences
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.
TOP Code: 1240.10 - Dental Assistant

DENTAL-430 CLINICAL PRACTICE (6) [CX]
Laboratory 288 - 324 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: DENTAL-420 Radiography for Dental Assistants
Prerequisite: DENTAL-410 Dental Assisting Preclinical Sciences
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.
TOP Code: 1240.10 - Dental Assistant

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.

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.

DPS-523 BEGINNING JOB READINESS SKILLS (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-576 Beginning Job Skills Practicum Lab
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation & Instructor's signature required
The first in a series of open-entry/open-exit self-paced courses for students with disabilities. This course introduces basic job readiness skills which prepare students for competitive employment.

DPS-524 INTERMEDIATE JOB READINESS SKILLS (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-577 Intermediate Job Skills Practicum Lab
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation & Instructor's signature required
The second course in a series of open-entry/open-exit self-paced courses for students with disabilities. The course focuses on intermediate job readiness skills to further prepare students for competitive employment.

DPS-525 ADVANCED JOB READINESS SKILLS (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-578 Advanced Job Skills Practicum Lab
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation & Instructor's signature required
Open-entry/open-exit, self-paced course for students with disabilities. This third course in the series focuses on advanced job readiness skills for competitive employment.

DPS-526 MASTERY OF JOB READINESS SKILLS (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-579 Mastery of Job Skills Practicum Lab
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation and Instructor signature required.
Open-entry / open-exit self-paced course for students with disabilities focused on job placement skills for obtaining competitive employment.

DPS-530 BASIC COMPUTER SKILLS FOR STUDENTS WITH DISABILITIES (1.5)
Lecture 8 - 10 hours. Laboratory 24 - 29 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Instructor signature required
Individualized prescriptive course providing students with disabilities knowledge of computer software, hardware and assistive devices needed to promote individual success and independence. Students create effective documents, utilize adaptive software and hardware, and develop transferable skills for use in college instructional courses and/or the work force.

DPS-576 BEGINNING JOB SKILLS PRACTICUM LAB (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-523 Beginning Job Readiness Skills
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation and Instructor signature required
Open-entry/open-exit self-paced course for students with disabilities focused on the introduction of basic hands-on job skills to prepare students for competitive employment

DPS-577 INTERMEDIATE JOB SKILLS PRACTICUM LAB (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-524 Intermediate Job Readiness Skills
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation and Instructor signature required.
Open-entry/open-exit self-paced course for students with disabilities focused on intermediate hands-on job skills to further prepare students for competitive employment

DPS-578 ADVANCED JOB SKILLS PRACTICUM LAB (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-525 Advanced Job Readiness Skills
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation and Instructor signature required.
Open-entry/open-exit self-paced course for students with disabilities focused on advanced hands-on job skills for competitive employment.

DPS-579 MASTERY OF JOB SKILLS PRACTICUM LAB (1.5)
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Corequisite: DPS-526 Mastery of Job Readiness Skills
Limitation on Enrollment (e.g. Performance tryout or audition): and Orientation and Instructor signature required
Open-entry/open-exit self -paced course for students with disabilities focused on hands-on job skills for obtaining job placement in competitive employment

DPS-651 JOB PLACEMENT PRACTICUM FOR STUDENTS WITH DISABILITIES (0)
Laboratory 24 - 29 hours.
Grading: Non-Credit (Not graded)
Self-paced, open-entry/open-exit course offering individualized and or group instruction in job development, job search techniques, job holding skills, 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.

DPS-657 VOCATIONAL SKILLS FOR STUDENTS WITH DISABILITIES (0)
Laboratory 48 - 54 hours.
Grading: Non-Credit (Not graded)
Self-paced, open-entry/open-exit course for students with disabilities, teaching work skills that increase their earning potential and level of independence. Students learn skills necessary to progress in vocational and independent living environments to achieve their vocational goals. In order to insure equal access, classes are held in the community providing underrepresented students the opportunity for quality educational programming. Students learn the basic academics that support vocational development and increase their level of independence. Curriculum may include entry level work skills, job retention skills, and interpersonal skill development.

DRAFTING - DRAFT

DRAFT-20 COMPUTER-AIDED DRAFTING AND DESIGN (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Introduction to Computer Aided Drafting and Design (CADD) technology, terminology, and application, using an industry-standard program. Drawing creation; detailing and dimensioning; management of drawing files; management of user environment; producing hardcopy output of drawings; introduction to parametric sketching; Emphasis on two-dimensional working drawings. Coursework will be completed using the AutoCAD software.
TOP Code: 0953.00 - Drafting Technology

DRAFT-21 MECHANICAL DESIGN I (3) [CX]
Lecture 16 - 19 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU)
Advisory: DRAFT-20 Computer-Aided Drafting and Design
Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or - 1 year of high school drafting using SolidWorks or similar feature-based modeling software
Engineering graphics for product design, manufacturing and construction. Emphasis on production of layouts and engineering drawings. Orthographic projection of primary views, section views, detail views and auxiliary views. Detailing of drawing views including dimensions, tolerancing, notes/labels and drawing formats. Assignments will be completed using the SolidWorks CAD software.
TOP Code: 0953.40 - Mechanical Drafting

DRAFT-41 MECHANICAL DESIGN AND DRAFTING II (4)
Lecture 32 - 38 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU)
Advisory: DRAFT-21 Mechanical Design I
Other: 1 year experience using SolidWorks.
Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or
Advanced mechanical design/drafting with an on interpretation and preparation of part and assembly drawings. Emphasis on application of ASME Y14.5 geometrical and positional tolerancing and Six-Sigma tolerance stacking/analysis practices. Additional topics will include techniques for automating and customizing application software. Coursework will be completed using the SolidWorks software.
TOP Code: 0953.40 - Mechanical Drafting

DRAFT-43 ADVANCED CAD MODELING AND APPLICATIONS (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics
Advanced concepts and development of three-dimensional solid models. Emphasis on techniques for part and assembly modeling using a feature-based parametric CAD solid modeler. Students are prepared for and take the CSWA (Certified SolidWorks Associate) Exam.
Coursework is done using the SolidWorks CAD software.
TOP Code: 0953.00 - Drafting Technology

DRAFT-50 ARCHITECTURAL DESIGN I (3) [CX]
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory (Completion Of): DRAFT-20 Computer-Aided Drafting and Design
Intro to Revit Architecture software. Projects of simple residential and commercial buildings will be employed. Student drawings will reflect the integration of topics concepts and the various plans needed for a complete set of working drawings, including floor plans, elevations, section views, schedules and other construction documents are covered. Hands-on exercises will be used to reinforce the functions of Revit. Coursework will be completed using REVIT Architecture software.
TOP Code: 0953.10 - Architectural Drafting

DRAFT-51 ARCHITECTURAL DESIGN II (3) [CX]
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: DRAFT-50 Architectural Design I
Design issues associated with more complex buildings and settings, including the impact of zoning, local codes, and challenging sites. Students will be using Revit Architecture software in order to help students master techniques used to develop and graphically convey architectural concepts, mainly using Revit Architecture. Students will progress an understanding of the design process related to space through digital media. Topics include: residential multiple story building, and small commercial design projects, green building design/materials, and environmental impact. Hands-on exercises will be used to reinforce the functions of Revit. Coursework will be completed using the REVIT Architecture software.
TOP Code: 0953.10 - Architectural Drafting

DRAFT-53 ARCHITECTURAL APPLICATIONS OF CAD (4) [CX]
Lecture 32 - 38 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU)
Prerequisite: DRAFT-51 Architectural Design II
In-depth use of parametric three-dimensional for Building Information Modeling (BIM), building design and production of working drawings using Revit Architecture
Software and exploring creating families. This will build upon the skills developed in Drafting 51 and will also include a light version of Revit MEP and Structure in order to create and modifying three-dimensional topography and buildings, parametric building walls with floor and roof slabs, creating floor reflected ceiling plans, generating building elevations and sections, and creating professional quality renderings. Hands-on exercises will be used to reinforce the functions of Revit.
TOP Code: 0953.10 - Architectural Drafting

DRAFT-78 ADVANCED MECHANICAL DESIGN APPLICATIONS (4) [CX]
Lecture 32 - 38 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU)
Advisory: DRAFT-43 Advanced CAD Modeling and Applications or
Other: 1 year experience using SolidWorks or similar feature-based modeling software
Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or
Advanced modeling/drawing of machine parts in the various stages of manufacturing with required back-up items such as jigs, fixtures, weldments, tooling, molds and dies. Advanced topics such as surfacing may also be included. Students will be prepared for the and take CSWP (Certified SolidWorks Professional) Exam.
Coursework will be completed using the SolidWorks software.
TOP Code: 0953.00 - Drafting Technology

EARTH SCIENCE - ESC

ESC-1 EARTH SCIENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Geology, oceanography, meteorology, and planetology aspects of the physical environment; designed for general education and earth science majors. (C-ID GEOL 120)

ESC-1L EARTH SCIENCE LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Corequisite: ESC-1 Earth Science (may be taken previously).
Optional laboratory for Earth Science. Use the tools and methods of science to image, measure and observe phenomenon in geology, oceanography, astronomy and meteorology. (C-ID GEOL 120 L)

ESC-5 OCEANOGRAPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the marine sciences. Properties of water, air-sea interaction, ocean currents, waves, tides, beaches, marine life, marine resources, ocean pollution, and the nature and origin of the sea floor.

ESC-5L OCEANOGRAPHY LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Corequisite: ESC-5 Oceanography
Use the tools and methods of science to image, measure and observe phenomenon in oceanography.

ECONOMICS - ECON

ECON-1 INTRODUCTION TO ECONOMICS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Provide an overview of basic economic theories and models and apply them to analyze contemporary economic issues. Topics include the U.S. economic system, domestic and international economic issues, e.g. wealth and income distribution, sustainable economic growth, health and health care reform, unemployment, globalization, environmental issues, regulation, deregulation, inflation, interest rates, discrimination, corporations and labor unions and contemporary labor issues.
TOP Code: 2204.00 - Economics

ECON-2 PRINCIPLES OF MACROECONOMICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for MATH-450 or higher as determined by the Chaffey assessment process.
Prerequisite: MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
An introductory course focusing on aggregate economic analysis. Topics include: market systems, aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics, and economic growth.
(C-ID ECON 202)

U.S. economic system and institutions and the their origins will be examined including: theories and policies concerning economic growth and development, business cycles, unemployment, full employment, inflation, taxation, deficits, the national debt, public choice, money, banking, interest rates, international trade and finance, and competing economic views (e.g. Classical, New Classical, Keynesian, Monetarism, Sustainable Growth Theories, and Human Scale Economics).
TOP Code: 2204.00 - Economics

ECON-4 PRINCIPLES OF MICROECONOMICS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for MATH-450 or higher as determined by the Chaffey assessment process.
Prerequisite: MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
This is an introductory course focusing on choices of individual economic decision-makers. Topics include scarcity; individual and household decision making; business decision making; specialization and trade; market equilibrium; elasticity; production and cost theory; market structures; factor markets; effects of taxes on individuals and businesses; income distribution and poverty; economics of race, gender, and culture; and market failure. May be offered as an Honors course.
(C-ID ECON 201) TOP Code: 2204.00 - Economics

ECON-7 ECONOMIC HISTORY OF THE UNITED STATES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Surveys events in the U.S. from the middle of the 17th Century to the present. The class uses economic analysis to examine the social, political and economic events from the Colonial Period to the present. Topics will include the evolution of the banking systems and financial services, manufacturing and tariffs, land and resource use, labor issues, government regulation and deregulation, slavery, the rise of big business, international trade, income and wealth distribution, business cycles, monetary and fiscal policy, and U.S. interaction with the global economy.
TOP Code: 2204.00 - Economics

ECON-8 HISTORY OF ECONOMIC IDEAS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition Advisory: Completion of English 1A recommended. 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.
TOP Code: 2204.00 - Economics

EDUCATION - ED

ED-10 ELEMENTARY CLASSROOM FIELDWORK (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative TB test within past 12 months and legal fingerprint clearance through Chaffey College Human Resources Department are required for fieldwork placement.
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students and ED-400 Introduction to Education and Teaching
Course explores concepts and issues related to teaching diverse learners in today's schools, Kindergarten through grade twelve (K-12). Topics include teaching as a profession, historical and philosophical foundations of the United States education system, contemporary educational issues, and California's standards for both student curriculum and teacher performance. In addition to a weekly lecture, the course requires 45 hours of structured fieldwork with a certificated teacher in a diverse public elementary classroom. Fieldwork placement will be carefully selected by the course instructor at schools within the district boundaries of the Chaffey College Rancho campus.
(C-ID EDUC 200)

ED-400 INTRODUCTION TO EDUCATION AND TEACHING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: ENGL-450 Fundamentals of Composition or ESL-450 Fundamentals of Composition for ESL Students
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.
TOP Code: 0802.00 - Educational Aide (Teacher Assistant)

EMERGENCY MEDICAL TECHNICIAN - EMT

EMT-405 EMERGENCY MEDICAL RESPONDER (3) [CX]
Lecture 40 - 48 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
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).
TOP Code: 1250.00 - Emergency Medical Services

EMT-411 EMERGENCY MEDICAL TECHNICIAN (7) [CX]
Lecture 80 - 90 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
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. ground and floor).
Limitation on Enrollment (e.g. Performance tryout or audition): Students must be 18 years of age at the start of the course. - Students must possess a current American Heart Association Health Care Provider CPR card.
Prerequisite: EMT-405 Emergency Medical Responder and
This course will provide EMT students with training to recognize the signs and symptoms of illness and traumatic injuries, as well as instruction on how to perform life-saving skills.

This course meets requirements as defined in the California Code of Regulations (CCR) Title 22, and is approved by the State of California EMS Authority, and local EMSA Inland Counties EMS Agency (ICEMA). This course includes lecture and laboratory experiences. Students must be a minimum of 18 years of age prior to beginning field experience. A minimum of 24 hours of field experience is included in the course, which consist of clinical rotation at Hospital, and/or ambulance ride along as required in CCR Title 22.

Upon successful completion of the course, students are eligible to register for the National Registry licensing examination which is taken off campus at an approved testing site.

Students upon successful completion of EMT 405 and EMT 411 may pursue the Emergency Medical Provider Certificate of Achievement.
TOP Code: 1250.00 - Emergency Medical Services

ENGINEERING - ENGIN

ENGIN-11 INTRODUCTION TO ENGINEERING (2)
Lecture 32 - 38 hours.
Grading: Letter Grade (CSU; UC)
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.

ENGIN-26 ENGINEERING GRAPHICS AND CAD (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-31 Plane Trigonometry
This course covers the principles of engineering drawings in visually communicating engineering designs and an introduction to computer-aided design (CAD). Topics include the development of visualization skills; orthographic projections; mechanical dimensioning and tolerancing practices; and the engineering design process. Assignments develop sketching and 2-D and 3-D CAD skills. The use of CAD software is an integral part of the course. Course aligns with ENGR 150

ENGIN-30 ENGINEERING APPLICATION OF DIGITAL COMPUTATION (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-65A Calculus I
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.

ENGIN-50 ENGINEERING STATICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PHYS-45 Physics for Scientists and Engineers I and MATH-65A Calculus I
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.

ENGIN-52 ENGINEERING DYNAMICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-65B Calculus II and ENGIN-50 Engineering Statics
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.

ENGIN-60 MATERIALS OF ENGINEERING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: CHEM-24A General Chemistry I
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.

ENGIN-71 CIRCUIT ANALYSIS (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PHYS-46 Physics for Scientists and Engineers II and MATH-65B Calculus II
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; The venin and Norton equivalents; superposition; simple RL, RC, and RLC circuits; phasors. Use of voltmeters, ammeters, ohmmeters and oscilloscopes.

ENGINEERING TECHNOLOGY - EGTECH

EGTECH-10 INTRODUCTION TO ENGINEERING DESIGN/GRAPHICS (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.
TOP Code: 0924.00 - Engineering Technology, General (requires Trigonometry)

EGTECH-12 PRINCIPLES OF ENGINEERING (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: MATH-425 Intermediate Algebra or MATH 450 as determined by the Chaffey College assessment.
Prerequisite: MATH-425 Intermediate Algebra or MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra
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.
TOP Code: 0924.00 - Engineering Technology, General (requires Trigonometry)

EGTECH-14 ELECTRONICS FOR ENGINEERING TECHNOLOGISTS I (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: EGTECH-12 Principles of Engineering
Prerequisite: MATH-425 Intermediate Algebra or MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra
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.
TOP Code: 0924.00 - Engineering Technology, General (requires Trigonometry)

EGTECH-16 COMPUTER INTEGRATED MANUFACTURING - CNC MATERIAL REMOVAL (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or DRAFT-43 Advanced CAD Modeling and Applications or - or one year in High School CAD/Engineering course using feature based modeling software such as AutoDesk Inventor or Solidworks - demonstrated competence 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.
TOP Code: 0924.00 - Engineering Technology, General (requires Trigonometry)

ENGLISH - ENGL

ENGL-1A COMPOSITION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for English 1A as determined by Chaffey assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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 arranged 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. (C-ID ENGL 100)

ENGL-1B ADVANCED COMPOSITION AND CRITICAL THINKING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
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 (e.g., inductive and deductive reasoning) and effective reasoning, 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 Honor course. (C-ID ENGL 105)

ENGL-1C INTRODUCTION TO LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
This course introduces representative works from major genres, develops students? close reading and analytical writing skills, and promotes appreciation and critical understanding of the cultural, historical, and aesthetic qualities 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. (C-ID ENGL 120)

ENGL-7A CREATIVE WRITING: SHORT FICTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for English 1A as determined by the Chaffey assessment process.
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
Seminar in short fiction writing. Students study the underlying principles of this form of literature, write short stories, and analyze each other's work.

ENGL-7B CREATIVE WRITING: FICTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for English 1A as determined by the Chaffey assessment process.
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-7D CREATIVE WRITING: POETRY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for English 1A as determined by the Chaffey assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-7E CREATIVE WRITING: NONFICTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for English 1A as determined by the Chaffey Assessment process
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or ENGL-495 College Reading and Writing
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.

ENGL-32 INTRODUCTION TO THE NOVEL (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
Reading and analysis of novels of established merit drawn from multiple cultures.

ENGL-33 INTRODUCTION TO POETRY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or ENGL-495 College Reading and Writing
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.

ENGL-35 LITERARY MAGAZINE PRODUCTION (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Strong word processing skills.
Prerequisite: or Eligibility for English 1A as determined by the Chaffey assessment process, ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-68 MYTHOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Other: Eligibility for English 1A as determined by the Chaffey assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-70A WORLD LITERATURE I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Chronological survey of significant authors and texts of world literature from earliest times through the mid-1600's. Selected works derive from Europe, the Middle East, Asia and other areas. 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. (C-ID ENGL 140)

ENGL-70B WORLD LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Chronological survey of significant authors and texts of world, including Europe, the middle East, Asia and other areas, from the mid-17th century to the present. Extensive reading and discussion of works reflecting diverse cultural viewpoints. Examination of the relationship between historical events and literary works, and the impact of works upon their age and ensuing eras. Strong writing component with emphasis on textual analysis. (C-ID ENGL 145)

ENGL-71 FOLKLORE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
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.

ENGL-73 LGBT LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Introductory analysis of LGBT literature written in the English language, with some review of Western and world classical literature. Identification of and analysis of major LGBT authors and themes. Special focus on the development of queer theory as a means of interpreting literature. Investigation of modes including drama, poetry, essays, short stories, and the novel.

ENGL-74 ASIAN-AMERICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for English 1A as determined by the Chaffey assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-75A AMERICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Chronological survey of significant authors and texts of American literature from its beginnings in 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. (C-ID ENGL 130)

ENGL-75B AMERICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
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. (C-ID ENGL 135)

ENGL-76 AFRICAN-AMERICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for 1A as determined by the Chaffey Assessment Process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

ENGL-77 LATINO LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.

ENGL-79 NATIVE AMERICAN LITERATURES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.

ENGL-80A SURVEY OF BRITISH LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Chronological survey of major authors and texts of British literature from the Old English to the Neoclassic period (up to the last quarter of the 18th century). Extensive reading and discussion of works. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis. (C-ID ENGL 160)

ENGL-80B SURVEY OF BRITISH LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
Chronological survey of major authors and texts of British literature from the late 18th century to the present. Includes contemporary British and post-colonial texts. Extensive reading and discussion of works. Examination of the relationship between historical events and literary works. Strong writing component with emphasis on textual analysis. (C-ID ENGL 165)

ENGL-81 SHAKESPEARE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition and ENGL-80A Survey of British Literature
Intensive reading, along with oral and written discussion, of a selected group of Shakespearean plays.

ENGL-495 COLLEGE READING AND WRITING (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
Assessment Level: Students must assess into English 495
Prerequisite: ENGL-675 Preparation for College Reading and Writing
Careful study and practice of critical thinking, reading, and expository writing techniques, using primarily nonfiction texts, and the frequent writing of compositions with the ultimate goal of writing essays using sources. Emphasizes study skills and prepares the student for English 1A and a variety of academic disciplines. Five hours of supplemental learning in a Success Center that supports this course are required. NOTE: Students who have successfully completed ESL 475 may not take English 495.

ENGL-675 PREPARATION FOR COLLEGE READING AND WRITING (0)
Lecture 64 - 76 hours.
Grading: Pass/No-Pass (Non-credit)
Assessment Level: Eligibility for English 675 as determined by the Chaffey assessment process.
Introduces the inexperienced reader and writer to a variety of pre-college and college-level texts and writing situations. Prepares students for the thinking, reading, and writing skills necessary to succeed at the college level. Ten hours of supplemental learning in a Success Center that supports this course are required. Upon successful completion of the course, student may re-assess for possible placement into the credit curriculum.

ENGLISH AS A SECOND LANGUAGE - ESL

ESL-475 Fundamentals of College Reading and Writing for ESL Students (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
Assessment Level: Eligibility for ESL 475 as determined by the Chaffey assessment process
Prerequisite: ESL-551 English as a Second Language V or
Careful study and practice of critical thinking, reading, and expository writing techniques for non-native speakers of English. Uses primarily nonfiction texts to facilitate composition writing with the ultimate goal of writing an essay using sources. Prepares the student for English 1A and a variety of academic disciplines. Five hours of supplemental learning in a Success Center that supports this course is required.
NOTE: Students who have successfully completed English 475 may not take ESL 475.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-502 ESL for Workplace and Academic Success (3)
Lecture 48 - 54 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Assessment Level: Assessment Level Eligibility for ESL 531 (Level 3) as determined by the Chaffey assessment test.
Prerequisite: ESL-621 English as a Second Language II or
Prepares students for jobs, job advancement, career success and academic success by strengthening language skills for the workplace. Topics include: career pathways, interviewing and resume writing, cultural norms, and academic skills. Focus is on developing the formal reading, writing, oral language and vocabulary skills commonly used in the workplace.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-508 Pronunciation of American English (3)
Lecture 48 - 54 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Prerequisite: or Placement recommendation by the ESL assessment test into 541 or higher ESL-531 English as a Second Language III
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.
TOP Code: 4930.86 - English as a Second Language-Speaking/Listening

ESL-531 English as a Second Language III (4)
Lecture 64 - 72 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Assessment Level: Assessment Level Eligibility for ESL 531 as determined by the Chaffey assessment process
Prerequisite: ESL-621 English as a Second Language II or
This is the third multi-skills core course in the study of English with reading, writing, listening and speaking designed for students whose first language is not English. The course includes the study of grammar and sentence structure, paragraph format and organization, reading skills, and oral communication. Eight hours of supplemental learning in a Success Center that supports this course is required.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-541 English as a Second Language IV (4)
Lecture 64 - 72 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Assessment Level: Assessment Level Eligibility for ESL 541 as determined by the Chaffey assessment process
Prerequisite: ESL-531 English as a Second Language III or
This is the fourth multi-skills core course in the study of English reading, writing, listening, and speaking designed for students whose first language is not English. The course further develops and adds to the skills taught in ESL 531: grammar and sentence structure, paragraph organization and development, reading, and speaking skills. Eight hours of supplemental learning in a Success Center that supports this course is required.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-551 English as a Second Language V (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Non-degree-applicable)
Assessment Level: Assessment Level Eligibility for ESL 551 as determined by the Chaffey assessment process
Prerequisite: ESL-541 English as a Second Language IV or
An introduction to the academic reading, writing, critical thinking, and oral communication expected at the college level. This is the fifth multi-skills core course in the study of English reading, writing, listening and speaking designed for students whose first language is not English. The course further develops and adds to the skills taught in ESL-541: grammar and sentence structure, essay organization and development, reading, and speaking skills. Eight hours of supplemental learning in a Success Center that supports this course is required.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-611 English as a Second Language I (0)
Lecture 64 - 72 hours.
Grading: Non-Credit (Pass/No Pass)
Assessment Level: Eligibility for ESL 611 as determined by the Chaffey assessment process
This is the first multi-skills core course in the study of English with reading, writing, listening and speaking designed for students whose first language is not English. The course includes reading and writing the English alphabet, producing the sound system, as well as practicing simple grammar, reading, and writing. Students also learn basic classroom rules and communication necessary for success at school. Ten hours of supplemental learning in a Success Center that supports this course is required.
TOP Code: 4930.87 - English as a Second Language-Integrated

ESL-621 English as a Second Language II (0)
Lecture 64 - 72 hours.
Grading: Non-Credit (Pass/No Pass)
Assessment Level: or Eligibility for ESL 621 as determined by the Chaffey assessment process
Prerequisite: ESL-611 English as a Second Language I or
This is the second multi-skills core course in the study of English with reading, writing, listening and speaking designed for students whose first language is not English. The course includes basic listening and speaking skills, beginning with simple words and phrases, then progressing to sentence level interaction. It also includes basic classroom culture, basic US culture, and communication necessary for success in school and life. Ten hours of supplemental learning in a Success Center that supports this course is required.

ESL-650 ENGLISH AND CITIZENSHIP (0)
Lecture 48 - 54 hours.
Grading: Non-credit (Pass/No-Pass)
Assessment Level: Placement recommendation at ESL 531 or higher level ESL course as determined by Chaffey ESL assessment process.
Prerequisite: ESL-621 English as a Second Language II or
A beginning non-credit course for non-native speakers of English who wish to become citizens of the United States. Topics: basic English, basic US History and Government, American culture and civics.
TOP Code: 4930.90 - Citizenship

FASHION DESIGN - FASHD

FASHD-20 HISTORY OF FASHION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Origin and evolution of apparel styles through history, from Egyptian to contemporary periods. Sociological, economic, political, and physical factors affecting apparel choices through the centuries. Trends of recurring styles throughout the fashion cycle.
TOP Code: 1303.00 - Fashion

FASHD-40 BEGINNING CLOTHING CONSTRUCTION (2) [CX]
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Principles and techniques for developing fundamental skills in clothing construction using woven fabrics.
TOP Code: 1303.00 - Fashion

FASHD-42 ADVANCED CLOTHING CONSTRUCTION (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: FASHD-40 Beginning Clothing Construction
Advanced construction techniques for couture sewing, tailoring and other complex garments, and the handling of specialty fabrics.
TOP Code: 1303.00 – Fashion

FASHD-45 DESIGN FUNDAMENTALS FOR FASHION AND INTERIORS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

FASHD-61 PATTERN DRAFTING I (3) [CX]
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: FASHD-40 Beginning Clothing Construction
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 replication, fit and accuracy.
TOP Code: 1303.10 - Fashion Design

FASHD-65 FASHION ILLUSTRATION (2) [CX]
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Introductory fashion sketching, leading to more advanced fashion figure drawing and descriptive rendering for fashion designers, illustrators, and merchandisers. Development of original designs and the uses of techniques of drawing for the fashion industry.
TOP Code: 1303.00 - Fashion

FASHD-72 FASHION DRAPING (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: FASHD-40 Beginning Clothing Construction
Three dimensional draping in muslin, and other textile and non-textile materials, and translation of the drape to a hard pattern.
TOP Code: 1303.10 - Fashion Design

FASHD-428 COMPUTER-AIDED DESIGN (2)
Lecture 16 - 18 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: Basic computer skills are recommended. FASHD-45 Design Fundamentals for Fashion and Interiors
Introductory course using CAD software to create flat sketches, colorize designs, assemble story boards, scan images and the effective use of program features to create and alter shapes and manipulate text.
TOP Code: 1303.10 - Fashion Design

FASHD-442 INDUSTRIAL SEWING (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: FASHD-40 Beginning Clothing Construction
Apparel industry construction techniques and assembly of garments utilizing industrial sewing machines, with a special emphasis on stretch fabrics.
TOP Code: 1303.00 - Fashion

FASHD-445 FITTING AND ALTERATIONS OF PATTERNS AND APPAREL (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: FASHD-40 Beginning Clothing Construction
Analysis of figure variations and application of pattern adjustments for proper fit. Topics include: ready-to-wear and commercial pattern alterations, and the development of custom patterns. Students will examine pricing, skills, equipment, and client management for an alteration businesses.
TOP Code: 1303.30 - Fashion Production

FASHD-470 APPAREL PRODUCTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: FASHD-40 Beginning Clothing Construction and FASHM-10 Introduction to the Fashion Industry
The design, development, pricing, sourcing, sample making, manufacturing, and marketing of a line of clothing.
TOP Code: 1303.30 - Fashion Production

FASHD-471 ADVANCED PATTERNMAKING (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: FASHD-61 Pattern Drafting I and FASHD-40 Beginning Clothing Construction
Theory and practice in developing flat patterns for sportswear, suits, linings and knitwear. Research of design details in more complicated garments and implementation into full-scale patterns. Patterns are tested in muslin, then in designer fabric, with the final pattern ready for industry production.
TOP Code: 1303.00 - Fashion

FASHD-472 COMPUTER-AIDED PATTERNMAKING (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: Basic computer skills are recommended.
Prerequisite: FASHD-61 Pattern Drafting I
Beginning study of computer applications in patternmaking, including terminology and software operation. Topics include pattern creation, manipulation, grading, file storage, and reporting. Use of pattern technologies current to the industry to produce preproduction and production documents.

FASHD-480 DESIGN COLLECTION (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: FASHD-42 Advanced Clothing Construction and FASHD-61 Pattern Drafting I
Preparation of a collection of garments for use in a runway show or photo shoot. Students must sketch, design, draft or drape patterns, select fabrics, and construct garments for a collection.

FASHD-482 INDUSTRY INTERNSHIP: FASHION DESIGN (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter Grade (Degree-applicable)
Corequisite: FASHD-42 Advanced Clothing Construction (may be taken previously) FASHM-60 Textiles and (may be taken previously)
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of instructor is required prior to registration.
Prerequisite: FASHD-61 Pattern Drafting I and FASHM-10 Introduction to the Fashion Industry and
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.

FASHION MERCHANDISING - FASHM

FASHM-10 INTRODUCTION TO THE FASHION INDUSTRY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Basic study of the fashion design and merchandising industry including leading designers and geographical centers, distribution, textile and apparel production, fashion cycles, retail outlets, merchandising techniques, and employment opportunities.
TOP Code: 1303.20 - Fashion Merchandising

FASHM-11 FASHION RETAIL MERCHANDISING AND MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: FASHM-10 Introduction to the Fashion Industry
From the perspective of the fashion industry 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, e-commerce, and controlling of merchandise.
TOP Code: 1303.20 - Fashion Merchandising

FASHM-12 VISUAL MERCHANDISING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Store design and space planning to maximize fashion sales. Visual display of store windows and vignettes using proper techniques and art principles.
TOP Code: 1303.20 - Fashion Merchandising

FASHM-15 IMAGE AND FASHION SELECTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Clothing choices for the professional workplace and California lifestyles. Analysis of body composition and proportions, individual coloring, and personality in the selection of a trendy, sophisticated, comfortable, and budget-appropriate wardrobe.
TOP Code: 1303.20 - Fashion Merchandising

FASHM-60 TEXTILES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Study of the textile fibers, yarns, weaves, and finishes which give the consumer and designer a background for intelligent selection, use, and care of modern fabrics. Special emphasis will be given to man-made fiber performance and properties.
TOP Code: 1303.20 - Fashion Merchandising

FASHM-482 INDUSTRY INTERNSHIPS: FASHION MERCHANDISING (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of instructor is required prior to registration.
Prerequisite: FASHM-10 Introduction to the Fashion Industry and FASHM-11 Fashion Retail Merchandising and Management and FASHM-60 Textiles
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.

FIRE TECHNOLOGY: PROFESSIONAL FIREFIGHTER - FIRETEC

The Fire Prevention Inspector courses are designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. Upon successful completion of Fire 420-423 with a score of 80% or higher on the final examination, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.

FIRETEC-1 PRINCIPLES OF EMERGENCY SERVICES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program. C-ID FIRE 100X

FIRETEC-2 FIRE BEHAVIOR AND COMBUSTION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course explores the theories 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.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program.
C-ID FIRE 140X

FIRETEC-3 FIRE PROTECTION SYSTEMS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course provides information relating to the 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.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program.
C-ID FIRE 120X
TOP Code: 2133.00 - Fire Technology

FIRETEC-4 BUILDING CONSTRUCTION FOR FIRE PROTECTION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Components of building construction relating to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Evolution of building and fire codes, developed in response to historical fires, in residential, commercial, and industrial occupancies.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program.
C-ID FIRE 130X
TOP Code: 2133.00 - Fire Technology

FIRETEC-5 FIRE PREVENTION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
The Fire Prevention course provides fundamental knowledge relating to the field of fire prevention. Topics include; history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use and application of codes and standards, plans review, fire inspections, fire and life safety education, and fire investigation.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program.
C-ID FIRE 110X
TOP Code: 2133.00 - Fire Technology

FIRETEC-6 FIRE APPARATUS AND EQUIPMENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Introduction to the mechanized equipment operated by fire service personnel and the regulations pertaining to its use. Topics include: driving laws and techniques, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, and apparatus maintenance. This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.This course is included as part of the articulation between CSU and Community Colleges. The course units are transferable into the CSULA Bachelors Program.
TOP Code: 2133.00 - Fire Technology

FIRETEC-7 STRATEGIES AND TACTICS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: FIRETEC-1 Principles of Emergency Services
Principles of fire control, through utilization of personnel, 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.
This course is identified by the National Fire Academy and FESHE as an approved course as listed in the National Fire Academy FESHE Model Curriculum Associate's document produced 2011, Revised 2014, 2016.
This course is included as part of the articulation between CSU and Community Colleges and by standardized CID numbers. The course units are transferable into the CSULA Bachelors Program.
TOP Code: 2133.00 - Fire Technology

FIRETEC-9 PRINCIPLES OF FIRE AND EMERGENCY SERVICES SAFETY & SURVIVAL (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services. This course curriculum is approved by the National Fire Academy (FESHE).

FIRETEC-10 WILDLAND FIRE CONTROL (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: FIRETEC-2 Fire Behavior and Combustion
This course provides students with a fundamental knowledge of the factors affecting wildland fires
including fuel, weather, topography, prevention, fire behavior, and public education. Students also learn about control techniques common to all agencies involved in wildland fire control.
TOP Code: 2133.10 - Wildland Fire Technology

FIRETEC-11 LEGAL ASPECTS OF EMERGENCY SERVICES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course will address the Federal, State, and local laws that regulate emergency services and include a review of national standards, regulations, and consensus standards.

FIRETEC-12 OCCUPATIONAL SAFETY AND HEALTH FOR EMERGENCY SERVICES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course introduces the basic concepts of occupational health and safety as it relates to emergency service organizations. Topics include risk and hazard evaluation and control procedures for emergency service organizations.

FIRETEC-420 FIRE INSPECTOR 1A - DUTIES AND ADMINISTRATION (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: FIRETEC-5 Fire Prevention FIRETEC-1 Principles of Emergency Services - Individuals who are currently working in the Fire Service or Emergency Services may enroll in this course. - and Course assumes familiarity with firefighting procedures and protocols, as it is designed for entry level personnel.
Provides fundamental information regarding the responsibility and authority for fire inspections, principles and procedures used to correct fire hazards, and occupancy classifications.

Course assumes familiarity with firefighting procedures and protocols, as it is designed for certified fire personnel. Non-firefighters are permitted to take the course, however they are ineligible to apply for the State Fire Marshall CFSTES certificate upon successful completion of the course.

The Fire Prevention Inspector courses are designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. Upon successful completion of Fire 420-423 with a score of 80% or higher on the final examination, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.
TOP Code: 2133.50 - Fire Academy

FIRETEC-421 FIRE INSPECTOR 1B, FIRE AND LIFE SAFETY (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: FIRETEC-420 Fire Inspector 1A - Duties and Administration
This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures.

The Fire Prevention Inspector courses are designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. Upon successful completion of Fire 420-423 with a score of 80% or higher on the final examination, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.
TOP Code: 2133.50 - Fire Academy

FIRETEC-422 FIRE INSPECTOR 1C - FIELD INSPECTION (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: FIRETEC-421 Fire Inspector 1B, Fire and Life Safety
This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers.

The Fire Prevention Inspector courses are designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. Upon successful completion of Fire 420-423 with a score of 80% or higher on the final examination, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.
TOP Code: 2133.50 - Fire Academy

FIRETEC-423 FIRE INSPECTOR 1D: FIELD INSPECTION-CALIFORNIA SPECIFIC (1) [CX]
Lecture 16 - 18 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: FIRETEC-422 Fire Inspector 1C - Field Inspection
This course provides students with a basic knowledge of a Fire Fighter I's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments.

The Fire Prevention Inspector courses are designed for (1) Students who are seeking a career as a Fire Inspector working within a fire department fire prevention bureau, (2) Fire Professionals preparing for the California State Board of Fire Service for Fire Inspector Certification, and (3) Individuals seeking employment as an inspector within Corporate Industry. Upon successful completion of Fire 420-423 with a score of 80% or higher on the final examination, the student and fire professional will receive a Certificate of Completion from The California Fire Service Training and Education System (CFSTES). To become certified as a Fire Inspector I the applicant must meet all requirements as set forth by the Office of the State Fire Marshall, State Fire Training.
TOP Code: 2133.50 - Fire Academy

FRENCH - FR

FR-1 ELEMENTARY FRENCH I (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
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 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.

FR-2 ELEMENTARY FRENCH II (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: FR-1 Elementary French I 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 life and culture in France and other Francophone communities. Ten hours of supplemental learning in a Success Center that supports this course is required.

GEOGRAPHY - GEOG

GEOG-1 WORLD REGIONAL GEOGRAPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the world's culture regions and nations as interpreted by geographers, including physical, cultural, and economic features. Emphasis on spatial and historical influences on population growth, transportation networks, and natural environments. Identification and importance of the significant features of 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 events discussed in an international framework. (C-ID GEOG 125)

GEOG-2 INTRODUCTION TO WEATHER, CLIMATE AND SOCIETY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course provides a survey of the scientific and societal issues associated with weather and climate variability and change. The course will examine physical phenomena observed in the Earth's weather and climate. Topics include atmospheric structure and composition, solar radiation and energy balances, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, air pressure, winds, air masses and fronts, cyclones, weather forecasting, climate and climate change.

The course will also review the current debate on climate change from a scientific point of view, with a focus on those aspects that have the largest potential impact on global society. (C-ID GEOG 130)
TOP Code: 1930.00 - Earth Science

GEOG-3 GEOGRAPHY OF CALIFORNIA (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
A thematic approach to the state's issues, processes and topics relevant to geography including climate, landforms, natural vegetation, water resources, cultural landscape, ethnic diversity, urban and agricultural regions, and the economy. This course explores the physical, and human landscapes that have evolved as a result of the human-environment interface.
(C-ID GEOG 140)

GEOG-4 PHYSICAL GEOGRAPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course is a spatial study of the Earth's dynamic physical systems and processes. Topics include: Earth-sun geometry, weather, climate, water, landforms, soil, and the biosphere. Emphasis is on the interrelationships among environmental and human systems and processes and their resulting patterns and distributions. Tools of geographic inquiry are also briefly covered; they may include: maps, remote sensing, Geographic Information Systems (GIS) and Global Positioning Systems (GPS).Broad-based course with an interdisciplinary outlook. (C-ID GEOG 110)

GEOG-5 PHYSICAL GEOGRAPHY LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Corequisite: GEOG-4 Physical Geography (may be taken previously).
This course is design to provide supplemental exercises in topics covered in Physical Geography lecture. Lab experience will include map analysis and interpretation, weather prognostication, landform processes and evolution, tectonics, biogeography, and habitat analysis. (C-ID GEOG 111)

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.

GEOG-6 ENVIRONMENTAL GEOGRAPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

GEOG-10 CULTURAL GEOGRAPHY OF NORTH AMERICA (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

GEOG-11 HUMAN GEOGRAPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course is a study of diverse human populations, their cultural origins, diffusion and contemporary spatial expressions. Topics include: demography, languages and religions, urbanization and landscape modification, political units and nationalism, and economic systems and development.
(C-ID GEOG 120)

GEOLOGY - GEOL

GEOL-1 PHYSICAL GEOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
An introduction to the principles of geology with emphasis on Earth processes. This course focuses on the internal structure and origin of the Earth and the processes that change and shape it. The laboratory component focuses on the identification of rocks and minerals, topographic and geologic map exercises demonstrating the work of water, wind, ice and gravity and the effects of tectonic activity. (C-ID GEOL 101)

GEOL-2 HISTORICAL GEOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
History of the Earth and the evolution of life forms including dinosaurs. This lecture/lab covers the formation of the earth, plate tectonics, ancient environments recorded in sedimentary rocks and evolution of life in the fossil record. (C-ID GEOL 111)

GERONTOLOGY - GERO

GERO-11 INTRODUCTION TO GERONTOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Interdisciplinary overview of the diverse characteristics, strengths, and needs of the increasing number of older persons. Topics include, aging services and community resources, occupations and career preparation in gerontology, information on aging and old age, laws and regulations governing work with the elderly, and ethical and policy issues.

GERO-18 AGING AND THE LIFE COURSE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
The scientific study of the social, cultural, and policy issues for an aging society from a gerontological perspective. Through gerontological research, study diversity in the aging process: cultural, economic, gender, and racial/ethnic differences. Study aging as a social construct including life-long age status and role expectations based on a gerontological perspective. Emphasis on society's response and the subsequent effects on individuals and their family/friends.

GERO-22 DYING AND DEATH (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

GERO-23 AGING AND OLDER ADULTHOOD (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Study of the aging process from a gerontological perspective with emphasis on major psychological theories of aging, stereotypes about aging and older adults, changes in physical health, cognition, mental health, and social relationships during later life.

GERO-400 PRINCIPLES OF CAREGIVING: OLDER ADULTS AND THEIR CARE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Functions and responsibilities of caregiving for older adults in both formal and informal settings. Students will explore medically-related as well as the social and emotional needs of those receiving care. Topics include individualized assessment, problem solving, interventions, effective communication, client advocacy, and functional decline factors.

GERO-404 HEALTH AND WELLNESS FOR OLDER ADULTS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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 and health promotion.

GERO-407 GERONTOLOGY CAREER COOPERATIVE EDUCATION (3)
Laboratory 144 - 171 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: GERO-11 Introduction to Gerontology
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. Instructor arranges student placement, and maintains contact with student throughout semester via online tools and resources.

GERO-455 RESOURCES AND SERVICES FOR OLDER ADULTS (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

GERO-462 ACTIVITY COORDINATOR TRAINING (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
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. This is a classroom-based intensive training

GERO-463 SOCIAL WORK DESIGNEE/ASSISTANT TRAINING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
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.

GUIDANCE - GUID

GUID-2 Essentials of Student Success (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Designed to increase student proficiency and retention in college. Topics include: learning styles, study and time management techniques, motivation, library research methods, critical thinking, memory and reading strategies, and exploration of college services. Helps students develop the personal and interpersonal communication skills critical to becoming responsible learners. Introduces students to the various segments of higher education and campus culture.

GUID-3 Career Exploration and Life Planning (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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, abilities, skills, and personality characteristics; intensive career investigation; self-marketing skill 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.

GUID-6 Successful College Transition (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
A course for new students that want to start college with a Hope, Growth and Grit mindset and learn the necessary skills to transition successfully to college. Topics to be reviewed in depth include: student services; first- year academic planning strategies; academic resources; policies and procedures; completion requirements for Career Technical Education (CTE) programs; Associate Degrees, and transfer pathways; as well as integrate critical thinking skills and personal management strategies necessary to the planning and successful implementation of a first-year educational plan.
TOP Code: 4930.10 - Guidance

GUID-507 Opening Doors to Student Effectiveness (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Non-degree-applicable)
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. This course is designed for students in the Opening Doors to Excellence program. Three arranged hours of supplemental learning in a Success Center that supports this course is required.

GUID-650 Supervised Tutoring (0)
Hours: Variable and arranged; based on student need as determined by assessment, diagnostic instruments, and/or instructor recommendation.
Grading: Non-Credit (Not graded)
Limitation on Enrollment (e.g. Performance tryout or audition): Referral by course instructor or academic counselor is required. - and Students must be enrolled in another Chaffey College course.
Open-entry/open-exit supervised tutoring course that provides students assistance in understanding college course assignments. Individualized/small group tutoring and Supplemental Instruction (SI) sessions are conducted outside of class time in a learning assistance center, and are 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.

HEATING VENTILATION AIR CONDITIONING AND REFRIGERATION - HVACR

HVACR-600 Introduction to Heating Ventilation and Air Conditioning (0)
Lecture 48 - 54 hours. Laboratory 24 - 27 hours.
Grading: Non-Credit (Pass/No Pass)
Provides a broad introduction to the world of the HVAC technician. The most basic operating principles of HVAC systems are presented along with a review of technician licensing and trade-governing regulations. The final portion of the module describes potential career paths for the well-trained HVAC technician. This curriculum aligns with NCCER HVACR Curriculum.

HVACR-601 HVAC Piping Practices (0)
Lecture 16 - 18 hours. Laboratory 24 - 27 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: HVACR-600 Introduction to Heating Ventilation and Air Conditioning
This course introduces students to the heating, Ventilation and Air Conditioning piping commonly used in the HVAC trade. This curriculum aligns with NCCER HVACR Curriculum.

HVACR-602 HVAC Electrical Systems (0)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: HVACR-601 HVAC Piping Practices
This course introduces students to the electrical concepts commonly used in the HVAC trade. This curriculum aligns with NCCER HVACR Curriculum.

HVACR-603 Environmental Protection Agency Certification (0)
Lecture 32 - 36 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: HVACR-600 Introduction to Heating Ventilation and Air Conditioning
This class prepares students for the certification test, and contains all the information a technician will require to successfully complete the test. This curriculum aligns with NCCER HVACR Curriculum. NCCER is an officially recognized training provider for North American Technician Excellence (NATE), and independent, third-party certification body for HVAC/R technicians.

HVACR-604 HVAC Compressors and Refrigerants (0)
Lecture 16 - 18 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: HVACR-603 Environmental Protection Agency Certification
This course introduces students to compressors, refrigerants, leak detection, evacuation, recovery and charging components commonly used in the trades. This curriculum aligns with NCCER HVACR Curriculum.

HVACR-605 HVAC Metering Devices, Heat Pumps and Basic Maintenance (0)
Lecture 8 - 9 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: HVACR-604 HVAC Compressors and Refrigerants
This course introduces students to metering devices, heat pumps and basic maintenance commonly used in the HVAC trade. This curriculum aligns with NCCER HVACR Curriculum.

HISTORY - HIST

HIST-1 World History: Pre-Civilization to 1500 (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of English 475 ESL-475 Fundamentals of College Reading and Writing for ESL Students
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. (C-ID HIST 150)

HIST-2 World History: 1500 to Present (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of English 475 ESL-475 Fundamentals of College Reading and Writing for ESL Students
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. (C-ID HIST 160)

HIST-4 History of Slavery (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.

HIST-5 Early Western Civilizations (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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. (C-ID HIST 170)

HIST-6 Modern Western Civilizations (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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. (C-ID HIST 180)

HIST-7 History of the Middle East (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of English 475 ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

HIST-9 History of Asian Civilizations I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Cultural development of Asian peoples from prehistoric times to the sixteenth century A.D., with emphasis on the religion and philosophy as well as early social and political institutions in China, India, Japan, and Korea

HIST-10 History of Asian Civilizations II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Cultural development of Asian peoples and nations from the sixteenth century A.D. to the present, with emphasis on the tension created by the impact of the West on traditional Asian institutions in China, Japan, India, and Southeast Asia. Focuses particularly on the response of those cultures in terms of socioeconomic and political developments.

HIST-12 Asian American History (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

HIST-16 Westward Movement and the Indian Wars 1840-90 (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the westward movement of the American frontier and the Indian Wars of 1840-1890. Historical significance of the people and events that comprise this crucial period in the formation of the American identity are studied from the perspectives of Native Americans and other ethnic groups, as well as Anglo-Americans.

HIST-17 United States History through 1877 (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of English 475 ESL-475 Fundamentals of College Reading and Writing for ESL Students
Survey of United States history from its colonial foundations through Reconstruction. Satisfies the California State University requirement in American History. May be offered as an Honors course. (C-ID HIST 130)

HIST-18 UNITED STATES HISTORY FROM 1865 (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of English 475 ESL-475 Fundamentals of College Reading and Writing for ESL Students
Development of the United States from the Reconstruction Era through the present. Satisfies the California State University requirement in American History. May be offered as an Honors course. (C-ID HIST 140)

HIST-19 HISTORY OF ETHNIC RELATIONS IN THE UNITED STATES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the American historical experience of ethnic, gender, and racial relations, as well as introducing fundamental theories of identity, racism and ethnocentrism. Examines the cultural, political and economic practices and institutions that support or challenge racism, racial and ethnic inequalities. Emphasis is given to Native, African, Hispanic, and Asian-American cultural experiences as well as the interrelationships of those minority groups with each other and with the dominant American culture. (C-ID SOCI 150)

HIST-20 HISTORY OF THE UNITED STATES FROM 1945-PRESENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Other: Eligibility for ENGL-1A as determined by the Chaffey assessment process.
Careful analysis of recent events in U.S. history from 1945 to the present, including an in-depth analysis of current events, movements and trends.

HIST-21 THE SIXTIES IN AMERICAN HISTORY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Issues and events of one of the most turbulent decades in American history - the 1960s, such as Civil Rights and the Vietnam War. May be taught in lecture or seminar format.

HIST-25 WOMEN IN UNITED STATES HISTORY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the history of women in America from the colonial period to the present with emphasis on relevant political, economic, and social factors.

HIST-37 CALIFORNIA HISTORY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: Eligibility for English 1A as determined by the Chaffey assessment process, or satisfactory completion of: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Survey of the history of California from pre-Columbian times to the present. Topics will include Native cultures, Spanish colonization, the mission system, Mexican rule, the Mexican war, the gold rush, the state constitution, Progressive-era political reforms, and immigration. Meets the subject matter requirements for the Liberal Studies degree, in preparation for teaching grades K-8. Course meets subject matter and state/local government state code requirements for students pursuing an Elementary Education degree in preparation for teaching grades K-8.
TOP Code: 2205.00 - History

HIST-40 RETROSPECTIVE OF WORLD WAR II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
World War II from the perspective of various viewpoints relative to the war's impact on but not limited to the following: history, sociology, philosophy, literature, the arts, business/technology, psychology, science, political science, religion, economics, and sports.

HIST-50 AFRICAN-AMERICAN HISTORY I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
African-American experience from the seventeenth-century African heritage to the American Civil War. Focuses on two great transitions: from Africa to New World slavery and from slavery to emancipation.

HIST-51 AFRICAN-AMERICAN HISTORY II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 policy and economy.

HIST-70 CHICANOS: THE COMMON HISTORY OF MEXICO AND THE US (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
The 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.

HIST-71 CHICANOS: THE CHICANO MINORITY IN THE UNITED STATES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Historical development of a Mexican-American community and the emergence of a Chicano cultural identity. Social, cultural, political, and economic issues and conflicts affecting the Chicano minority from the nineteenth century to the present.

HOMELAND NATIONAL SECURITY - HNS

HNS-10 INTRODUCTION TO HOMELAND SECURITY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course explores and introduces 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.

HNS-11 INTELLIGENCE ANALYSIS AND SECURITY MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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 also examines intelligence community operations and associated intelligence support of homeland security measures implemented by the U.S.

HNS-12 TRANSPORTATION AND BORDER SECURITY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

HOSPITALITY MANAGEMENT - HOTFS

HOTFS-10 INTRODUCTION TO HOSPITALITY MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
An overview of the hospitality industry with emphasis on career opportunities and guest services. This course covers organization and management of the hospitality industry, including restaurants, hotels, convention centers, amusement parks, and areas of leisure and travel.
TOP Code: 1307.00 - Hospitality

HOTFS-14 QUANTITY FOOD PRODUCTION MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Management methods for quantity food production in the food service industry. Prepares students for entry-level positions in both commercial and institutional settings. Students study the role of management with regards to challenges prevalent in quantity food production, equipment, labor, scheduling and nutritional concerns.
TOP Code: 1307.10 - Restaurant and Food Services and Management

HOTFS-21 PURCHASING, COST CONTROLS, AND MENU PLANNING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Principles, policies, and procedures associated with the procurement and conveyance of food and beverages in the food service industry. Deals with markets, federal and trade grades, government regulations, packaging, comparative versions of price buying, yields and quality control. 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. Fundamentals of menu writing, types of menus, layout, design, and food merchandising. Analyze menus for effectiveness.

HOTFS-32 HOSPITALITY LAW (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Study of the legal aspects of hospitality law both historically and as it exists today. Topics include torts and contracts, real and personal property rights, duties of innkeepers, food and beverage liability and proper documentation.

HOTFS-422 HOTEL OPERATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Operation and organization of a variety of lodging facilities for the hospitality industry. Covers front office, housekeeping, food and beverage, human resources, property maintenance, revenue management and forecasting, pricing and inventory.

HOTFS-428 HUMAN RESOURCES MANAGEMENT IN HOSPITALITY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: HOTFS-10 Introduction to Hospitality Management
Management of human resources and techniques applicable to the hospitality industry. Topics include: recruitment, selection, hiring, coaching, employee development and motivation, benefits, performance management, counseling and discipline

HOTFS-431 HOSPITALITY MARKETING MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
The application of basic marketing principles in the hospitality service product. Students will develop and present strategic marketing plans for a hospitality organization. Identification of the market, image development, advertising, sales promotions, public relations, and the administration and control of a marketing plan.

HOTFS-450 PRINCIPLES OF PUBLIC EVENTS AND CONVENTION MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
An overview of the event planning industry. Topics include step-by-step planning, budgeting, marketing and execution of a variety of events. Students will learn to write specifications for the venue, establish registration procedures, manage and evaluate the event.

HOTFS-451 SOCIAL EVENTS AND PRIVATE EVENT MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: HOTFS-10 Introduction to Hospitality Management
This course will provide an overview of event management related to all aspects of social events including: weddings, Quinceañera, birthday parties, reunions, fundraisers, etc. Topics include: types of private events, difference between event planning and event managements, the scope and responsibilities associated with private events and event management. This course will teach the importance of room dimensions and floor plans, and provide an understanding of the process of vetting and approving vendors.

HOTFS-452 EVENT SALES, MARKETING AND FINANCIAL MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: HOTFS-10 Introduction to Hospitality Management
Course will provide an overview of event sales, marketing, financial management. Topics include effective sales and marketing strategies, market data analysis, proposals, presentations, Internet marketing, promotions, budgeting, forecasting, pricing and profitability, and cost controls. Using the Excel template, students will understand how cost saving measures can affect the bottom line. Determine the cost per head at an event, and specifically how to control costs.

HOTFS-482 INDUSTRY INTERNSHIP: HOSPITALITY MANAGEMENT (1)
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of instructor is required prior to registration.
Prerequisite: HOTFS-422 Hotel Operations or CUL-442 Professional Cooking
Supervised work experience in a hotel, restaurant, or commercial kitchen. Includes front office, housekeeping, marketing and kitchen experience. Student will spend a minimum of 60 hours (if unpaid) or 75 hours (if paid) on the work site.
TOP Code: 1307.00 – Hospitality

HUMANITIES - HUMAN

HUMAN-5 ARTS AND IDEAS: ANTIQUITY TO RENAISSANCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for ENGL-1A as determined by the Chaffey assessment process
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective.
TOP Code: 1504.00 - Classics

HUMAN-6 ARTS AND IDEAS: RENAISSANCE TO MODERN (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for ENGL-1A as determined by the Chaffey assessment process
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
An interdisciplinary study of the movements in art, music, literature, and philosophy from 1500s Western Civilization to the modern era within a cultural and historical perspective.
TOP Code: 1504.00 - Classics

HUMAN-20 THE HOLOCAUST: HISTORY AND PHILOSOPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: or Eligibility for ENGL-1A as determined by the Chaffey assessment process
Prerequisite: ENGL-495 Fundamentals of College Reading and Writing or ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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.

INDUSTRIAL ELECTRICAL TECHNOLOGY CORE - IET

IET-401A INTRODUCTION TO ELECTRICITY (2.5) [CX]
Lecture 32 - 36 hours. Laboratory 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: MATH-550 Introduction to Algebra or higher level math course
Principles of basic electricity. Ohm's Law, series and parallel circuits, conventional current theory, current flow, conductors and insulators, combination circuits, and power ratings.

IET-401B INDUSTRIAL BASIC CONTROLS (2.5) [CX]
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: One year or more of professional experience in the related field. IET-401A Introduction to Electricity
Study of batteries and other sources of electricity, magnetism, magnetic induction, direct current generators, measuring instruments, resistive and capacitive circuits.

IET-403A ELECTRICAL MOTORS AND CONTROLS I (2.5) [CX]
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade
Advisory: or One to two years or more of professional experience in the related field IET-401A Introduction to Electricity
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.

IET-403B ELECTRICAL MOTORS AND CONTROLS II (2.5)
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: IET-403A Electrical Motors and Controls I One year or more of work experience in the related field or completion of IET-403A.
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.

IET-405 NATIONAL ELECTRIC CODE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: Two years or more of field related work experience or completion of IET-403A.
Interpretation and application of the National Electric Code (NEC) with emphasis on wire size, conduit, motor load protection, classified areas, grounding, and latest NEC updates.

IET-407 ELECTRICAL BLUEPRINTS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: One year or more of field related work experience or completion of IET-403A.
Interpretation of basic ladder diagrams, one line diagrams, electrical symbols, schematics, hydraulic symbols and diagrams including pictorials.

IET-411 PROGRAMMABLE LOGIC CONTROLLERS (3) [CX]
Lecture 40 - 48 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: or Two or more years of field related work experience and basic computer skills IET-403B Electrical Motors and Controls II and IET-407 Electrical Blueprints
Ladder diagrams, common computer terms, and operation of the programmer. Verifying and programming of timers and counters.

IET-413 INTERMEDIATE PROGRAMMABLE LOGIC CONTROLLERS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: or Two or more years of field related work experience including basic knowledge in PLC's
Prerequisite: IET-411 Programmable Logic Controllers
PLC advanced ladder diagrams; operations of the programmer; verifying, editing, and programming of timers, counters, master control relays and jump instructions using a computer.

IET-414 ADVANCED PROGRAMMABLE LOGIC CONTROLLERS (3)
Lecture 40 - 45 hours. Laboratory 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: IET-413 Intermediate Programmable Logic Controllers
This course covers advanced software and the practical skills necessary to program, communicate, and edit logic controls for an industrial touch screen HMI including: creating and configuring dynamic, pushbuttons, multistate indicator, and numeric input and output objects. The course also covers the fundamentals of configuring as well as the operation of analog input and output device controls using a PLC. Students will determine parameter settings and scale data for analog input and output modules. Students will use Allen-Bradley communication protocol, EtherNet IP, and software.

IET-415 ADVANCED ELECTRICITY LABORATORY (2)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: or Two or more years of field related experience including PLC's and static devices IET-405 National Electric Code and IET-407 Electrical Blueprints and IET-411 Programmable Logic Controllers and IET-420 Fundamentals of Control Systems Technology
Application and integration of concepts and skills covered in the advisory 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.
TOP Code: 0934.40 - Electrical Systems and Power Transmission

IET-417 ELECTRICAL TROUBLESHOOTING (3)
Lecture 40 - 45 hours. Laboratory 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: or Two or more years of field related work experience including static devices IET-403A Electrical Motors and Controls I and IET-411 Programmable Logic Controllers and IET-407 Electrical Blueprints and IET-420 Fundamentals of Control Systems Technology
Applying the knowledge learned on DC/AC motor controls and blueprint reading, and developing troubleshooting skills.
TOP Code: 0934.40 - Electrical Systems and Power Transmission

IET-419 DC VARIABLE SPEED DRIVE (1.5)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: IET-403A Electrical Motors and Controls I and IET-403B Electrical Motors and Controls II or
Other: Two or more years of field related work experience
Function and controls of a DC variable speed drive and its application on the field, including adjustments, settings, tuning, and configuration.

IET-420 FUNDAMENTALS OF CONTROL SYSTEMS TECHNOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: IET-403A Electrical Motors and Controls I and IET-411 Programmable Logic Controllers or - Two years or more of professional work experience that includes knowledge of static devices.
This course covers the fundamental knowledge and practical skills necessary to install and maintain standard measurement and control instrumentation. Includes instruction on the following concepts of process control: calibration, maintenance, repair, & troubleshooting; piping and instrumentation diagram (P&ID) basics; project start-up, commissioning, loop checking, project organization, & planning; evaluation of loop performance; P&IDs and ISA Standards; documentation; installation practices; hazardous area classification; intrinsic safety; logical analysis; common problems; types and uses of loop diagrams; basics of Smart Devices and Digital Controllers; calculating and configuring Smart Transmitters.
TOP Code: 0934.40 - Electrical Systems and Power Transmission

IET-421 AC VARIABLE FREQUENCY SPEED DRIVE (1.5)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: IET-419 DC Variable Speed Drive or - Two or more years of field related work experience.
Function and controls of an AC variable frequency drive and its application on the field, including parameter, setting, tuning, and configuration.

IET-422 OSHA SAFETY TRAINING (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
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.

IET-482 INTERNSHIP IN INDUSTRIAL ELECTRICITY (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter Grade
Limitation on Enrollment (e.g. Performance tryout or audition): Instructor signature is required prior to enrollment. - Enrollment in any industrial electricity course.
Prerequisite: IET-401A Introduction to Electricity
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.

INDUSTRIAL ELECTRICAL TECHNOLOGY ELECTROMECHANICAL TECHNOLOGY - IETELMT

IETELMT-430 HYDRAULIC FUNDAMENTALS (2) [CX]
Lecture 24 - 29 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Introduction to hydraulic fundamentals, demonstration of hydraulic power, basic circuits, functional circuits, and troubleshooting.

IETELMT-432 ELECTRICAL CONTROL OF HYDRAULIC SYSTEMS (2)
Lecture 24 - 29 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: IETELMT-430 Hydraulic Fundamentals
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.

NDUSTRIAL MAINTENANCE MECHANIC - INDMM

INDMM-400 INTRO TO CONSTRUCTION SAFETY, TRADE MATH, RIGGING, AND TOOLS (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
This course introduces basic safety and trade math for construction using OSHA approved standards by emphasizing how to follow safe work practices and procedures, introduction hand and power tools, construction drawings, and basic rigging.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-401 BASIC COMMUNICATION AND EMPLOYABILITY SKILLS, AND CORE TESTING (2.5) [CX]
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: INDMM-400 Intro to Construction Safety, Trade Math, Rigging, and Tools Or six months or more of work experience in a related field.
This course provides students with techniques for communicating effectively with co-workers and supervisors, introduces critical thinking and problem solving skills, and provides an introduction to material handling. Students also have the opportunity to demonstrate the skills learned in the classroom.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-402 FUNDAMENTALS OF INDUSTRIAL MAINTENANCE, OXYFUEL, AND CRAFT SKILLS (3.5) [CX]
Lecture 48 - 54 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: INDMM-401 Basic Communication and Employability Skills, and Core Testing
This course is designed to give the student the fundamental skills necessary to increase success in the workforce, how to use Oxyfuel cutting equipment safely, and how to apply quantitative skills commonly used by industrial maintenance mechanics, such as gaskets, pumps, valves, and lubrication. This course covers an introduction to test instruments along with an orientation of the tools of the trade, such as fasteners and anchors
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-403 TRADE MATH AND DRAWINGS, MATERIAL HANDLING, AND MOBILE EQUIPMENT (2.5) [CX]
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: INDMM-402 Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills
This course is designed to give the student the fundamental quantitative skills commonly used by industrial maintenance personnel. Topics include: ratios and proportions as they apply to industrial maintenance, basic algebra applicable to industrial maintenance, circumference problems as applied in industrial maintenance , solving for right triangles using the Pythagorean theorem applicable to the use of rigging, construction drawings, techniques of material handling, and mobile and support equipment.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-600 INTRO TO CONSTRUCTION SAFETY, TRADE MATH, RIGGING, AND TOOLS (0) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
This course introduces basic safety and trade math for construction using OSHA approved standards by emphasizing how to follow safe work practices and procedures, and
providing an introduction to hand and power tools, construction drawings, and basic rigging.

INDMM-604 INDUSTRIAL MECHANICAL MATH AND PRECISION TOOLS (0)
Lecture 48 - 54 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-403 Trade Math and Drawings, Material Handling, and Mobile Equipment
This course is designed to give the student the fundamental quantitative skills commonly used by industrial maintenance personnel in the area of piping. Topics include: the proper use of level, feeler gauge, calipers, micrometer, dial indicator, protractor, gauge blocks, speed measurement tools, and pyrometer. Functions of thermal imaging, vibration analysis, and acoustic vibrations.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-605 INTRODUCTION TO INDUSTRIAL PIPING (0)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass) Prerequisite: INDMM-604 Industrial Mechanical Math and Precision Tools
Introduction to industrial piping, including basic layout, piping components, copper and plastic piping practices, and introduction to ferrous metal piping practices.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-606 INTRODUCTION TO VALVES, BEARINGS AND TESTING (0)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-605 Introduction to Industrial Piping
This course includes the identification, installation and maintenance of valves, introduction to bearings, as well as hydrostatic and pneumatic testing.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-607 INSTALLATION OF BEARINGS, COUPLINGS, SEALS, AND DRIVES (0)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-606 Introduction to Valves, Bearings and Testing
This course covers the installation of bearings, couplings, belt and chain drives and mechanical seals.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-608 SETTING BASEPLATES AND ALIGNMENT (0)
Lecture 8 - 10 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-607 Installation of Bearings, Couplings, Seals, and Drives
This course covers the setting of baseplates and soleplates, precision leveling procedures, pre-alignment and conventional alignment. Course may be repeated.

INDMM-609 ADVANCED ALIGNMENT (0)
Lecture 8 - 9 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-608 Setting Baseplates and Alignment
This course further develops skills students need to understand alignment in the industrial field. Misalignment of equipment can cause damage to bearings, couplings to name a few. Specific topics include shaft runout using dial indicator jig, complex reverse dial indicators, and indicator sag.

INDMM-610 FUNDAMENTALS OF PRESSURE, HEATING & COOLING SYSTEMS (0)
Lecture 24 - 29 hours. Laboratory 48 - 54 hours.
Grading: Non-Credit (Pass/No Pass)
This course provides student's with the fundamentals of, pressure, heating, and cooling systems used in the industrial mechanical craft. May be repeated.

INDMM-611 TROUBLESHOOTING PUMPS AND GEARBOXES (0)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-610 Fundamentals of Pressure, Heating & Cooling Systems
This course covers troubleshooting pumps and gearboxes used in the industrial mechanical craft. May be repeated.

INDMM-612 ADVANCED BLUEPRINT READING AND INTRODUCTION TO SUPERVISORY SKILLS (0)
Lecture 32 - 38 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-611 Troubleshooting Pumps and Gearboxes
This course provides students with additional skills required in the industrial mechanical craft related to blueprint reading and supervisory skills. May be repeated.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-613 ADVANCED MECHANICAL TOPICS I (0)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-612 Advanced Blueprint Reading and Introduction to Supervisory Skills
This course covers the operation of various types of fans and blowers and explains how they are used including maintenance procedures. May be repeated.
TOP Code: 0945.00 - Industrial Systems Technology and Maintenance

INDMM-614 ADVANCED MECHANICAL TOPICS II (0)
Lecture 16 - 19 hours. Laboratory 24 - 29 hours.
Grading: Non-Credit (Pass/No Pass)
Prerequisite: INDMM-613 Advanced Mechanical Topics I
This course addresses vibration and balancing analysis and covers compressors and pneumatic systems including troubleshooting procedures. May be repeated.

INTERIOR DESIGN - ID

ID-10 INTRODUCTION TO INTERIOR DESIGN (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Overview of the interior design field. Topics covered include: interior design profession, history of styles, elements and principles of design, design process, building systems, space planning, visual communication, color, lighting, materials, furnishings, textiles and window treatments for Residential and non-residential interiors.
TOP Code: 1302.00 - Interior Design and Merchandising

ID-11 HISTORY OF ARCHITECTURE AND INTERIORS I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Furniture, interior and architectural styles of ancient Egypt, Greece, and Rome; the European Middle Ages, Renaissance, French periods, and non-western world to 1820.
TOP Code: 1302.00 - Interior Design and Merchandising

ID-12 HISTORY OF ARCHITECTURE AND INTERIORS II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Furniture, interior and architectural styles of the English, Anglo-American, late 19th and 20th century Western periods, and non-western cultures.
TOP Code: 1302.00 - Interior Design and Merchandising

ID-16 QUICK SKETCHING FOR INTERIOR DESIGNERS (2.5)
Lecture 24 - 27 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Manual and computer sketching techniques for illustrating interiors. Includes one and two point perspective drawing creation, color rendering, shading, textures, and use of a variety of presentation techniques and medium. Emphasis on quick presentation of ideas for the designer and client. Completed projects become part of a student portfolio.

ID-17 INTRODUCTION TO LIGHTING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Basic principles of lighting and their application. Visual perception, properties of light and color, sources and luminaires, lighting design elements and techniques, and elementary calculations. Energy efficient lighting practices and applicable codes and regulations. Written and graphic design documents.

ID-21 SPACE PLANNING (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Course focuses on the design process, human factors in design, ADA compliance, spacial relationships, aesthetic considerations and codes. Emphasis is placed on furniture layouts and space planning for various spaces in residential and non-residential interiors.

ID-22 INTERIOR DESIGN MATERIALS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Materials and treatments used in interior design for commercial and residential installations, including "green" resources. Field trips to vendors and resources may be required.

ID-25 INTERIOR DESIGN MANAGEMENT (2)
Lecture 32 - 38 hours.
Grading: Letter Grade (CSU)
Practical course in the special problems encountered in the interior design profession, including measuring and estimating materials, purchasing, client relationships, ethics, methods of compensation, contracts and business documents.

ID-30 INTERIOR DESIGN STUDIO (3.5)
Lecture 40 - 45 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: ID-16 Quick Sketching for Interior Designers and ID-21 Space Planning and ID-17 Introduction to Lighting ID-22 Interior Design Materials
Advanced course integrating knowledge, problem solving, conceptual development, visual and oral communication concerning a residential and a non-residential project. Course focuses on design process, furniture layouts, effective space plans, elevations, reflected ceiling plans, lighting and electrical plans, renderings and creating models. Additional course emphasis in selecting interior components and materials as well as providing estimates and scheduling for two complete projects

ID-427 COMPUTER DRAFTING & DESIGN FOR INTERIORS (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Computer-aided drafting & design using professional software, such as AutoCAD, Revit, Sketchup, or ArchiCAD. Course will focus on 3D modeling, and production of 2D Floor plans, furniture layouts, elevations, lighting plans, 3D perspectives, and photo-realistic renderings. Use of various scanners, printers and plotters.

ID-482 INDUSTRY INTERNSHIP: INTERIOR DESIGN (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Letter Grade (Degree-applicable)
Corequisite: ID-30 Interior Design Studio
Limitation on Enrollment (e.g. Performance tryout or audition): Consent of instructor is required prior to registration.
Prerequisite: ID-16 Quick Sketching for Interior Designers and ID-21 Space Planning and ID-22 Interior Design Materials
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.

JOURNALISM - JOUR

JOUR-10 NEWSWRITING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Eligibility for ENGL-1A as determined by the Chaffey Assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
This course will provide an introduction to multimedia storytelling with a journalism emphasis. Techniques that will be explored include use of video, photos, audio, animation, and text to convey interactive news and feature stories through the Internet and other electronic media. It also will include techniques in digital research, critical thinking, and synthesis. 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. Examination of the legal and ethical issues facing journalists. Students will report and write based on their original interviews and research to produce news content. Experiences may include covering speeches, meetings and other events, writing under deadline and use of AP Style. (C-ID JOUR 110)

JOUR-11 MULTIMEDIA REPORTING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: JOUR-10 Newswriting
Prerequisite: ENGL-1A Composition
Principles and practice in multimedia storytelling with a journalism emphasis. Using digital research, critical thinking and synthesis, students will explore video, photos, audio, animation, and text to convey interactive news and feature stories through the Internet and other electronic media.
(C-ID JOUR 120)

JOUR-30 STUDENT MEDIA PRACTICUM I (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Assessment Level: Eligibility for ENGL 1A as determined by the assessment process
Prerequisite: ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
Student media practicum that includes a lab and regularly produces a news or feature non-fiction product with a journalism emphasis by and for students and distributed to a campus or community audience. Must include weekly news assignments. May include a variety of student media across multiple platforms, including print, broadcast, and online. Includes practical experience in design/layout, visual, online, multimedia journalism and emerging technologies. Must be student produced with student leadership.
(C-ID JOUR 130)

JOUR-31 STUDENT MEDIA PRACTICUM II (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: JOUR-10 Newswriting or JOUR-30 Student Media Practicum I
This course requires higher skill level and/or leadership/management involvement than JOUR 30. Intermediate student media practicum that includes a lab and regularly produces a news or feature non-fiction product with a journalism emphasis by and for students and distributed to a campus or community audience. Must include weekly news assignments. May include a variety of student media across multiple platforms, including print, broadcast, and online. Includes practical experience in design/layout, visual, online, multimedia journalism, emerging technologies and leadership/management. Must be student produced with student leadership. (C-ID JOUR 131)

KINESIOLOGY: ACTIVITY - KINACT

KINACT-1 BEGINNING TENNIS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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.

KINACT-2 ADVANCED TENNIS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
This course will emphasize the rules, court etiquette, history, and advanced skills of tennis.

KINACT-9 SWIMMING (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Basic skills and safety precautions for swimming. Several different strokes are taught according to skill levels.

KINACT-16 VOLLEYBALL (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Course will emphasize rules, strategy, and basic volleyball skill development such as setting, digging, serving, spiking and team strategies.

KINACT-17 ADVANCED VOLLEYBALL (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Previous volleyball experience.
The course will include teaching of the advanced skills of volleyball with emphasis on strategy, skills and complex offensive and defensive schemes.

KINACT-20 BASKETBALL (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Rules, court etiquette, basic offensive and defensive positions, and basic passing and dribbling techniques of basketball.

KINACT-22 SOCCER (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Designed to introduce the student to the game of soccer. Emphasis on providing information and practice in the skills of kicking, trapping, shooting, passing, rules and basic tactics. The class is for beginners as well as students who have played soccer.

KINACT-23 INTERMEDIATE SOCCER (1)
Lecture 16 - 19 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: KINACT-22 Soccer
Designed for players with basic soccer playing skills and understanding of the game, who wish to improve their playing abilities. Topics include heading drills, systems of play, ball control skills, and advanced defense and offense tactics.

KINACT-24 AEROBIC CROSS TRAINING (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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.

KINACT-25 SPINNING FOR FITNESS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Use of an indoor cycling bike for improving overall physical fitness and health. Students develop a safe and efficient spinning program designed to meet their fitness goals. Suitable for all genders and fitness levels.

KINACT-26 BEGINNING PILATES MATWORK (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
This course is an introduction to Pilates mat work. Pilates is a form of mind-body exercise that improves flexibility and endurance while building strength. An emphasis will be placed on strengthening the core, which consists of muscles in the abdomen, low back, and hips. Students can expect to improve coordination and balance in daily activities or for fitness and sport.

KINACT-28A BEGINNING YOGA (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
This course is designed for the beginning students who would like to learn the importance of breath, alignment of postures and relaxation techniques to improve health and fitness of the mind and body. The goal of the course is to improve flexibility, muscle strength, endurance, and coordination through the physical postures of yoga. Introduction to relaxation techniques will be incorporated for stress reduction and mental calm.
TOP Code: 0835.10 - Physical Fitness and Body Movement

KINACT-28B INTERMEDIATE YOGA (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: KINACT-28A Beginning Yoga
This course is designed for intermediate students to advance their yoga skills through breathing exercises, alignment of physical postures and advanced forms of relaxation techniques to improve health and fitness of the mind and body. The goal of the course is to advance flexibility, muscle strength, endurance and coordination through the challenge of intermediate physical postures such as inversions, arm balances, twists and wraps. Intermediate levels of meditation will be incorporated for stress reduction and mental calm.
TOP Code: 0835.10 - Physical Fitness and Body Movement

KINACT-29A BEGINNING BODY CONDITIONING (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Course is designed to teach the student the basic exercises for the development of the major muscles. Emphasis is placed on muscular strength, endurance and flexibility.

KINACT-29B INTERMEDIATE BODY CONDITIONING (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: KINACT-29A Beginning Body Conditioning
Course is designed to teach the student intermediate exercises for the development of the major muscles. Emphasis is placed on muscular strength, endurance flexibility and plyometrics. The student will be introduced to interval training and plyometrics.

KINACT-29C ADVANCED BODY CONDITIONING (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: KINACT-29B Intermediate Body Conditioning
Course is designed to teach the student advanced exercises for the development of the major muscles. Emphasis is placed on muscular strength, endurance flexibility plyometrics and Olympic strength training.

KINACT-31 INTRODUCTION TO SELF-DEFENSE AND PERSONAL SAFETY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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.

KINACT-32 BEGINNING JIU-JITSU (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Introduction to the basic techniques and strategies of Brazilian Jiu-Jitsu. Instruction focuses on the fundamental positions, sweeps, escapes, and submissions of this "gentle art" of self-defense. General conditioning, coordination, and body movement will also be emphasized.

KINACT-35 CARDIO FITNESS FOR LIFE (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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 will include both cardiovascular efficiency and muscular strength. Suitable for all ages and fitness levels.

KINESIOLOGY: LECTURE - KINLEC

KINLEC-2 Introduction to Athletic Training (3)
Lecture 40 - 48 hours. Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Possession of current first-aid and cardiopulmonary resuscitation cards.
This course will cover concepts of prevention, recognition, emergency care, evaluation, management, treatment and rehabilitation and reconditioning resulting from physical activity and athletics. Legal and ethical issues, professionalism, organization and administration of a sports medicine facility. This course is focused on preparing those interested in becoming Athletic Trainers and Coaches.

KINLEC-11 Theory and Analysis of Football (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Comprehensive video review of football techniques. 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.
TOP Code: 0835.60 - Coaching

KINLEC-14 Lifeguard Training (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: 1) Swim 300 yards continuously. 2) Starting in the water, swim 20 yards using front crawl or breaststroke, surface dive 7 - 10 feet, retrieve a 10-pound object, return to the surface, swim 20 yards back to the starting point with the object and exit the water without using a ladder or steps, within 1 minute, 40 seconds.
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, and American Red Cross CPR for the Professional Rescuer.

KINLEC-15 Diet and Fitness (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

KINLEC-16 First Aid (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course involves the theory and detailed demonstration of the first aid care of the injured. The student will learn to assess a victim's condition and incorporate proper treatment. Standard first aid, CPR, and AED certification(s) will be granted upon successful completion of requirements. (C-ID KIN 101)

KINLEC-17 First Aid & Emergency Response to Community Disasters (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 bloodborn pathogens in the workplace, open/closed wounds, broken bones, drowning, childbirth, spinal injuries. Those who successfully complete this course will be awarded an American Red Cross certificate, which qualifies the holder to be entered into the National American Red Cross database to be called 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.

KINLEC-18 Introduction to Kinesiology (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This course is an introduction to the interdisciplinary study of human movement. An overview of the importance of the sub-disciplines in kinesiology will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions. (C-ID KIN 100)

KINLEC-19 Practical Applications in Athletic Training I (2)
Lecture 8 - 9 hours. Laboratory 72 - 81 hours.
Grading: Letter Grade (CSU)
Prerequisite: KINLEC-2 Introduction to Athletic Training
This course will provide first semester students with the opportunity to observe and learn the basic principles and protocols of athletic training during day-to-day sports activities in a supervised lab setting. Basic athletic training room and event observation with an emphasis on prevention, care, evaluation, treatment, and rehabilitation for the lower extremity. This course will help the student prepare for transfer to a Commission on Accreditation of Athletic Training Education (CAATE) accredited athletic training program.

KINLEC-21 Practical Applications in Athletic Training II (2)
Lecture 8 - 9 hours. Laboratory 72 - 81 hours.
Grading: Letter Grade (CSU)
Prerequisite: KINLEC-19 Practical Applications in Athletic Training I
This course will provide the second semester student with the opportunity to observe and learn the basic principles and protocols of athletic training during day-to-day sports activities in a supervised lab setting. Basic athletic training room and event observation with an emphasis on prevention, care, evaluation, treatment, and rehabilitation for the upper extremity. This course will help the student prepare for transfer to a Commission on Accreditation of Athletic Training Education (CAATE) accredited athletic training program. This course is a continuation of KINLEC-19.

KINLEC-22 Practical Applications in Athletic Training III (2.5)
Lecture 8 - 9 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU)
Prerequisite: KINLEC-21 Practical Applications in Athletic Training II
This course will provide third semester student with the opportunity to observe and learn the advanced principles and protocols of athletic training during day-to-day sports activities in a supervised lab setting. Advanced athletic training room and event observation with an emphasis on prevention, care, evaluation, treatment, and rehabilitation for the upper and lower extremity. This course will help the student prepare for transfer to a Commission on Accreditation of Athletic Training Education (CAATE) accredited athletic training program. This course is a continuation of KINLEC-21.

KINLEC-24 BIOMECHANICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: BIOL-20 Human Anatomy
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.

KINLEC-32 OUTDOOR ADVENTURES (2)
Lecture 16 - 18 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: Comfort in an outdoors environment and good physical fitness are recommended for course success.
Introduces the techniques of environmentally-sensitive backpacking, selection and evaluation of backpacking equipment and its use, 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.

KINESIOLOGY: TEAM - KINTM

In-season (competition) intercollegiate Kinesiology: Team courses (KINTM-41 through 59) are open-entry activity.

Off-season (conditioning) intercollegiate Kinesiology: Team courses (KINTM-1 through 15, 27, and KINTM-61A-69) are structured/scheduled activity.

Students may take all KINTM courses (excluding KINTM-16, 18, and 19) up to four times, restricted to 175 hours of competition and 175 hours of conditioning per sport, per year.

KINTM-1 FOOTBALL TEAM ACTIVITY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Information and practice in the development of football basic skills and techniques. Primarily intended for students who wish to compete in the sport of football.

KINTM-1A FOOTBALL TEAM ACTIVITY (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Advisory: Competitive football background
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is based on a successful tryout.
Information and practice in the development of football basic skills and techniques.

KINTM-2 VOLLEYBALL TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Designed for women interested in learning competitive volleyball and joining the women's intercollegiate team.

KINTM-2A VOLLEYBALL TEAM ACTIVITY, WOMEN (0.5)
Laboratory 24 - 27 hours.
Grading: Letter Grade (CSU)
Designed for women interested in learning competitive volleyball and joining the women's intercollegiate team.

KINTM-3 BASKETBALL TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Focus on history, conditioning, rules, and fundamental and advanced skills needed for competitive women's basketball.

KINTM-3A BASKETBALL TEAM ACTIVITY, WOMEN (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Advisory: Competitive basketball background.
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is based on a successful tryout.
Focus on history, conditioning, rules, and fundamental skills needed for competitive women's basketball.

KINTM-4 SOFTBALL TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Overall development of basic skills and knowledge needed for competitive women's softball play.

KINTM-5 WATER POLO TEAM ACTIVITY, MEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Rules, etiquette, history, and advanced skills of water polo, designed for the prospective men's water polo team participant.

KINTM-6 BASKETBALL TEAM ACTIVITY, MEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Designed for men interested in playing competitive men's basketball.

KINTM-6A BASKETBALL TEAM ACTIVITY, MEN (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Advisory: Competitive basketball background.
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is based on a successful tryout.
Designed for men interested in playing competitive men's basketball.

KINTM-7 CROSS COUNTRY TEAM ACTIVITY, MEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Provides training in skills, techniques, strategies, and conditioning for cross country runners. Designed for men interested in competitive cross country at the college level.

KINTM-8 CROSS COUNTRY TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Provides training in skills, techniques, strategies, and conditioning for cross country runners. Designed for women interested in competitive cross country at the college level.

KINTM-9 WATER POLO TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on a successful tryout.
Rules, etiquette, history, and advanced skills of water polo. Course is designed for prospective women's water polo team participants.

KINTM-11 SWIMMING TEAM ACTIVITY, MEN AND WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on successful tryout.
Rules and fundamental skills involved in competitive swimming strokes. Designed for students interested in competitive swimming.

KINTM-14 SOCCER TEAM ACTIVITY, MEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on successful tryout.
Information and practice to develop basic soccer skills, techniques, and strategies. Designed for men interested in playing competitive soccer at the college level.

KINTM-15 SOCCER TEAM ACTIVITY, WOMEN (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on successful tryout.
Information and practice to develop basic soccer skills, techniques, and strategies. Designed for women interested in playing competitive soccer at the college level.

KINTM-16 DANCE/SPIRIT TEAM (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Previous dance training is recommended
Limitation on Enrollment (e.g. Performance tryout or audition): Admission is by audition
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 is on competition-level performance skills as well as dance team protocol and etiquette.

KINTM-18 BEGINNING DANCE/CHEER TEAM (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Previous dance training is recommended
Limitation on Enrollment (e.g. Performance tryout or audition): Admission is by audition
This course is designed for beginning skills in cheer techniques, conditioning, jumping, and dance. This course is for students who will represent the college at athletic contests, national dance competitions, and community events.

KINTM-19 INTERMEDIATE DANCE/CHEER TEAM (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Previous dance training is recommended
Limitation on Enrollment (e.g. Performance tryout or audition): Admission is by audition
This course is designed for intermediate skills in cheer techniques/motivation and dance. This course is for students who will represent the college at athletic contests, national dance competitions, and community events.

KINTM-27 BASEBALL TEAM CLASS, MEN (2)
Laboratory 96 - 114 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment based on successful tryout.
Designed for men interested in playing competitive intercollegiate baseball.

KINTM-41 INTERCOLLEGIATE FOOTBALL (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Advanced skills for competing in football contests. Information and daily practice to develop a high level of proficiency in football skills and techniques.

KINTM-42 INTERCOLLEGIATE VOLLEYBALL TEAM, WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in volleyball.

KINTM-44 INTERCOLLEGIATE SOFTBALL TEAM, WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in softball.

KINTM-45 INTERCOLLEGIATE WATER POLO TEAM, MEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Competitive intercollegiate water polo team involving skills and knowledge of all aspects of competitive play.

KINTM-47 INTERCOLLEGIATE BASEBALL TEAM, MEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men to compete at the intercollegiate level in baseball.

KINTM-48 INTERCOLLEGIATE CROSS COUNTRY, MEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men to compete at the intercollegiate level in cross country. Advanced training techniques, strategies, and conditioning developed for successful participation.

KINTM-49 INTERCOLLEGIATE CROSS COUNTRY, WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in cross country. Advanced training techniques, strategies, and conditioning developed for successful participation.

KINTM-51 INTERCOLLEGIATE SWIMMING TEAM, MEN AND WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men and women to compete at the intercollegiate level in swimming.

KINTM-54 INTERCOLLEGIATE SOCCER TEAM, MEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men to compete at the intercollegiate level in soccer.

KINTM-55 INTERCOLLEGIATE SOCCER TEAM, WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in soccer.

KINTM-56A INTERCOLLEGIATE BASKETBALL TEAM, WOMEN FALL (1.5)
Laboratory 88 - 88 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in basketball during the fall semester. Information and daily practice to develop a high level of proficiency in basketball skills and techniques during the pre-season and non-conference schedule.

KINTM-56B INTERCOLLEGIATE BASKETBALL TEAM, WOMEN SPRING (1.5)
Laboratory 88 - 88 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for women to compete at the intercollegiate level in basketball during the spring semester. Information and daily practice to develop a high level of proficiency in basketball skills and techniques during conference play and post-season schedule.

KINTM-57A INTERCOLLEGIATE BASKETBALL TEAM, MEN FALL (1.5)
Laboratory 88 - 88 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men to compete at the intercollegiate level in basketball during the fall semester. Information and daily practice to develop a high level of proficiency in basketball skills and techniques during pre-season and non-conference schedule.

KINTM-57B INTERCOLLEGIATE BASKETBALL TEAM, MEN SPRING (1.5)
Laboratory 88 - 88 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Opportunity for men to compete at the intercollegiate level in basketball during the spring semester. Information and daily practice to develop a high level of proficiency in basketball skills and techniques during conference play and post-season schedule.

KINTM-59 INTERCOLLEGIATE WATER POLO TEAM, WOMEN (3)
Laboratory 175 - 175 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): Enrollment is restricted to student athletes who meet both skill and eligibility requirements.
Competitive intercollegiate women's water polo team, involving skills and knowledge of all aspects of competitive play.

KINTM-60 VOLLEYBALL STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition):
Other: Concurrent or previous enrollment in any Volleyball KINTM course.
Advanced sport-specific drills and exercises designed for volleyball 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 the sport and individuals' capabilities.

KINTM-60A VOLLEYBALL STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 27 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition):
Other: Concurrent or previous enrollment in any Volleyball KINTM course.
Advanced sport-specific drills and exercises designed for volleyball 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 the sport and individuals' capabilities.

KINTM-61A BASKETBALL STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Basketball KINTM course.
Advanced sport-specific drills and exercises designed for basketball 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 the sport and individuals' capabilities.

KINTM-62 FOOTBALL STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Football PETEAM course.
Advanced sport-specific drills and exercises designed for preseason football athletes necessary for proper conditioning . 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 the sport and individuals? capabilities.

KINTM-62A FOOTBALL STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Football KINTM course.
Advanced sport-specific drills and exercises designed for football 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 the sport and individuals? capabilities.

KINTM-64 SOFTBALL STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Softball KINTM course.
Advanced sport-specific drills and exercises designed for softball 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 the sport and individuals' capabilities.

KINTM-65 WATER POLO STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Water Polo KINTM course.
Advanced sport-specific drills and exercises designed for water polo 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 the sport and individuals' capabilities.

KINTM-65A WATER POLO STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Water Polo KINTM course.
Advanced sport-specific drills and exercises designed for water polo 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 the sport and individuals' capabilities.

KINTM-66 BASEBALL STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition):
Other: Concurrent or previous enrollment in any Baseball KINTM course
Advanced sport-specific drills and exercises designed for baseball athletes. Increases in volume, intensity, frequency, and duration of specific activities to 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 the sport and individuals' capabilities.

KINTM-66A BASEBALL STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Baseball KINTM course.
Advanced sport-specific drills and exercises designed for baseball 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 the sport and individuals' capabilities.

KINTM-67A SWIMMING STRENGTH AND CONDITIONING FOR ATHLETES (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Swimming KINTM course.
Advanced sport-specific drills and exercises designed for swimming 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 the sport and individuals' capabilities.

KINTM-69 CROSS COUNTRY STRENGTH AND CONDITIONING FOR ATHLETES (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Concurrent or previous enrollment in any Cross Country KINTM course.
Advanced sport-specific drills and exercises designed for cross country 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 the sport and individuals' capabilities.

LIFE MANAGEMENT - LIFE

LIFE-670 Transition Skills and Well-Being (0)
Lecture 24 hours.
Grading: Non-Credit (Pass/No Pass)
This course is designed to support the development of adults transitioning to independent living. The course focuses on assessing individual strengths and fostering life-management skills that support well-being in five critical domains: career, social, physical, financial, and community.

MATHEMATICS - MATH

MATH-4 Mathematical Concepts for Elementary School Teachers (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra or - Eligibility for Math 25 as determined by the Chaffey assessment process.
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 College Algebra. Topics include: real number systems and sub-systems, 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. (C-ID MATH 120)

MATH-17 Statway II (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU)
Prerequisite: MATH-417 Statway I
The Statway path is a two-semester sequence recommended only for students following a non-STEM pathway. This course is the second semester of two in the Statway sequence. The course explores the concepts of probability and statistics with requisite algebraic topics integrated throughout. Statistics topics emphasize data analysis and include basic concepts of probability; confidence intervals; hypothesis tests for means, proportions, and variance; chi-squared tests; and ANOVA (Analysis of Variance). Statway students participate in collaborative group learning, develop skills to maintain a positive perspective towards learning, and engage in classroom activities that introduce statistical concepts and skills. Both courses in the sequence, Math 415 and 17 must be completed with a passing grade to receive credit for transfer-level statistics.

MATH-25 College Algebra (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Assessment Level: Eligibility for Mathematics 25 as determined by the Chaffey assessment process.
Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra
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; introduction to mathematical proof.

MATH-31 Plane Trigonometry (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU)
Advisory: 1 year of high school geometry.
Prerequisite: MATH-25 College Algebra
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. Students may be required to obtain a graphing utility for the course.

MATH-60 Calculus for Business (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (Non-degree-applicable)
Prerequisite: MATH-25 College Algebra or eligibility for MATH 31 as determined by the Chaffey assessment process
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. (C-ID MATH 140)

MATH-61 Pre-Calculus (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (Non-degree-applicable)
Advisory: Prior experience with a graphic calculator is needed.
Other: Eligibility for Math 61 as determined by the Chaffey placement process
Prerequisite: MATH-25 College Algebra and MATH-31 Plane Trigonometry
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, 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.

MATH-65A Calculus I (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (Non-degree-applicable)
Prerequisite: MATH-61 Pre-Calculus
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. Students may be required to obtain a graphing utility for the course. (C-ID MATH 211)

MATH-65B Calculus II (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-65A Calculus I
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. Students may be required to obtain a graphing utility for the course. (C-ID MATH 221)

MATH-75 CALCULUS III (5) [CX]
Lecture 80 - 95 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Prior experience with a graphing calculator is needed.
Prerequisite: MATH-65B Calculus II
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. Students may be required to obtain a graphing utility for the course. (C-ID MATH 230)

MATH-81 LINEAR ALGEBRA (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: MATH-75 Calculus III
This course develops the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Investigates the properties of vectors in two and three dimensions, leading to the notion of an abstract vector space. Vector space and matrix theory are presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra are included. (C-ID MATH 250)

MATH-85 DIFFERENTIAL EQUATIONS (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Prior experience with a graphing utility is needed.
Prerequisite: MATH-75 Calculus III
Methods and theory of solving ordinary differential equations; including existence of solutions, series solutions, and singular points. Laplace transforms and linear systems. Applications primarily in the physical sciences. A graphing utility is required; see instructor for specifics, since CAS-based calculators may be prohibited. (C-ID MATH 240)

MATH-401 MATHEMATICS FOR HEALTH SCIENCE (1)
Lecture 16 - 18 hours.
Grading: Letter Grade (Degree-applicable)
Assessment Level: or Eligibility for Mathematics 550 as determined by the Chaffey assessment process.
Prerequisite: MATH-550 Introduction to Algebra or
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.

MATH-417 STATWAY I (5)
Lecture 80 - 90 hours.
Grading: Letter Grade (Degree-applicable)
Advisory - Prior Enrollment: MATH-550 Introduction to Algebra Placement through the assessment process.
The Statway path is a two-semester sequence recommended only for students following a non-STEM pathway. This course is the first semester of two in the Statway sequence and is a prerequisite for the concepts explored in Math 15. The course explores the concepts of probability and statistics with requisite algebraic topics integrated throughout. Statistics topics emphasize data analysis and include methods for collecting data, graphical and numerical descriptive statistics, correlation, and linear regression. Algebra topics include proportional relationships (including variation) with applications, expressions, linear equations and systems with applications, functions, quadratic and exponential equations, and linear and exponential/logarithmic models. Statway students participate in collaborative group learning, learn skills to maintain a positive perspective towards learning and engage in classroom activities that introduce statistical concepts and skills. Both courses in the sequence, Math 417 and Math 17, must be taken to receive credit for college level statistics.

MATH-420 ESSENTIALS OF INTERMEDIATE ALGEBRA (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
Advisory - Concurrent Enrollment: MATH-642 Skill Building for Math 420 or
Advisory - Prior Enrollment: MATH-550 Introduction to Algebra
Prerequisite: Eligibility for Math 420 as determined by the Chaffey assessment process.
This course is designed to be the Intermediate Algebra prerequisite specifically for Statistics 10 or Math 4. Topics covered include the following: first degree equations and inequalities; factoring; quadratic equations and inequalities; equations with radicals; applications; exponential functions and their inverses; graphing; sequences and series; and determining linear equations in two variables. A student may not earn credit for both Math 420 and Math 450. Any student who takes Math 420 and wants to enroll in Math 25, must take Math 420B prior to enrolling in Math 25.

MATH-420B BRIDGE TO STEM+ FROM INTERMEDIATE ALGEBRA (1)
Lecture 16 - 18 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: MATH-420 Essentials of Intermediate Algebra (May be taken previously).
This course is specifically designed to help students who have already taken Math 420 and prepare them for Math 25. A student who enrolls in Math 420B must have already taken Math 420 prior to enrolling in Math 420B. Topics covered in this course include the following: Logarithmic properties and log functions; conics; systems of equations with matrices; rational expressions and equations.

MATH-450 INTERMEDIATE ALGEBRA: A CRITICAL THINKING APPROACH (5)
Lecture 80 - 90 hours.
Grading: Letter Grade (Degree-applicable)
Advisory - Concurrent Enrollment: MATH-645 Skill Building for Math 450 or
Advisory - Prior Enrollment: MATH-550 Introduction to Algebra
Assessment Level: Eligibility for Mathematics 450 as determined by the Chaffey Assessment.
This course is designed to prepare students for their first transfer level math course. Topics include: Factoring, rational expressions and their operations, polynomial, radical, absolute value, exponential and logarithmic expressions, equations, and functions; linear and non-linear inequalities; quadratic functions; graphing of non-linear functions; complex numbers; non-linear single variable inequalities; conic sections; sequences; series; and the Binomial Theorem. There is a 5 hour supplemental learning requirement that will need to be met in the Success Centers. The Math Department strongly recommends that any student wanting or needing extra support for this course to consider enrolling in MATH-645 to be taken concurrently with MATH-450.

MATH-550 INTRODUCTION TO ALGEBRA (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (Non-degree-applicable)
Advisory - Prior Enrollment: MATH-650 Mathematical Foundations or
Assessment Level: Eligibility for Math 550 as determined by the Chaffey assessment process
This course is based on the fundamentals of algebra. Topics include: rational number arithmetic, order of operations, Pythagorean Theorem, variable expressions, solving linear equations, application problems, graphing linear equations in two variables, polynomial operations, special products and factoring, solution and application of linear and rational equations, solving linear systems of two equations, and determining the equation of a line. There is a 7 hour supplemental learning requirement that will need to be met in the Success Centers.

MATH-642 SKILL BUILDING FOR MATH 420 (0)
Lecture 32 - 36 hours.
Grading: Non-Credit (Pass/No Pass)
Advisory - Concurrent Enrollment: MATH-420 Essentials of Intermediate Algebra
This course is designed to be taken concurrently with Math 420. This course focuses on mastery of algebra competencies including: the graphing and writing of linear equations, factoring, and quadratic equations. The Mathematics Department recommends that this course be taken by any student who might need extra support while taking Math 420.

MATH-645 SKILL BUILDING FOR MATH 450 (0)
Lecture 32 - 36 hours.
Grading: Non-Credit (Pass/No Pass)
Advisory - Concurrent Enrollment: MATH-450 Intermediate Algebra: A Critical Thinking Approach
This course is designed to be taken concurrently with Math 450. This course focuses on mastery of algebra competencies, including: linear equations, systems of linear equations, factoring, rational expressions, and quadratic equations. The Mathematics Department recommends that this course be taken by any students who might need extra support while taking Math 450.

MATH-650 MATHEMATICAL FOUNDATIONS (0)
Lecture 32 - 36 hours.
Grading: Pass/No-Pass (Non-credit)
Other: This course is designed for students placing below the Math 550 level.
Mathematics Review for students whose assessment results indicate placement below Introduction to Algebra, and who wish to re-acquire the skills needed to re-assess into a higher level mathematics course. The course focuses on operations of whole numbers, rational numbers, decimal numbers and integers. Other topics include; ratios, proportions and measurement. Successful completion of this course allows the student to bypass the 3-month waiting period for re-assessment.

MUSIC - MUSIC

MUSIC-2A MUSIC HISTORY AND LITERATURE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Chronological survey of music in Western culture, encompassing the Medieval through Baroque periods. Origins of Western music up through the era of Johann Sebastian Bach and George Frideric Handel.

MUSIC-2B MUSIC HISTORY AND LITERATURE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Chronological survey of music in Western culture, from 1750 to the present. Explores the music of the great composers of the Classical, Romantic, and 20th century eras.

MUSIC-4 MUSIC APPRECIATION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
A survey of art music in western civilization. Topics studied include but are not limited to elements of music, basic musical forms, music periods, styles, and the role of music and musicians in the western world. (C-ID MUS 100)

MUSIC-5 MUSIC THEORY AND MUSICIANSHIP I (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-35 Piano for Music Majors I
This course, through guided composition, analysis, and cultural inquiry, incorporates the following concepts: rhythm and meter; basic properties of sound; intervals; diatonic scales and triads; diatonic chords; basic cadential formulas and phrase structure; dominant seventh; figured bass symbols; and non-harmonic tones; music as science, mathematics, and philosophy in Ancient Greek culture; musical form in the context of poetic, artistic and architectural form. Students explore the history and evolution of music notation in the context of the growth of European vernacular literacy, and development of skills in handwritten notation is expected. (C-ID MUS 125)

In addition, the musicianship component of this course applies and develops the rhythmic, melodic, and harmonic materials of the first semester of Music Theory through ear training, sight singing, analysis, and dictation, drawing from and examining musicals sources from European art music, traditional/folk music from American, European, and non-European cultures, and American popular music.

MUSIC-6 MUSIC THEORY AND MUSICIANSHIP II (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-36 Piano for Music Majors II
Prerequisite: MUSIC-5 Music Theory and Musicianship I
This course incorporates the concepts from Music Theory and Musicianship I. In addition, through guided composition and analysis, the course will include: an introduction to two-part counterpoint; voice leading involving four-part chorale writing; diatonic harmony; and an introduction to secondary/applied chords and modulation. Applies and develops the rhythmic, melodic, and harmonic materials of the second semester of Music Theory through ear training, sight singing, analysis, and dictation. Students continue to explore the history and evolution of music notation and theory, as well as cultural influences thereon, through examination and analysis of historically and geographically diverse musical examples. (C-ID MUS 135)

MUSIC-7 MUSIC THEORY AND MUSICIANSHIP III (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-37 Intermediate Piano
Prerequisite: MUSIC-6 Music Theory and Musicianship II
This course incorporates the concepts from Music 6, Music Theory and Musicianship II. In addition, through writing and analysis, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. Applies and develops the rhythmic, melodic, and harmonic materials through ear training, sight singing, analysis, and dictation. (C-ID MUS 140)

MUSIC-8 MUSIC THEORY AND MUSICIANSHIP IV (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-38 Studio Piano
Prerequisite: MUSIC-7 Music Theory and Musicianship III
This course incorporates the concepts from Music 7, Music Theory and Musicianship III. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm. Applies and develops the rhythmic, melodic, and harmonic materials of the fourth semester of Music Theory through ear training, sight singing, analysis, and dictation. (C-ID MUS 150)

MUSIC-10 SONGWRITING AND COMMERCIAL HARMONY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: MUSIC-6 Music Theory and Musicianship II
Introduction to the application of commercial music theory and technology to the songwriter. Diatonic and non-diatonic harmony including the circle of fifths, extended and altered chords, basic chord substitution, slash chords, chord symbols, substitution and common chord progressions with direct application to commercial song forms. Introduction to operation and use of the drum machine, synthesizer and computer as related to class projects.

MUSIC-15 INTRODUCTION TO MUSIC BUSINESS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Survey of the music industry, with emphasis on individual career options, roles, and responsibilities. Contracts, relationships, and interaction of song writing, publishing, copyright law, recording, broadcasting, managing, booking, licensing, and merchandising.

MUSIC-16 INTRODUCTION TO RECORDING ARTS (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Theory and application of contemporary recording concepts, techniques and equipment utilizing modern technology and practice in the recording studio.

MUSIC-17 ELECTRONIC MUSIC (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
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.

MUSIC-18 COMPUTER ASSISTED RECORDING AND EDITING (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: MUSIC-16 Introduction to Recording Arts
Techniques and applications of recording and editing sound on personal computers. Hardware, software, editing for song, sound effects and dialog for film.
TOP Code: 1005.00 - Commercial Music

MUSIC-21 HISTORY OF JAZZ (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of the development of jazz from its origins in the Afro-American society, through the developmental periods of the various metropolitan areas, to the present-day eclectic style. Includes correlation with sociological influence.

MUSIC-22 HISTORY AND SURVEY OF ROCK MUSIC (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Survey of rock music styles covering their origins, development, and cultural impact. Designed to make students aware of the role of rock music in shaping our society.

MUSIC-26 WORLD MUSIC (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Music and music cultures around the world, focusing on their role(s) in those cultures. Extensive listening and musical vocabulary development to facilitate the discussion and interpretation of the music. Some performance expected.

MUSIC-35 PIANO FOR MUSIC MAJORS I (1)
Studio 48 – 57 hours.
Grading: Letter Grade (CSU; UC)
Development of the ability to read simple piano scores in the classical literature. Development of a keyboard sense from the standpoint of touch and sound. Major and minor scales, the use of primary chords and their inversions in harmonizing melodies. Some key transposition.

MUSIC-36 PIANO FOR MUSIC MAJORS II (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-35 Piano for Music Majors I
Second semester of Piano for Music Majors further advances the development of the ability to read piano scores in the classical literature, the 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, and key transposition.

MUSIC-37 INTERMEDIATE PIANO (1)
Studio 48-54 hours.
Grading: Letter Grade (CSU)
Advisory: MUSIC-35 Piano for Music Majors I
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.

MUSIC-38 STUDIO PIANO (1)
Studio 48-54 hours.
Grading: Letter Grade (CSU)
Advisory: MUSIC-35 Piano for Music Majors I or
Limitation on Enrollment (e.g. Performance tryout or audition): Audition with instructor's signature.
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 basic improvisation.

MUSIC-40 BEGINNING GUITAR (1) [CX]
Studio 48-54 hours.
Grading: Letter Grade (CSU; UC)
Basic fundamentals which prepare the student for most styles of guitar playing. Emphasis on chording, right-hand technique, and melodic playing, as well as basic music reading. Student must provide own guitar for use in class.

MUSIC-41 INTERMEDIATE GUITAR (1)
Studio 48-54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: MUSIC-40 Beginning Guitar 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.

MUSIC-58 APPLIED MUSIC (0.5)
Laboratory 24 - 29 hours.
Grading: Letter Grade (CSU)
Corequisite: MUSIC-78 Jazz Band or MUSIC-77 Community Concert Band or MUSIC-76 Chamber Choir or MUSIC-75 Concert Choir
Limitation on Enrollment (e.g. Performance tryout or audition): and Audition required.
This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument or voice being studied. The emphasis is on the progressive development of skills needed for solo performance. Achievement is evaluated through a juried performance. (C-ID MUS 160)

MUSIC-75 CONCERT CHOIR (1)
Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Previous choral experience is desirable.
Limitation on Enrollment (e.g. Performance tryout or audition): Audition is required during the first week of class to verify ability to match pitches, sing in tune, perform simple rhythms, and carry an assigned part independently.
Study and performance of a wide variety of choral music, mostly accompanied with some a cappella. Primary focus is classical, with significant secondary focus on American vernacular and non-European repertoire. Some basic vocal and musical skills are required, but course emphasis is on the development of the ability to perform parts independently as well as key choral performance skills including phrasing, interpretation, diction, breathing, blend, and vocal control. Attendance at public performances is required. (C-ID MUS 180)

MUSIC-76 CHAMBER CHOIR (1.5)
Studio 72 - 81 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Previous significant choral singing experience is desirable.
Limitation on Enrollment (e.g. Performance tryout or audition): Audition is required first week of class to determine basic music reading ability, tonal memory, independence in carrying an assigned part, and ability to blend with other voices.
Advanced study and performance of varied choral music, with a focus on a cappella art, folk, and popular music. Requires established vocal and musical skills, including basic music reading, vocal technique, and choral rehearsal practice. Attendance at public performances is required. (C-ID MUS 180)

MUSIC-77 COMMUNITY CONCERT BAND (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU)
Assessment Level: Students may pre-register but instructor will assess students ability to play a musical instrument on first day of class.
Limitation on Enrollment (e.g. Performance tryout or audition): Students may pre-register, but will be assessed by instructor on first day of class as to ability to play a musical instrument.
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 theatre is required. Student must provide their own instrument. Some larger instruments will be available through the Music Department. (C-ID MUS 180)

MUSIC-78 JAZZ BAND (1)
Studio 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: Students may pre-register in class, but instructor will access students ability to play musical instrument on first day of class.
Limitation on Enrollment (e.g. Performance tryout or audition): 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. (C-ID MUS 180)

MUSIC-98ABC INDEPENDENT STUDY: MUSIC (1 - 3)
Lecture 16 - 19 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Limitation on Enrollment (e.g. Performance tryout or audition): 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. Regardless of the unit combination;

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".

NURAST-400 Nursing Assistant (3.5)
Lecture 56 - 67 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURAST-400L Nursing Assistant Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Nursing Assistant Program.
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 Public Health (CDPH).

NURAST-400L Nursing Assistant Laboratory (2)
Laboratory 96 - 114 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURAST-400 Nursing Assistant
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Nursing Assistant Program.
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.

NURAST-405 Nursing Assistant Skills Laboratory (0.5)
Laboratory 24 - 29 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURAST-400 Nursing Assistant and NURAST-400L Nursing Assistant Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Nursing Assistant Program.
Demonstration and student practice of the twenty one core skills requiring mastery, in preparation for the state competency evaluation for the California Department of Public Health (CDPH) Certified Nurse Assistant (CNA) exam.

NURAST-420 Home Health Aide (1.5)
Lecture 24 - 29 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURAST-420L Home Health Aide Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Nursing Assistant program, and possession of an active California Certified Nursing Assistant (CNA) certificate.
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 client self- administration of medication, provision of personal care and cleaning tasks in patient's homes, and client care status reporting procedures.

NURAST-420L Home Health Aide Laboratory (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURAST-420 Home Health Aide
Clinical application of the care functions required to meet the physical, medical, and social needs of home-care and assisted living clients of all ages. Demonstration and practice in providing personal care, preparing food, assisting client with self-administering medications, performing basic cleaning of clients' living environment, and assessing/reporting client status.

NURAST-450 Professional Development for the Nursing Assistant (1)
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: Basic computer skills are recommended.
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Nursing Assistant program.
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, resume preparation, and job interview techniques.

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.

NURADN-3 Transition in Nursing (1.5) [CX]
Lecture 24 - 27 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-3L Transition in Nursing Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Must be a graduate of a Vocational Nursing School with an active LVN license, and at least one year of work experience as a LVN in a clinical health care setting.
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.

NURADN-3L Transition in Nursing Laboratory (0.5) [CX]
Laboratory 24 - 29 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-3 Transition in Nursing
Limitation on Enrollment (e.g. Performance tryout or audition): Must be a graduate of a Vocational Nursing School with an active LVN license, and at least one year of work experience as a LVN in a clinical health care setting.
Application of basic nursing skills in the nursing-skills lab.

NURADN-6 Clinical Nursing Skills (1.5) [CX]
Laboratory 72 - 86 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Nursing A.D.N. program.
Development of the essential components of client care, enabling the practice of safe and effective nursing.

NURADN-14 NURSING PROCESS 1 (4) [CX]
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-14L Nursing Process 1 Laboratory
Prerequisite: NURADN-6 Clinical Nursing Skills
Utilization of the nursing process in providing basic care for adult and geriatric clients and families. Development of beginning client-centered communication, interpersonal relationships, and critical thinking skills.
TOP Code: 1230.00 - Nursing

NURADN-14L NURSING PROCESS 1 LABORATORY (3.5) [CX]
Laboratory 168 - 200 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-14 Nursing Process 1
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the nursing ADN program.
Clinical application of the nursing process in providing basic care of 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. Students enrolled in two corequisite-linked courses that consist of one lecture and one lab course, 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 the lecture and "CR" in the lab is required to advance in the ADN Program.
TOP Code: 1230.10 - Registered Nursing

NURADN-26 MATERNAL-NEWBORN NURSING (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-26L Maternal-Newborn Nursing Laboratory
Prerequisite: NURADN-27 Nursing Process 2
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.
TOP Code: 1230.00 - Nursing

NURADN-26L MATERNAL-NEWBORN NURSING LABORATORY (1.5) [CX]
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-26 Maternal-Newborn Nursing
Clinical application of maternal- newborn concepts in ambulatory, hospital, and home care settings.

NURADN-27 NURSING PROCESS 2 (4) [CX]
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-27L Nursing Process 2 Laboratory
Prerequisite: NURADN-14 Nursing Process 1 and NURADN-14L Nursing Process 1 Laboratory or NURADN-3 Transition in Nursing and NURADN-3L Transition in Nursing Laboratory
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical surgical units.

NURADN-27L NURSING PROCESS 2 LABORATORY (3) [CX]
Laboratory 144 - 162 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-27 Nursing Process 2
Limitation on Enrollment (e.g. Performance tryout or audition):
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical/surgical units.

NURADN-34 NURSING PROCESS 3 (4) [CX]
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-34L Nursing Process 3 Laboratory
Prerequisite: NURADN-27 Nursing Process 2 and NURADN-27L Nursing Process 2 Laboratory or NURADN-3 Transition in Nursing and NURADN-3L Transition in Nursing Laboratory
Utilization of the nursing process and management of care for the gerontological, acute and chronically ill individuals/family.

NURADN-34L NURSING PROCESS 3 LABORATORY (3) [CX]
Laboratory 144 - 171 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-34 Nursing Process 3
Management of care for gerontological, acute, and chronically ill patients and their families.

NURADN-38 FAMILY-CHILD NURSING (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-38L Family-Child Nursing Laboratory
Nursing care of infants, children, and adolescents. Use of the nursing process and critical thinking skills in pediatric units and selected community agencies.

NURADN-38L FAMILY-CHILD NURSING LABORATORY (1.5) [CX]
Laboratory 72 - 86 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-38 Family-Child Nursing
Clinical application in the nursing care of infants, children, and adolescents in ambulatory, hospital, and community settings.

NURADN-45 NURSING PROCESS 4 (4) [CX]
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-45L Nursing Process 4 Laboratory
Prerequisite: NURADN-34 Nursing Process 3 and NURADN-34L Nursing Process 3 Laboratory and
Nursing management of critically ill clients, family, and groups of client in high acuity medical surgical and community health settings.

NURADN-45L NURSING PROCESS 4 LABORATORY (3.5)
Laboratory 168 - 200 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-45 Nursing Process 4
Clinical application in the nursing management of critically ill clients, family and groups of clients in high acuity medical surgical and community health settings.

NURADN-48 MENTAL HEALTH AND PSYCHIATRIC NURSING (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Corequisite: NURADN-48L Mental Health and Psychiatric Nursing Laboratory
Other: Students must apply for admission into the Nursing (A.D.N.) program.
Mental health and psychiatric illness across the life span. Application of client-centered communication and critical thinking skills.

NURADN-48L MENTAL HEALTH AND PSYCHIATRIC NURSING LABORATORY (1) [CX]
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (CSU)
Corequisite: NURADN-48 Mental Health and Psychiatric Nursing
Other: Students must apply for admission into the Nursing (A.D.N.) program.
Clinical application of psychiatric nursing. Performance of client-centered communication and critical thinking skills at psychiatric and community health facilities.
TOP Code: 1230.10 - Registered Nursing

NURADN-50 PROFESSIONAL ISSUES IN NURSING (1) [CX]
Lecture 16 - 18 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURADN-403 PATHOPHYSIOLOGY FOR NURSING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: Biology 22
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into a nursing (ADN or VN) program or equivalent.
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.

NURADN-404 BASIC ECG AND DYSRHYTHMIA INTERPRETATION (2) [CX]
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Study of basic electrocardiogram (ECG) waveforms in relation to atrial, junctional and ventricular dsyrhythmias. Designed to assist health care workers or those interested in health care with recognition and treatment of basic cardiac dysrhythmias.

NURADN-428 BASIC PHARMACOLOGY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade
Limitation on Enrollment (e.g. Performance tryout or audition): Student must be in good standing in the Chaffey ADN or VN program or another California accredited ADN or VN program, or be a California licensed health care provider, or student must obtain permission of the nursing program coordinator.
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.

NURADN-482 COOPERATIVE EDUCATION: NURSING A.D.N. (1)
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.
Grading: Pass/No-Pass (Degree-applicable)
Prerequisite: NURADN-14L Nursing Process 1 Laboratory
Work experience in cooperation with clinical agencies. Provides expanded learning opportunities directly related to the student's clinical experience.
TOP Code: 1230.10 - Registered Nursing

NURADN-550 HEALTH SCIENCE SKILLS DEVELOPMENT I (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students must be enrolled in the ADN program.
Application of appropriate health science skills in a simulated laboratory setting. Skills taught correspond to skills levels in current health science program.

NURADN-551 HEALTH SCIENCE SKILLS DEVELOPMENT II (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students must be enrolled in the ADN program.
Use of computers to improve test taking skills, critical thinking skills, and technical skills in conjunction with current health science courses.

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.

NURVN-403 FUNDAMENTALS OF NURSING (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-403L Fundamentals of Nursing Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Vocational Nursing Program.
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 12 hours of related pharmacology content.

NURVN-403L FUNDAMENTALS OF NURSING LABORATORY (2)
Laboratory 96 - 114 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-403 Fundamentals of Nursing
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Vocational Nursing program.
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.

NURVN-405 BEGINNING MEDICAL SURGICAL NURSING (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-405L Beginning Medical Surgical Nursing Laboratory
Prerequisite: NURVN-403 Fundamentals of Nursing and NURVN-403L Fundamentals of Nursing Laboratory
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 12 hours of related pharmacology content.

NURVN-405L BEGINNING MEDICAL SURGICAL NURSING LABORATORY (3)
Laboratory 144 - 171 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-405 Beginning Medical Surgical Nursing
Prerequisite: NURVN-403 Fundamentals of Nursing NURVN-403L Fundamentals of Nursing Laboratory
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.

NURVN-407A BEGINNING NURSING SKILLS/CLINICAL SIMULATION LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURVN-407B INTERMEDIATE NURSING SKILLS/CLINICAL SIMULATION LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURVN-407C ADVANCED NURSING SKILLS/CLINICAL SIMULATION LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Pass/No-Pass (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURVN-409 INTERMEDIATE MEDICAL SURGICAL NURSING (4) [CX]
Lecture 64 - 76 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-409L Intermediate Medical Surgical Nursing Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-405 Beginning Medical Surgical Nursing and NURVN-405L Beginning Medical Surgical Nursing Laboratory
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.

NURVN-409L INTERMEDIATE MEDICAL SURGICAL NURSING LABORATORY (3)
Laboratory 144 - 171 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-409 Intermediate Medical Surgical Nursing
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-405 Beginning Medical Surgical Nursing and NURVN-405L Beginning Medical Surgical Nursing Laboratory
Nursing care of adult patients in the hospital/clinical setting. Utilization of the nursing process as a framework for providing care to patients with respiratory, cardiac, and endocrine disorders.

NURVN-411 ADVANCED MEDICAL SURGICAL NURSING (7) [CX]
Lecture 112 - 126 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-411L Advanced Medical Surgical Nursing Lab
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the second semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-409 Intermediate Medical Surgical Nursing and NURVN-409L Intermediate Medical Surgical Nursing Laboratory
Discussion, demonstration, and application of the nursing process and developmental theory for the care of adult patients with diseases and disorders of the reproductive, hematologic, immune, and nuerological systems. Emergency nursing, shock and bioterriorism, and care of the patient with cancer will also be emphasized. Includes 12 hours of related pharmacology content.

NURVN-411L ADVANCED MEDICAL SURGICAL NURSING LAB (3)
Laboratory 144 - 171 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-411 Advanced Medical Surgical Nursing
Limitation on Enrollment (e.g. Performance tryout or audition): and Acceptance into the vocational nursing program. Successful completion of the second semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-409 Intermediate Medical Surgical Nursing NURVN-409L Intermediate Medical Surgical Nursing Laboratory
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 will also be emphasized.

NURVN-413 LEADERSHIP FOR THE VOCATIONAL NURSE (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-413L Leadership for the Vocational Nurse Lab
Limitation on Enrollment (e.g. Performance tryout or audition): and Acceptance into the vocational nursing program. Successful completion of the second semester of the vocational nursing program or equivalent.
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.

NURVN-413L LEADERSHIP FOR THE VOCATIONAL NURSE LAB (2)
Lecture 16 - 19 hours. Laboratory 96 - 114 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-413 Leadership for the Vocational Nurse
Limitation on Enrollment (e.g. Performance tryout or audition): and Acceptance into the vocational nursing program. Successful completion of the second semester of the VN program or equivalent.
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.

NURVN-414 ACUTE CARE NURSING ASSISTANT: VOCATIONAL NURSING FOUNDATIONS (6)
Lecture 64 - 72 hours. Laboratory 96 - 108 hours.
Grading: Letter Grade (Degree-applicable)
Advisory - Prior Enrollment: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra ENGL-1A Composition
Limitation on Enrollment (e.g. Performance tryout or audition): Evidence of current State of California CNA certification
Other: Students must provide proof of the following by the third week of class: A satisfactory health examination including a drug screening test and proof of immunizations completed within the past 3 months, a cleared background check, and current CPR certification as an American Heart Association Healthcare Provider.
Prerequisite: BIOL-424 Anatomy and Physiology and BIOL-424L Anatomy and Physiology Laboratory or BIOL-20 Human Anatomy and BIOL-22 Human Physiology
Using a body systems approach, this course introduces medical terminology, pathophysiology and the medical treatment and nursing care of common diseases and disorders encountered in the acute care hospital setting. The course explores the role of the vocational nurse in today's healthcare system, as well as an introduction to the policies and expectations of the Vocational Nursing program. Introduction to principles of medication dosage calculation, including IV drip rate calculations.

This course prepares the CNA to function effectively in the acute care setting, and students who successfully complete this course are eligible to apply to the Vocational Nursing program. Includes 108 hours of instruction in the acute care clinical setting.

Students must provide proof of the following by the third week of class: A satisfactory health examination including a drug screening test and proof of immunizations completed within the past 3 months, a cleared background check, and current CPR certification as an American Heart Association Healthcare Provider.

NURVN-415A GROWTH/DEVELOPMENT: PSYCHOLOGY ADULT - GERIATRIC (1) [CX]
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURVN-415B GROWTH AND DEVELOPMENT OF THE CHILD (1) [CX]
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-415A Growth/Development: Psychology Adult - Geriatric and
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.

NURVN-417A CRITICAL THINKING AND THE NURSING PROCESS I (1) [CX]
Lecture 16 - 18 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

NURVN-417B CRITICAL THINKING AND THE NURSING PROCESS II (1) [CX]
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
Prerequisite: NURVN-417A Critical Thinking and the Nursing Process I and
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.

NURVN-421 MATERNAL AND CHILD HEALTH NURSING (4) [CX]
Lecture 64 - 72 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NURVN-421L Maternal and Child Health Nursing Lab
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
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.
TOP Code: 1230.20 - Licensed Vocational Nursing

NURVN-421L MATERNAL AND CHILD HEALTH NURSING LAB (2)
Laboratory 96 - 114 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: NURVN-421 Maternal and Child Health Nursing
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.
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.

NURVN-500 NCLEX REVIEW FOR VN LICENSURE EXAMINATION (2)
Lecture 32 - 38 hours.
Grading: Pass/No-Pass (Non-degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): or 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.
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 using the most current NCLEX test plan. Taking this course does not guarantee passing of the NCLEX examination.

NUTRITION AND FOOD - NF

NF-5 NUTRITION FOR LIFE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

NF-11 FOOD SERVICE MANAGEMENT SUPERVISION (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: NF-471 Dietetic Service Supervisor I
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.

NF-15 NUTRITION I: INTRODUCTION TO NUTRITION SCIENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the science of nutrition and its implications for human health. Scientific concepts of nutrition related to the function of nutrients in basic life processes and current health issues with emphasis on individual needs. (C-ID NUTR 110)

NF-19 NUTRITION II: MODIFIED DIETS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: NF-15 Nutrition I: Introduction to Nutrition Science
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

NF-22 NUTRITION AND THE ACTIVE PERSON (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
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, flexibility, and stress management through the components of diet and fitness.

NF-27 HEALTHY COOKING (2)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Techniques of planning and preparing nutritious foods, incorporating lower levels of fat, cholesterol, and sodium into meals. Emphasis is on healthy food selection as a lifestyle.

NF-471 DIETETIC SERVICE SUPERVISOR I (1)
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NF-471L Dietetic Service Supervisor: Supervised Clinical Laboratory I and
Limitation on Enrollment (e.g. Performance tryout or audition): Proof of a negative tuberculosis test within the past 12 months is required.
Supervisory and management roles in the professional health care setting for first semester students. 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.

NF-471L DIETETIC SERVICE SUPERVISOR: SUPERVISED CLINICAL LABORATORY I (2)
Laboratory 96 - 114 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NF-471 Dietetic Service Supervisor I and
Limitation on Enrollment (e.g. Performance tryout or audition): and Proof of a negative tuberculosis test within the past 12 months is required.
Practical experience in practice and live clinical situations for the first semester student. Application of dietetic principles and practices, communication skills, record keeping, introduction to conceptual patient/client screening and assessment, adherence to Federal and State regulations, and essential management functions.

NF-472 DIETETIC SERVICE SUPERVISOR II (1)
Lecture 16 - 19 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): and Proof of a negative tuberculosis test within the past 12 months is required
Prerequisite: NF-471 Dietetic Service Supervisor I
Supervisory and management roles in the professional health care setting for the second semester student. Topics include: menu planning, purchasing, food production management, health care management, supervision, and training.

NF-472L Dietetic Service Supervisor II: Supervised Clinical Laboratory (2)
Lecture 32 - 38 hours. Laboratory 96 - 114 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: NF-472 Dietetic Service Supervisor II
Limitation on Enrollment (e.g. Performance tryout or audition): and Proof of a negative tuberculosis test within the past 12 months is required
Practical experience in practice and live clinical situations for the second semester student. 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.

PHARMACY TECHNICIAN - PHARMT

PHARMT-401 Pharmacology of the Body Systems I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
Basic anatomy, physiology, and pharmacology related to drugs affecting the endocrine and
gastrointestinal systems, neoplastic disorders, infectious diseases, immunological function, vitamin and mineral balance, and the eyes and ears. Emphasis will be placed on related medical terms, trade/generic drug names, drug classifications and indications used in each body system.

PHARMT-402 Pharmacology of the Body Systems II (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Student must attend a mandatory program orientation.
Basic anatomy, physiology, and pharmacology related to drugs affecting the respiratory, genitourinary, musculoskeletal, integumentary, nervous and cardiovascular systems and special senses. Emphasis will be placed on related medical terms, trade/generic drug names, drug classifications and indications used in each body system.

PHARMT-403 Principles of Community Pharmacy Practice (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
This course is designed to provide the student with an overview of the community pharmacy setting. The role of a pharmacy technician and pharmacist in the community pharmacy practice setting, pharmacy law and ethics, medical
and pharmaceutical terminology, pharmaceutical dosage forms, drug development processes, drug classification systems, and introduction to prescription reading and labeling.

PHARMT-404 Principles of Institutional Pharmacy Practice (1.5)
Lecture 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Registration is restricted to students who have attended a mandatory orientation session and submitted a contact application to the program.
This course will introduce students to acute-care, long-term care and home-health care facilities.
Students will be introduced to the role of a pharmacy technician and pharmacist in the institutional pharmacy practice setting, pharmaceutical care, the patient model, and the drug delivery process as they relate to these health-care facilities. An introduction to dosage forms, routes of administration, medication order reading, and patient profiles will be emphasized.

PHARMT-405 Sterile Products (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
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, including USP 797.

PHARMT-410 Over-The-Counter Products (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-421L Community Pharmacy Operations Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Restricted to students who have attended a mandatory orientation session and submitted a contact application to the program.
This course will enable the pharmacy technician student to recognize the classifications and uses of the various over-the-counter (OTC) products utilized in modern health care. The drugs mechanism of action, major indications, body systems affected, adverse effects, consumer precautions and contraindications will be discussed.

PHARMT-415 Pharmaceutical Calculations (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (Degree-applicable)
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
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.

PHARMT-421 Community Pharmacy Operations (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-421L Community Pharmacy Operations Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
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.

PHARMT-421L COMMUNITY PHARMACY OPERATIONS LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-421 Community Pharmacy Operations
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an ambulatory setting.

PHARMT-431 INSTITUTIONAL PHARMACY OPERATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-431L Institutional Pharmacy Operations Laboratory
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
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.

PHARMT-431L INSTITUTIONAL PHARMACY OPERATIONS LABORATORY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-431 Institutional Pharmacy Operations
Limitation on Enrollment (e.g. Performance tryout or audition): Students are required to attend a mandatory orientation session and submit a contact application to the program.
Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an institutional setting.

PHARMT-481 CLINICAL EXTERNSHIP SEMINAR (1)
Lecture 16 - 18 hours.
Grading: Pass/No-Pass (Degree-applicable)
Corequisite: PHARMT-481L Clinical Externship
This externship seminar is a lecture course designed to provide students with practical experience in selected inpatient and outpatient pharmacy settings This course will review the duties of a pharmacy technician in each practice setting in areas of pharmacy administration, federal/state laws and regulations, pharmacology and certification requirements.

PHARMT-481L CLINICAL EXTERNSHIP (4.5)
Lecture 8 - 9 hours. Laboratory 216 - 243 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: PHARMT-481 Clinical Externship Seminar
Other: and Student must have completed all PHARMT course work with a 'C' grade or better. - Must pass a background check and physical examination prior to placement in clinical facility.
This clinical experience course is to provide the student with practical pharmacy experience in selected out-patient community pharmacy settings and in selected in-patient or acute care settings, home health, or selected hospital settings with intravenous additives and sterile compounding areas under the supervision of a registered pharmacists and clinical externship coordinator. Students study the application of prescription dispensing, inventory management, customer service, communication and professional ethics. Placement is by the instructor and students will complete 120 hours in a minimum of two site locations for a total of 240 hours for the semester. This course should be taken at the same time as PHARMT 481.

PHILOSOPHY - PHIL

PHIL-70 INTRODUCTION TO PHILOSOPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
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, and religion (axiology), and social/political influences. (C-ID PHIL 100)

PHIL-71 PHILOSOPHY OF FEMINISM (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-70 Introduction to Philosophy or PHIL-76 Critical Thinking or PHIL-72 Seminar in Ethics
Assessment Level: Eligibility for English 1A as determined by the Chaffey assessment process
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
This course traces the development of, and ongoing need for, Feminist Philosophy; including descriptions of Liberal Feminism, Radical Feminism, Socialist Feminism as well as feminist interpretations of ?traditional? philosophical fields such as Epistemology and Ethics. The course will also address modern feminist philosophical issues, e.g. sexuality, pornography, gender, separatism, sexual harassment, and the politics of family.
TOP Code: 1509.00 - Philosophy

PHIL-72 SEMINAR IN ETHICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-70 Introduction to Philosophy
Assessment Level: ENGL-1A Composition or
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Seminar for the study of ethics with emphasis on personal, social, and political values. May be offered as an Honors course. (C-ID PHIL 120)

PHIL-73 SEMINAR IN CONTEMPORARY AMERICAN PHILOSOPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: PHIL-70 Introduction to Philosophy
Assessment Level: ENGL-1A Composition or
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or
Study of the leading American thinkers in the areas of aesthetics, political and social theory, scientific thought, religious philosophy, and ethics.

PHIL-75 SYMBOLIC LOGIC (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-76 Critical Thinking
Prerequisite: ENGL-1A Composition
An introduction to symbolic methods of reasoning, covering sentential logic and predicate logic. Students will translate ordinary language sentences and arguments into symbolic form and will evaluate symbolized arguments using Truth Tables, Truth Trees and Natural Deduction. (C-ID PHIL 210)

PHIL-76 CRITICAL THINKING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: ENGL-1A Composition
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.

PHIL-77 HISTORY OF ANCIENT PHILOSOPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-70 Introduction to Philosophy
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
This course addresses ancient philosophy with emphasis on the development of Greek philosophy from the Pre-Socratics through Aristotle and may also include Hellenistic, Roman, medieval or non-western thinkers.
(C-ID PHIL 130) TOP Code: 1509.00 - Philosophy

PHIL-78 HISTORY OF PHILOSOPHY: MODERN (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-70 Introduction to Philosophy PHIL-77 History of Ancient Philosophy
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
A survey of the major philosophers and ideas from Descartes to the 19th century, including Kant, Locke, Hume, Nietzsche, Kierkegaard, and others. (C-ID PHIL 140)

PHIL-79 PHILOSOPHY OF CONSCIOUSNESS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: PHIL-70 Introduction to Philosophy or PHIL-76 Critical Thinking
A study of contemporary debate regarding the nature of the mind and consciousness and how it relates to the brain and body.

PHIL-80 INTRODUCTION TO RELIGION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Exploration into the philosophies of religion and their intellectual, cultural, and personal expressions.

PHIL-81 INTRODUCTION TO EASTERN PHILOSOPHY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Survey of the philosophies and practices of Hinduism, Buddhism, Confucianism, and Taoism, and their influences in contemporary society.

PHIL-82 INTRODUCTION TO MONOTHEISTIC RELIGIONS: JUDAISM/CHRISTIANITY/ISLAM (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Assessment Level: ENGL-1A Composition
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
The origins and manifestations for the Jewish, Christian, and Muslim belief systems.

PHOTOGRAPHY - PHOTO

PHOTO-1 HISTORY OF PHOTOGRAPHY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
History and appreciation of photography as a medium of artistic and social communication. May be offered as an Honors course.

PHOTO-7 INTRODUCTION TO DIGITAL PHOTOGRAPHY (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the principles of digital photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in 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.

PHOTO-9 DIGITAL IMAGING (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

PHOTO-10 BEGINNING PHOTOGRAPHY (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the principles of photography. Emphasis on issues in photography in the context of art, mass media, and media history, using camera. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography. Instruction in the basic principles of black-and-white photography with darkroom experience. Students must furnish an adjustable non-digital camera.

PHOTO-11 INTERMEDIATE PHOTOGRAPHY (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: PHOTO-10 Beginning Photography
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.

PHOTO-12 STUDIO LIGHTING (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: PHOTO-7 Introduction to Digital Photography or PHOTO-10 Beginning Photography
Introduction to the use of studio equipment and lighting techniques. Throughout the semester emphasis will also be on composition, aesthetic judgment and visual communication. Understanding lighting is critical to photography. Topics include portrait, still life, advertising, and art photography. Students must furnish an adjustable camera.

PHOTO-13 FINE ART PHOTOGRAPHY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PHOTO-10 Beginning Photography or PHOTO-7 Introduction to Digital Photography
Students will explore photography as an art form. The focus will be on contemporary issues in art photography. Emphasis on students making photographic artwork.

PHOTO-20 PHOTOGRAPHY FOR MEDIA (4) [CX]
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: PHOTO-7 Introduction to Digital Photography
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 resulting communication impact. Student must supply an adjustable digital camera.

PHOTO-50 INTRODUCTION TO COLOR PHOTOGRAPHY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: PHOTO-9 Digital Imaging and
Prerequisite: PHOTO-7 Introduction to Digital Photography
Basic background in the aesthetics, history, theory, techniques, and materials of color photography. Students must furnish an adjustable digital camera.

PHOTO-429 WEDDING, QUINCEAÑERA, AND EVENT PHOTOGRAPHY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography
Photographic techniques used by contemporary Wedding/ Quinceañera/Events photographers. Subjects covered include: composition, subject posing, selection and use of cameras, lenses, filters, set-ups, lighting, special effects, basic digital workflow, as well as business presentations and sales strategies. Students will produce a portfolio of projects and student must furnish an adjustable digital camera.

PHOTO-430 FINE ART PHOTOGRAPHY PORTFOLIO (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography and PHOTO-13 Fine Art Photography
This course is designed for photography students interested in furthering their conceptual and technical skills learned in Fine Art Photography through individually directed work in a supervised studio/lab environment with regular group, individual, and written critiques and reviews. Emphasis is on the development of a fine art portfolio.

PHOTO-436 STUDIO LIGHTING PORTFOLIO (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography and PHOTO-12 Studio Lighting
This course is designed for photography students interested in further honing skills learned in Studio Lighting through individually directed work in a supervised studio environment. Regular group, individual, and written critiques and reviews with an emphasis on the development of work suitable for portfolio review are included.

PHOTO-438 PHOTOGRAPHY FOR MEDIA PORTFOLIO (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography and PHOTO-20 Photography for Media
This course is designed for photography students interested in further honing skills learned in Photography for Media through individually directed work in a supervised environment with regular group, individual, and written critiques and reviews with an emphasis on the development of work suitable for a Media based portfolio review.

PHOTO-439 WEDDING, QUINCEAÑERA, AND EVENT PHOTOGRAPHY PORTFOLIO (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography PHOTO-429 Wedding, Quinceañera, and Event Photography
Designed for photography students interested in further honing skills learned in Wedding, Quinceañera and Event Photography. Individually directed work in a supervised studio/lab environment that includes group and individual critiques, along with reviews that put an emphasis on the development of a professional portfolio

PHOTO-475 LABORATORY PRACTICE IN PHOTOGRAPHY (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: PHOTO-7 Introduction to Digital Photography or PHOTO-10 Beginning Photography
Provides an opportunity for students who wish additional time in lab to develop and expand their digital or film processing skills or lighting capabilities. Allows students to develop and enhance their commercial photography portfolio geared towards commercial industry specifications.

PHOTO-677 WORKFORCE PREPARATION IN PHOTOGRAPHY (0)
Laboratory 48 - 54 hours.
Grading: Letter Grade and Pass/No-Pass (Non-credit)
Corequisite: PHOTO-7 Introduction to Digital Photography or PHOTO-10 Beginning Photography or PHOTO-11 Intermediate Photography or PHOTO-12 Studio Lighting or PHOTO-13 Fine Art Photography or PHOTO-20 Photography for Media or PHOTO-50 Introduction to Color Photography or PHOTO-412 Intermediate Studio Lighting or PHOTO-429 Wedding, Quinceañera, and Event Photography or PHOTO-436 Studio Lighting Portfolio or PHOTO-439 Wedding, Quinceañera, and Event Photography Portfolio
To become marketable, student need access to professional photography tools such lighting and software, which are available in this course. This course provides laboratory experience for workforce preparation in the field of photography. For the current photography student who wishes to increase skills.

PHYSICAL SCIENCE - PHSCI

PHSCI-10 SURVEY OF CHEMISTRY AND PHYSICS (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: Completion of MATH-450 or MATH-420.
Prerequisite: or Completion of 1 year high school algebra - or Eligibility for MATH 450 or 420 MATH-410 Elementary Algebra or MATH-550 Introduction to Algebra
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. This course aligns with C-ID CHEM 140 and PHYS 140.

PHYSICS - PHYS

PHYS-5 THE IDEAS OF PHYSICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Basic concepts of mass, force, and Newton's Laws of Motion will be covered, as well as conservation laws,(momentum and energy). Introduction to physics for students requiring a general education science lecture course and for students majoring in engineering technology and life sciences.

PHYS-6 THE IDEAS OF PHYSICS LABORATORY (1)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade
Corequisite: PHYS-5 The Ideas of Physics
Introduction to physics for students requiring a general education science lab course and for students majoring in engineering technology and life sciences. 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.

PHYS-20A ALGEBRA/TRIGONOMETRY COLLEGE PHYSICS I (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: MATH-31 Plane Trigonometry and - One year of high school physics. PHYS-5 The Ideas of 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. (C-ID PHYS 105)

PHYS-20B ALGEBRA/TRIGONOMETRY COLLEGE PHYSICS II (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: PHYS-20A Algebra/Trigonometry College Physics I
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. (C-ID PHYS 110)

PHYS-30A PHYSICS FOR THE MEDICAL AND LIFE SCIENCES I (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Corequisite: MATH-65A Calculus I
Prerequisite: or One year of high school physics. PHYS-5 The Ideas of Physics or PHYS-44 Introduction to Motion or MATH-61 Pre-Calculus
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. (C-ID PHYS 105)

PHYS-30B PHYSICS FOR THE MEDICAL AND LIFE SCIENCES II (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: PHYS-30A Physics for the Medical and Life Sciences I and MATH-65A Calculus I
Course is designed for students majoring in a life or medical science, whose university major requires calculus-based physics. 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. (C-ID PHYS 110)

PHYS-44 INTRODUCTION TO MOTION (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: MATH-61 Pre-Calculus
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 representations of motion- velocity-time graphs, acceleration-time graphs, and force-time graphs - are emphasized.

PHYS-45 PHYSICS FOR SCIENTISTS AND ENGINEERS I (5)
Lecture 64 - 76 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: MATH-65A Calculus I and PHYS-44 Introduction to Motion or - or Completion of High School Physics.
For students majoring in a physical science or engineering. Topics covered include: translational and rotational kinematics and dynamics; conservation laws; hydrostatics and hydrodynamics, and equilibrium. (C-ID PHYS 205)

PHYS-46 PHYSICS FOR SCIENTISTS AND ENGINEERS II (5)
Lecture 64 - 76 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: PHYS-45 Physics for Scientists and Engineers I and MATH-65B Calculus II
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, Maxwell's equations, inductors, LC circuits, and LCR circuits ? impedance and power factor. (C-ID PHYS 210)

PHYS-47 PHYSICS FOR SCIENTISTS AND ENGINEERS III (5)
Lecture 64 - 76 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: MATH-65B Calculus II and PHYS-45 Physics for Scientists and Engineers I and
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. (C-ID PHYS 215)

POLITICAL SCIENCE - PS

PS-1 AMERICAN POLITICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.
(C-ID POLS 110) TOP Code: 2207.00 - Political Science

PS-2 INTRODUCTION TO POLITICAL SCIENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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. (C-ID POLS 150)

PS-3 CALIFORNIA POLITICS AND CULTURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: ENGL-1A Composition
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.
TOP Code: 2207.00 - Political Science

PS-4 POLITICAL THEORY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.
(C-ID POLS 120) TOP Code: 2207.00 - Political Science

PS-7 INTERNATIONAL RELATIONS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
An introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions, interactions and processes as they relate to global issues. 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. (C-ID POLS 140)

PS-10 COMPARATIVE POLITICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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. (C-ID POLS 130)

PS-21 URBAN POLITICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Analysis of the politics of urban and suburban areas in the United States, other industrialized countries, and the Third World. Important issues such as unemployment, poverty, racism, and the impact of economic change will be examined.

PS-25 LATINO POLITICS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
Examination of Latino politics. Topics include: political influence, civil rights, discrimination, immigration, affirmative action, assimilation, acculturalization, 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.
TOP Code: 2203.00 - Ethnic Studies

PS-32 LAW AND SOCIETY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
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.
TOP Code: 2207.00 - Political Science

PSYCHOLOGY - PSYCH

PSYCH-1 INTRODUCTION TO PSYCHOLOGY (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: GUID-2 Essentials of Student Success ENGL-495 Fundamentals of College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students
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)

PSYCH-5 PERSONAL AND SOCIAL AWARENESS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: PSYCH-1 Introduction to Psychology
This course is designed with an applied focus on factors affecting personal and social awareness. Topics such as culture, gender, ethnicity, historical cohort, and socioeconomic status are examined and viewed through various psychological perspectives and theoretical foundations. A broad understanding of how scientists, clinicians, and practitioners study and apply psychology is emphasized. (C-ID PSY 115)

PSYCH-20 DEVELOPMENTAL PSYCHOLOGY: CHILDHOOD AND ADOLESCENCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Prerequisite: PSYCH-1 Introduction to Psychology
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.

PSYCH-25 DEVELOPMENTAL PSYCHOLOGY: LIFESPAN DEVELOPMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
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)

PSYCH-41 BIOLOGICAL PSYCHOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PSYCH-1 Introduction to Psychology
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. (C-ID PSY 150)

PSYCH-55 ABNORMAL PSYCHOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PSYCH-1 Introduction to Psychology
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)

PSYCH-65 SOCIAL PSYCHOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PSYCH-1 Introduction to Psychology
This course considers individual human behavior in relation to the social environment. The power of the situation, other individuals, and the social group will be examined. Emphasized topics include: aggression, prejudice and stereotypes, interpersonal attraction, attitudes and attitude change, conformity, group phenomena, gender roles, cultural norms, person perception, and social cognition. (C-ID PSY 170)

PSYCH-80 RESEARCH METHODS IN PSYCHOLOGY (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: PSYCH-1 Introduction to Psychology and SCSCI-10 Statistics for Social Science
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 205 B)

RADIOLOGIC TECHNOLOGY - RADTEC

Students must apply for admission to the Radiologic Technology program and must pay for a physical examination.

RADTEC-10 ANATOMY AND RADIOGRAPHIC POSITIONING I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Radiologic Technology Program
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 for optimal diagnostic quality. Laboratory experience complements the didactic portion.

RADTEC-10L LABORATORY FOR ANATOMY AND RADIOGRAPHIC POSITIONING I (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-10 Anatomy and Radiographic Positioning I
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Radiologic Technology Program.
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.

RADTEC-16 MEDICAL PROCEDURES FOR RADIOLOGIC TECHNOLOGISTS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-16L Laboratory for Medical Procedures for Radiologic Technologists and
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Radiologic Technology Program
An overview of the Radiologic Technologist's role in the health care delivery system to include history, legal/ethical terminology, attitudes and communication for appropriate patient care, scope of practice, and radiation safety practices to include trauma, geriatric, neonatal, and pediatric patients. Topics include: ethical issues and dilemmas found in clinical practice; role of the radiographer in patient education and patient care; professional standards and the ASRT scope of practice. Recognition and treatment of adverse reactions to contrast agents, as well as patients suffering from stoke, myocardial infarction, and respiratory distress. Addresses various tubes, catheters and venous/arterial lines; oxygen delivery systems; infection control procedures (medical and surgical asepsis) using standard and isolation precautions; skills theory to include acquiring vital signs, enema administration, drug preparation administration, urinary catheterization, and transfer of patients. Patient and radiographer safety protocols, including body mechanics, patient transfer and movement, positioning, immobilization, environmental safety and accident / incident reporting are emphasized. Laboratory experience complements the didactic portion.

RADTEC-16L LABORATORY FOR MEDICAL PROCEDURES FOR RADIOLOGIC TECHNOLOGISTS (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-16 Medical Procedures for Radiologic Technologists RADTEC-16 Medical Procedures for Radiologic Technologists and Admission into the Radiologic Technology Program 16L requires corequisite RT 16Fall 1st semester; 1st year students
Limitation on Enrollment (e.g. Performance tryout or audition): Admission to the Radiologic Technology Program
Discussion, application, role-play and timed simulated procedure evaluations of the medical procedures and techniques commonly used in radiology departments to include pediatric, geriatric and trauma & special needs patients. Enema administration, drug administration 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.

RADTEC-20 RADIOLOGIC SCIENCE AND PROTECTION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-20L Laboratory for Radiologic Science and Protection
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Radiologic Technology Program.
This 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 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 are explored. Laboratory experiments are performed to compliment the didactic instruction.

RADTEC-20L Laboratory for Radiologic Science and Protection (1)

Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-20 Radiologic Science and Protection
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Radiologic Technology Program.
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 utilizing a digital imaging system.

RADTEC-25 Anatomy and Radiographic Positioning II (3)

Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-25L Laboratory for Anatomy and Radiographic Positioning II
Limitation on Enrollment (e.g. Performance tryout or audition): Successful completion of the first semester of the Radiologic Technology program.
Prerequisite: RADTEC-10 Anatomy and Radiographic Positioning I
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.

RADTEC-25L Laboratory for Anatomy and Radiographic Positioning II (1)

Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-25 Anatomy and Radiographic Positioning II and
Limitation on Enrollment (e.g. Performance tryout or audition): Successful completion of the first semester of the Radiologic Technology Program.
Prerequisite: RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I
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.

RADTEC-31 Radiographic Clinical Education I (2)

Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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. Competency and outcomes measurement ensure the well-being of the patient pre-, during, and post-procedure. Students perform under direct supervision following the policy and procedures in the Radiology Technology Student Handbook.

RADTEC-34 Radiographic Imaging (3)

Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-34L Laboratory for Radiographic Imaging
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Radiologic Technology Program.
Prerequisite: RADTEC-20 Radiologic Science and Protection
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 cassette-less digital systems response to radiation are explored. In-depth study of radiation protection, health physics, cell radiosensitivity, and radiobiologic effects on humans.

RADTEC-34L Laboratory for Radiographic Imaging (1)

Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-34 Radiographic Imaging
Limitation on Enrollment (e.g. Performance tryout or audition): Admission into the Radiologic Technology Program.
Prerequisite: RADTEC-20L Laboratory for Radiologic Science and Protection
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.

RADTEC-41 RADIOGRAPHIC CLINICAL EDUCATION II (7)
Laboratory 336 - 378 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Successful completion of first semester of the RADTEC program.
Prerequisite: RADTEC-31 Radiographic Clinical Education I
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.

RADTEC-51 RADIOGRAPHIC CLINICAL EDUCATION III (4.75)
Laboratory 228 - 271 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Chaffey College Radiologic Technology program and successful completion of the 1st two semesters
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 procedures, appropriate sequencing, and total quality management.
TOP Code: 1225.00 - Radiologic Technology

RADTEC-55 RADIOGRAPHIC EQUIPMENT AND CLINICAL APPLICATION (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Radiologic Technology program with successful completion of the first two semesters.
Course establishes a knowledge base in fluoroscopic equipment requirements, design, and operation to include conventional and digital fluoroscopic equipment. Study of the radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies, and health care organizations. Study of radiobiology as it relates to occupational and public dose limits and radiation effects on the human body. Overview of personnel dose monitoring, record keeping and equipment. Study of radiation protection practices specific to fluoroscopy studies consistent with ALARA principles. Class demonstrations/labs provide opportunity for application and reinforcement of theory.

RADTEC-61 RADIOGRAPHIC CLINICAL EDUCATION IV (8)
Laboratory 384 - 432 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

RADTEC-66 ANATOMY AND RADIOGRAPHIC POSITIONING III (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-66L Laboratory for Anatomy and Radiographic Positioning III
Limitation on Enrollment (e.g. Performance tryout or audition): Must be a 2nd year student in the Radiologic Technology Program in good standing.
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.

RADTEC-66L LABORATORY FOR ANATOMY AND RADIOGRAPHIC POSITIONING III (1)
Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Corequisite: RADTEC-66 Anatomy and Radiographic Positioning III
Limitation on Enrollment (e.g. Performance tryout or audition): Student must be a 2nd year Radiologic Technology student in good standing.
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.

RADTEC-71 RADIOGRAPHIC CLINICAL EDUCATION V (10)
Laboratory 480 - 540 hours.
Grading: Letter Grade (CSU)
Prerequisite: Limitation on Enrollment (e.g. Performance tryout or audition) 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 do a secondary rotation for nine weeks to experience different equipment and procedures.

RADTEC-77 RADIOGRAPHIC PATHOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Limited to 2nd year students in good standing in the RT program.
Introduction to theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Radiobiology, radiation protection, 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.

RADTEC-82 RADIOGRAPHIC CLINICAL EDUCATION VI (4)
Laboratory 192 - 216 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Acceptance into the Chaffey College Radiologic Technology program and successful completion of the 1st five semesters.
Prerequisite: RADTEC-71 Radiographic Clinical Education V
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 radiological 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 employment.
TOP Code: 1225.00 - Radiologic Technology

RADTEC-85 RADIOGRAPHIC REVIEW AND EXAM PREPARATION (2)
Lecture 32 - 36 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): 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.

RADTEC-470 VENIPUNCTURE FOR IMAGING PROFESSIONALS (1)
Lecture 16 - 18 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: RADTEC-470L Venipuncture Laboratory for Imaging Professionals
Limitation on Enrollment (e.g. Performance tryout or audition): Student should be a 2nd year radiography student or a graduate of JRCERT-approved radiograpy program, and possess a current health care provider CPR card.
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.

RADTEC-470L VENIPUNCTURE LABORATORY FOR IMAGING PROFESSIONALS (0.5)
Laboratory 24 - 27 hours.
Grading: Letter Grade (Degree-applicable)
Corequisite: RADTEC-470 Venipuncture for Imaging Professionals
Limitation on Enrollment (e.g. Performance tryout or audition): 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.
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 veinpuncture sticks on simulated mannequins. Patient care aspects of venipuncture are emphasized.

REAL ESTATE - RE

RE-10 REAL ESTATE PRINCIPLES (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Fundamentals of real estate, covering basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in the specialized courses.

RE-15 REAL ESTATE PRACTICE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: RE-10 Real Estate Principles
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.

RE-60 REAL ESTATE FINANCE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: RE-10 Real Estate Principles
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.

RE-70 REAL ESTATE APPRAISAL (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Current real estate license may substitute for Real Estate 10.
Prerequisite: RE-10 Real Estate Principles
Introductory course covering the purposes of appraisals, the appraisal process and approaches, and the methods and techniques used to determine the value of various types of property, with emphasis on the single-family residence. Course is applicable toward the educational requirements for broker's license and real estate sales-person's license.

RE-86 REAL ESTATE PROPERTY MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: RE-10 Real Estate Principles
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.

RE-472 ADVANCED REAL ESTATE APPRAISAL (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Prerequisite: RE-70 Real Estate Appraisal
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.

RE-475 REAL ESTATE ESCROW I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (Degree-applicable)
Advisory: RE-10 Real Estate Principles
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.

SOCIAL SCIENCE - SCSCI

SCSCI-10 STATISTICS FOR SOCIAL SCIENCE (4)
Lecture 48 - 54 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Assessment Level: Eligibility for MATH-25 or higher as determined by the Chaffey assessment process
Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra or MATH-425 Intermediate Algebra
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. The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education. Use of computerized statistical packages (e.g. SPSS).
(C-ID SOCI 125) TOP Code: 2201.00 - Social Sciences, General

SCSCI-17 HUMAN SEXUALITY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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, historical, sociological, and psychological information, as well as an evaluation of sex research.

SOCIOLOGY - SOC

SOC-10 INTRODUCTION TO SOCIOLOGY (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-495 College Reading and Writing
Assessment Level: ENGL-1A Composition or Eligibility for English 1A as determined by the Chaffey assessment process.
Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students
This class introduces students to basic concepts, theoretical approaches and methods employed in Sociology. This class will examine, analyze and explain social structure, group membership and dynamics, socialization and the self, social stratification, culture and diversity, social change and globalization. Students should be able to apply the sociological framework to everyday life upon taking this course. (C-ID SOCI 110)

SOC-14 SOCIOLOGY OF GENDER (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: SOC-10 Introduction to Sociology
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; as well as sex and gender debates. (C-ID SOCI 140)

SOC-15 ETHNIC AND RACE RELATIONS: U.S. AND GLOBAL PERSPECTIVES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: SOC-10 Introduction to Sociology
Application of major sociological theories and concepts to the examination of ethnic and race relations in the United States and the world, with detailed focus on the four major U.S. ethnic groups: African-American, Latino-American, Asian-American, and Native American. Scrutiny of historical, socioeconomic, and gender influence on inter-group relations. Examination of the 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. (C-ID SOCI 150)

SOC-16 MARRIAGE, FAMILY AND RELATIONSHIPS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ESL-475 Fundamentals of College Reading and Writing for ESL Students
Assessment Level: Eligibility for ENGL 1A Composition Eligibility for English 1A as determined by the Chaffey assessment process
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, variations 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)

SOC-18 SOCIOLOGY OF AGING (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Advisory: SOC-10 Introduction to Sociology or
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.
TOP Code: 2208.00 - Sociology

SOC-25 INTRODUCTION TO CHICANO/LATINO STUDIES IN THE UNITED STATES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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.

SOC-26 INTRODUCTION TO LATIN AMERICAN SOCIETIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 divisions, 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.

SOC-30 INTRODUCTION TO LGBTQ STUDIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
This introductory course examines a broad range of contemporary gay, lesbian, bisexual, transgender, and queer issues in various contexts including bio-medical, sociological, political, racial and sexual.
(C-ID SJS 130) TOP Code: 2208.00 - Sociology

SOC-32 INTRODUCTION TO WOMEN STUDIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the origins, purpose, subject matter, and methods of Women's Studies and to feminist perspectives on a range of social issues affecting women of diverse backgrounds. Study of gender and its intersections with race, class, sexuality, dis/ability, age, religion, and other systems of difference (C-ID SJS 120).
TOP Code: 2201.10 - Women's Studies

SOC-33 INTRODUCTION TO SOCIAL JUSTICE STUDIES (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Inter-disciplinary study of dominant and minority group relations. Examines the emergence of social justice movements to address oppression on the basis of race, sex, religion, gender, social class and ability in the United States. to provide a basis for a better understanding of the socio-economic, cultural and political conditions among key social groups.
(C-ID SJS 110) *TOP Code: 2208.00 - Sociology*

SOC-70 SOCIAL PROBLEMS (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: SOC-10 Introduction to Sociology
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.

SOC-80 INTRODUCTION TO RESEARCH METHODS IN SOCIOLOGY (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Advisory: SCSCI-10 Statistics for Social Science
Prerequisite: SOC-10 Introduction to Sociology and
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, analyzing data from a variety of methodological approaches. (C-ID SOCI 120)

SPANISH - SPAN

SPAN-1 ELEMENTARY SPANISH I (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
This introductory course teaches beginning language acquisition in a cultural context through listening, speaking, reading and writing. The students will interact with authentic language in cultural context. This course corresponds to the first year of high school Spanish. Spanish 1 is not recommended for heritage (native) speakers of Spanish.
Ten hours of supplemental learning in a Success Center that supports this course is required. (C-ID SPAN 100)

SPAN-2 ELEMENTARY SPANISH II (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Other: One year of high school Spanish.
Prerequisite: SPAN-1 Elementary Spanish I or
This course continues to teach language acquisition in a cultural context through listening, speaking, reading and writing at the second semester level. The students will continue to interact with authentic language in cultural context. This course corresponds to the second year of high school Spanish. Spanish 2 is not recommended for heritage (native) speakers of Spanish.
Ten hours of supplemental learning in a Success Center that supports this course is required. (C-ID SPAN 110)

SPAN-3 INTERMEDIATE SPANISH I (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Other: two years of high school Spanish.
Prerequisite: SPAN-2 Elementary Spanish II
This course teaches culture and facilitates language acquisition through listening, speaking, reading and writing. Students will continue to interact with authentic language in context. Content is expanded beyond 'survival? needs of the immediate environment in order to express personal meaning and to apply different strategies and techniques to go beyond casual conversation and express opinions, make suggestions on familiar topics, as well as some abstract issues and plans. Students demonstrate an increased awareness of cultural norms, values, and culturally relevant appropriate customs and events. Accuracy becomes quite high for high frequency structures and vocabulary but more complex discourse is still developing and requires a somewhat sympathetic listener or reader. Students will demonstrate the ability to think critically by analyzing linguistic structures and reflecting on and making cross-cultural comparisons. This course is taught primarily in Spanish.
Ten hours of supplemental learning in a Success Center that supports this course is required. (C-ID SPAN 200)

SPAN-3SS SPANISH FOR HERITAGE SPEAKERS I (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: SPAN-2 Elementary Spanish II or department determined equivalency
This course is designed for heritage speakers of Spanish or other linguistically qualified students. It provides instruction that builds upon the existing reading, writing, speaking and listening skills and the cultural heritage and knowledge of these students. The course will increase awareness of linguistic registers, discuss items beyond the familiar routine and develop an appreciation for Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish. (C-ID SPAN 220)

SPAN-4 INTERMEDIATE SPANISH II (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: SPAN-3 Intermediate Spanish I or
This course continues to expand upon culture and facilitate language acquisition through listening, speaking, reading and writing. Students will interact with more sophisticated authentic language in context. Content continues to expand in order to express more complex ideas in order to express personal meaning and to apply different strategies and techniques to go beyond casual conversation and express opinions, make suggestions on familiar topics, as well as some abstract issues and plans. Students demonstrate an increased awareness of cultural norms, values, and culturally relevant appropriate customs and events. Accuracy becomes quite high for high frequency structures and vocabulary but more complex discourse is still developing and requires a somewhat sympathetic listener or reader. Students will continue to demonstrate the ability to think critically by analyzing linguistic structures and reflecting on and making cross-cultural comparisons. This course is taught primarily in Spanish. Ten hours of supplemental learning in a Success Center that supports this course is required. (C-ID SPAN 210)

SPAN-4SS SPANISH FOR HERITAGE SPEAKERS II (4)
Lecture 64 - 76 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: SPAN-3SS Spanish for Heritage Speakers I or department-determined equivalency
This course continues to provide instruction that builds upon the existing reading, writing, speaking and listening skills and the cultural heritage and knowledge of these students. The course will continue to increase awareness of linguistic registers, discuss items beyond the familiar routine and expand upon students appreciation for Hispanic cultures as manifested in Spanish speaking countries and in the United States. This course is entirely conducted in Spanish. (C-ID SPAN 230)

SPAN-8 SURVEY OF HISPANIC LITERATURE: 1700 - PRESENT (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Other: Department-determined equivalency
Prerequisite: SPAN-3 Intermediate Spanish I or SPAN-3SS Spanish for Heritage Speakers I or
A Chronological survey, conducted in Spanish, of the history and development of Spanish and Spanish-American literature from 1700 to the present. Emphasis is on critical thinking and reasoned support of ideas. Literary discussions and written expression will be important components of the class, as well as exposure to Peninsular and Latin American culture. This course is designed for advanced speakers of Spanish who wish to improve their skills through reading, writing, and literary discussion. Prepares students for upper-division courses.
TOP Code: 1105.00 - Spanish

SPAN-13 SURVEY OF MEXICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition (Completion Of)
A course exploring Mexican cultural identity through the reading and discussion of major works in Mexican literature in translation from different historical periods. Close reading will guide the reader toward greater understanding and appreciation of the culture and history of Mexico. Selected readings from important authors such as Mariano Azuela, Juan Rulfo, Rosario Castellanos, Carlos Fuentes and Octavio Paz among others.

SPAN-14 LATIN AMERICAN LITERATURE (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: ENGL-1A Composition
A course studying the diverse cultures of Latin America through 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 the work of important authors such as Gabriela Mistral, Pablo Neruda, Jorge Luis Borges, Mario Vargas Llosa, and Gabriel Garcia Marquez.

SPAN-16 SPANISH COMPOSITION (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: SPAN-4SS Spanish for Heritage Speakers II or SPAN-3 Intermediate Spanish I
Writing in Spanish, including writing strategies as well as recognition and self-correction of errors. Focus on paragraph development using appropriate grammar, punctuation, tense, style, and complex sentences, with ultimate goal of writing an essay in Spanish.

STATISTICS - STAT

STAT-10 ELEMENTARY STATISTICS (4)
Lecture 64 - 72 hours.
Grading: Letter Grade (CSU; UC credit limitations)
Assessment Level: Eligibility for MATH-25 or higher as determined by the Chaffey assessment process or completion of MATH-420 or MATH-450.
Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra or
The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Introduction to descriptive and inferential statistics.
Topics include: frequency distribution; measures of variation and central tendency; discrete and continuous random variables and probability distributions; sampling distributions; interval estimations of population parameters; hypothesis testing; analysis of variance; chi square and t-test analysis; and linear regression and correlation. Application of technology for statistical analysis including the interpretation of the relevance of statistical findings; Applications using data from various disciplines such as: business, physical sciences, social sciences, psychology, life science, health science, and education. A specific statistical graphing & computing utility is required; see instructor before acquiring. May be offered as an Honors course.
(C-ID MATH 110)

THEATRE - THEATRE

THEATRE-1 Introduction to Theatre (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: or Eligibility for ENGL-1A as determined by the Chaffey assessment process ESL-475 Fundamentals of College Reading and Writing for ESL Students
This course introduces students to elements of the production process including playwriting, acting, directing, design, and criticism. Students will also survey different periods, cultures, styles, and genres of theatre through play reading, discussion, films and viewing and critiquing live theatre, including required attendance of theatre productions. (C-ID THTR 111)

THEATRE-2 Theatrical Dance (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 of dance theory and understanding the importance of control, coordination, balance, strength, and conscious development of movement habits.

THEATRE-4 Theatre History: Ancient to 1700 (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: or Eligibility for ENGL-1A as determined by the Chaffey assessment process ESL-475 Fundamentals of College Reading and Writing for ESL Students
The study of theatre history from the Origins of Theatre 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. (C-ID THTR 113)

THEATRE-5 Theatre History: 1700-present (3) [CX]
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: or Eligibility for ENGL-1A as determined by the Chaffey assessment process ESL-475 Fundamentals of College Reading and Writing for ESL Students
The 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.

THEATRE-7 Theatrical Script Analysis (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: Eligibility for English 1A as determined by the Chaffey assessment process, or completion of English as a Second Language 475. ESL-475 Fundamentals of College Reading and Writing for ESL Students
This course explores principles, techniques and theories of play script analysis for theatrical production.
TOP Code: 1007.00 - Dramatic Arts

THEATRE-8 Voice and Movement for the Actor (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
In depth application of techniques designed to examine the integral use of the voice and body for the actor; developing skills for vocal and physical relaxation, flexibility, and strength. This course is for the theatre majors or any performer or student interested in developing vocal and physical awareness and understanding the importance of transforming the actor's use of his/her vocal and physical instrument.

THEATRE-10 Beginning Acting (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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. (C-ID THTR 151)

THEATRE-12 Intermediate Acting (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: THEATRE-10 Beginning Acting
In depth application of the techniques explored in beginning acting, with emphasis on characterization and scene study. (C-ID THTR 152)

THEATRE-14 Stylized Acting (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Prerequisite: THEATRE-10 Beginning Acting
Advanced acting techniques necessary for drama of various types. Stylized acting students will study Elizabethan, Commedia Delsarte, Comedy of Manners and contempory styles of acting. Some work on dialects as needed for specific scenes.

THEATRE-18 Seminar in Television Production: Acting Techniques (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: THEATRE-10 Beginning Acting and
Prepares the student for the particular demands of acting in front of the camera, either motion-picture or television. Course will examine techniques of blocking, text analysis, cold reading, vocabulary and various camera shots.

THEATRE-20 Directing for the Stage I (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Advisory: THEATRE-10 Beginning Acting
This course is designed for theatre students to explore fundamentals of play directing. Through a series of exercises, students will demonstrate a knowledge of specific directing techniques and skills necessary to direct a contemporary play.

THEATRE-30 Stagecraft (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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. This course involves participation in all the technical aspects of preparing a scheduled College production. (C-ID THTR 171)

THEATRE-32 THEATRE DESIGN-LIGHTING (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: THEATRE-30 Stagecraft
This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. (C-ID THTR 173)

THEATRE-35 MUSICAL THEATRE PERFORMANCE I (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: THEATRE-10 Beginning Acting
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.

THEATRE-36 STAGE MANAGEMENT (3)
Lecture 48 - 54 hours.
Grading: Letter Grade (CSU)
This course involves the study and the practical application of the practices of the stage manager as they pertain to the theatrical production process. Emphasis is placed on the duties, responsibilities and procedures from pre-production to postproduction. The course will prepare all students who are interested in stage management positions for the Theatre Arts Department productions.

THEATRE-37 MUSICAL THEATRE PERFORMANCE II (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Prerequisite: THEATRE-35 Musical Theatre Performance I
Extensive practice of synthesizing acting, singing, and movement skills. Course will include the preparation and performance of an audition portfolio appropriate for musical theatre auditions.
TOP Code: 1007.00 - Dramatic Arts

THEATRE-40 STAGE COSTUMING (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
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 specifically to live theatrical productions. (C-ID THTR 174)

THEATRE-42 THEATRICAL MAKEUP (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU; UC)
Introduction to the theory, design, and application of makeup for theatre, including corrective, character, and non-realistic makeups for the various theatrical forms. (C-ID THTR 175)

THEATRE-44 AUDIO/VISUAL DESIGN IN THEATRE AND LIVE ENTERTAINMENT (3)
Lecture 32 - 38 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
This course provides an overview of the use of audio, video and projection media and their practical applications in live performance, entertainment, and event design. Contemporary and historical techniques for media integration will be examined through readings, viewings, and laboratory projects as well as performance applications. Technologies examined include audio composition, live audio mixing, live-feed video, prepared video content, and interactive performance.
TOP Code: 1006.00 - Technical Theater

THEATRE-50 MAIN STAGE PRODUCTION WORKSHOP -REHEARSAL AND PERFORMANCE (3)
Laboratory 144 - 162 hours.
Grading: Letter Grade (CSU; UC)
Limitation on Enrollment (e.g. Performance tryout or audition): Audition/Interview with faculty overseeing that specific production.
A supervised practical experience in the rehearsal and performance of a faculty-directed public production. Requires participation in acting, or stage management role. Students will participate in the Kennedy Center/American College Theatre Festival academic theatre competition OR the production will participate in the Kennedy Center/American College Theatre Festival academic theatre competition. (C-ID THTR 191)

THEATRE-52 MAIN STAGE PRODUCTION WORKSHOP- TECHNICAL THEATRE (3)
Laboratory 96 - 108 hours.
Grading: Letter Grade (CSU)
Limitation on Enrollment (e.g. Performance tryout or audition): Interview required.
Course provides instruction and supervised practical experience in the technical preparation and public performance of a faculty-directed theatrical production. Requires participation in design, or production role.
Students will participate in the Kennedy Center/American College Theatre Festival academic theatre competition OR This production will participate in the Kennedy Center/American College Theatre Festival academic theatre competition.

THEATRE-57 COMMUNITY OUTREACH THEATRE (3)
Lecture 32 - 36 hours. Laboratory 48 - 54 hours.
Grading: Letter Grade (CSU)
Advisory: THEATRE-10 Beginning Acting
Limitation on Enrollment (e.g. Performance tryout or audition): enrollment based on successful audition or interview.
This course is designed for advanced theatre students who have completed several acting courses or who have extensive stage training through participation in public and traveling performances.
This course examines the dramatic structure, acting, directing and stage-managing that are employed for an Outreach theatre performance.
Outreach Theatre includes performances designed specifically for a target audience such as: K-12, community centers, outside venues and University campuses creating a guided pathway of communications between Chaffey College and the community.
Practical and creative applications of scenic design, costumes, make-up, improvational skills and performance are among the topics studied in the preparation of the final production. Students will audition, rehearse, design and perform in a production suited for targeted audience. The production will travel to different venue sites allowing the actors to experience a variety of theatre spaces. Homework may include required attendance at evening or weekend performance.

THEATRE-62 SHOWCASE DEVELOPMENT WORKSHOP (1)
Lecture 8 - 9 hours. Laboratory 24 - 27 hours.
Grading: Letter Grade (CSU)
This course is designed for advanced theatre students who have completed several acting courses or who have extensive stage training through participation in public. Workshop in which student playwrights, directors, actors, and designers develop and refine new theatre pieces producing them in a studio development of new plays from drafts through staged reading to showcase productions. Students will audition, rehearse, design and perform in a showcase production suited for
targeted audience.

THEATRE-496ABCD INTERNSHIPS IN TECHNICAL THEATRE AND ENTERTAINMENT DESIGN (1 - 4)
Grading: Letter Grade
Prerequisite: Limitation on enrollment (interview). Consent of Technical Theatre program coordinator is required for registration.
Supervised employment which is designed to assist students in achieving job-related learning objectives and acquiring desirable work habits, attitudes and skills so as to enable them to become productive employees. This internship/work experience also provides students with career awareness for jobs. This type of work experience is available to students whose job and educational or occupational goals are not directly related. Career and professional development include knowledge, judgments, skills and attitudes essential for success in the workplace, and achievement of job related learning objectives. Practical experience in the application of production responsibilities in any of the following: stage management, house management, construction, scenery, properties, costume, lighting, sound, audio/visual and running crews.

WELDING - WELD

WELD-70 BEGINNING ARC WELDING (5)
Lecture 32 - 36 hours. Laboratory 144 - 162 hours.
Grading: Letter Grade (CSU)
This course provides an introduction to Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), and Gas Metal Arc Welding (GMAW). Students will learn how to weld utilizing various electrodes in multiple positions. The professional use of carbon arc, plasma arc, and oxy-acetylene. Course includes lectures and demonstrations on industrial fabrications.

STUDENT SUPPORT SERVICES

ATHLETICS

Playing under the name of The Panthers, the men's and women's teams compete in the South Coast Conference and the National Central Conference (football). The men's athletic program offers competition in football, basketball, baseball, cross country, swimming, soccer, and water polo. The women's athletic program includes competition in basketball, softball, cross country, swimming, water polo, soccer, and volleyball.

ATHLETIC ELIGIBILITY

Chaffey College is a member of the South Coast Conference and the National Central 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

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 a component of 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 relevant credentials. Customized training and development programs are fee-based, and in many instances, funded by the California Employment Training Panel contract awarded to Chaffey College's Economic Development Department. Training is typically delivered at the business site and can be arranged around business schedules (all shifts; all days). Consulting services and needs assessments are also provided. For more information, visit www.chaffey.edu/workforce or call (909) 652-7642.

EMPLOYMENT DEVELOPMENT

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 support our local economy by strengthening work-related skills. Community Education programs are listed on the College's website at www.chaffey.edu/communityed. For more information, please call (909) 652-6041.

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 Journalism 30 and Journalism 31.

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 Life or accessed online at www.chaffey.edu/student_handbook.

STUDENT LIFE

The Office of Student Life is the place students go to get help and to get involved. We are committed to complementing the academic curriculum in the development of the whole student within a diverse campus community by offering opportunities and services to support, engage, and empower our students to get the most out of their time at Chaffey. We are always happy to help in any way we can!
The Office of Student Life is located in Campus Center East on the Rancho Campus. The office publishes the annual student handbook in the fall term, organizes the Spring Commencement ceremony and oversees student elections. The office supports student government and all other student organizations and oversees a student study lounge. Students interested in getting involved on campus are invited to visit the office or you can just study and relax between classes in the lounge.

Chaffey College Student Government (CCSG)

Chaffey College Student Government is the college student government. CCSG is supported by students and is for the benefit of students. The college service fee of $8.00 per semester ($5.00 for summer session) funds CCSG sponsored programs and activities, including scholarships (please check your Chaffey College issued panther email for information; scholarships are awarded in the spring term), annual book grants, lectures, cultural events, service projects for students and community, giveaways, the textbook rental program that is administered in the Chaffey College Campus Store and more. The college service fee is an optional fee endorsed by CCSG annually and is approved by the college Governing Board. Individuals who wish to learn more about the college service fee, including its benefits to students and service to the community may contact CCSG for more information. Students who wish to be exempt from paying the college service fee, please contact the Cashier's Office at cashier.staff@chaffey.edu on or before the appropriate refund deadline for the current term.

If you would like more information about CCSG, please visit the Office of Student Life in Campus Center East (north of the campus store) or call (909) 652-6593/6594.

CLUBS AND ORGANIZATIONS

Get involved with a club at Chaffey College. Participation in clubs and student government not only makes educational pursuits more enjoyable, but also affords students the opportunity to gain special skills in communication and leadership which enrich the Chaffey community.

For a current list of available clubs, visit http://www.chaffey.edu/stuactiv/roster.shtml. If a club of interest is not available, students may form a club of their own. Clubs and organizations that were chartered by the Chaffey Community College District in 2018-2019 are:

- Anime Club
- Associated Press Club
- Business Elites
- The Cannabis Education Club
- Chaffey Car Club
- Chaffey Chinese Club
- Chaffey College Accounting Society
- Chaffey College Anthropology Club
- Chaffey College Legal Society
- Chaffey College Student Chapter of IFMA
- Chaffey College Student Government (CCSG)
- Chaffey College Student Vocational Nurses: Class of Spring 2018
- Chaffey College Theatre Club
- Chemistry Club
- The College Church
- Computer Science Club
- Democratic Club
- Dungeons and Dragons Club
- Engineering Club
- EOPS Club
- Film Makers Club
- The Game Development Club
- Hispanic Association of Colleges of Universities Alumni
- Hospitality Club
- Interior Design Club
- Kappa Sigma Nu
- Kinesiology Club
- The Lavender Coalition
- Men in Nursing
- Multicultural Club
- Musicianship Club
- Muslim Students Association
- Persian Student Association
- Pinto Club
- Pre-Medical Society
- Psychology Club
- PUENTE
- Students for Justice in Palestine
- The Tribe
- Umoja
- (U)ntitled
- Vocational Nursing Club- Fall 2017

STUDENT SERVICES

ADMISSIONS AND RECORDS OFFICE

The Admissions and Records Office provides a wide range of services to students and members of the community. The office provides general information, including but not limited to:

- Admission application processing
- Registration assistance
- Residency determination for tuition purposes
- Processing of requests for official transcripts
- Enrollment verification
- Payment of fees
- Degree conferral and issuing of diplomas/ certificates
- Unit evaluations
- Photo ID services

The Admissions and Records Office serves as the official custodian of records and, as such, maintains student academic records of courses taken, units attempted, units earned, grades, grade points, graduation dates, military credit, non-credit enrollment and other data. Community services academic history is only maintained from Fall 1999 forward.

The Admissions and Records Office also provides computers for student use located in the lobby of the Student Services and Administration building. These computers provide access to the student portal for students to register, order official transcripts, and print unofficial transcripts, final grades, and class schedules.

Most services are also available online through the MyChaffey portal.

CALWORKS

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. For more information, please call (909) 652-6049.

CALWORKS PROGRAM FOR PARENTS

CalWORKs (California Work Opportunity Responsibility to Kids) Program for Parents is a program that supports students who receive public assistance (cash aid) while attending Chaffey College. Program staff are here to help students succeed in their educational and career goals through services such as: developing a comprehensive educational plan, priority registration, CalWORKs Work Study/Job Placement, work readiness support, personal and professional development workshops, assistance with completing county documentation related to their education, advocacy for their continued education and success, referrals for additional academic support, and many more services. The Office for the CalWORKs Program for Parents is located in the Administration Building, Room 190. For more information, please visit http://www.chaffey.edu/calworks, or call (909) 652-6045.

CAMPUS STORE

The Campus Store is dedicated to supporting the mission of the College, academic programs, and student life by providing a wide range of services including new, used, rental, and digital textbooks, fax and print services, supplies, art kits, food items, apparel, electronics, uniforms, and much more. Campus Store proceeds stay with the college and benefit Chaffey students. Visit http://books.chaffey.edu for online purchases, current and extended hours of operation, textbook availability and price comparisons, textbook buyback information, and more.

Purchase or Rent Textbooks:

In person at the Rancho Cucamonga Campus Store for classes held online and at the Rancho Campus. In person at the Chino Campus Store for classes held at all Chino Campus locations, including Chino Valley Adult School and Ontario High School. In person at the Fontana Campus Stores for classes held at the Fontana Campus, including Fontana High School. Online at http://books.chaffey.edu for direct shipping and free in-store pickup at all three campuses.

CAREER CENTER AND STUDENT EMPLOYMENT OFFICE

The Career Center is located on the Rancho Cucamonga campus in MACC-203. The Career Center offers career counseling, assessments, and other career planning resources. Professional career counseling is available to assist Chaffey College students, alumni, and members of the community in formulating their career goals. The Career Center regularly provides workshops on a variety of career-related topics (see www.chaffey.edu/careercenter/calendar). For more information, call (909) 652-6511 or visit www.chaffey.edu/careercenter.

The Student Employment Office manages the Chaffey Connect online career services portal and offers a variety of employer services to local organizations including job announcements and on-campus recruiting

opportunities. This office also serves as the personnel office for all on-campus student positions and provides assistance with hiring paperwork, employment verifications, and trainings. All new student employees must complete their personnel documents and submit them to this office prior to their first day of work. The Student Employment Office is located within the Career Center, in MACC-203, and can be contacted during normal business hours at (909) 652-6511.

Student Employment Program Eligibility Requirements

Chaffey College is a learning-centered environment where student success is highly valued, supported, and assessed. As such, the Student Employment Office monitors the academic success of current student employees and enforces the following procedures:

To apply for student employee positions, new and returning students must be enrolled in at least 6 units during fall or spring semesters, or 3 units if applying during a summer session. Continuing students must be enrolled in at least 6 units during fall or spring semesters to apply (NOTE: summer enrollment is not required unless prior spring enrollment was less than 6 units). Applicants must also have a cumulative GPA of at least 2.0 at the time of application. Students with no prior college coursework are exempt from the cumulative GPA requirement.

While employed, student employees must maintain enrollment in at least 6 units during fall and spring semesters (summer enrollment is not required) and a cumulative GPA of at least 2.0. Failure to maintain the required enrollment and/or GPA requirement will result in termination of the student employee's position.

Chaffey Connect – Online Career Services Portal

The Chaffey Connect system is an online career services portal that provides access to dozens of on- and off-campus job postings, employer profiles, a resume and cover letter builder, a career exploration tool, a digital career resource library, and an online career event calendar. Students may access the system at www.chaffey.edu/chaffeyconnect.

Cooperative Education – Work Experience

Cooperative Education courses enable students to earn elective units for their job, internship, or volunteer work. Cooperative Education can also help students make effective career choices, expand their learning on the job, and gain lifetime career development skills. For further information, call (909) 652-6190.

CHILD DEVELOPMENT CENTER

The Chaffey College Child Development Center located at the Rancho Cucamonga Campus provides low cost or free, high quality child care services for eligible families with children between the ages of 18 months to Kindergarten.

The Center is licensed by the State of California, Title 22, accredited through the National Association for the Education of Young Children (NAEYC), and provides subsidized childcare services through the State Department of Education, Early Education and Support Division, 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 center participates in the Child and Adult Care Food Program (CACFP) offered by the U.S. Department of Agriculture (USDA) and serves meals at no separate charge to all enrolled children. 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's hours are as follows:

State Preschool Program:

Monday – Thursday	7:00am-6:00pm
Friday	7:00am-5:00pm

Toddler Program:

Monday – Thursday	7:00am-5:00pm
Friday	7:00am-3:00pm

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 needed to obtain a child development permit which is required for employment in state and federally funded programs. Employment applications for apprentice positions are available at www.chaffey.edu/childctr or at the Child Development Center. This institution is an equal opportunity provider and employer. 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 placement site. For information on fees, enrollment procedures, or job openings please call (909) 652-6875.

COUNSELING DEPARTMENT

The Counseling Department offers students counseling and information on all academic and vocational programs at Chaffey College. Counseling services include interpreting assessment results for new and returning 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, petitions and referrals to other agencies on campus and in the community, and completion of Abbreviated and Comprehensive Education Plans. The Counseling Department offers valuable resources for students' questions and concerns.

For information regarding services available relating to career planning, see the heading "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) 652-8000 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 (EText), 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
7:30am - 4:30pm

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.

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 DPS 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 18 years of age and receiving public assistance. Eligible foster youth may also qualify for additional services. Services available at Rancho, Chino, and Fontana.

For further information and eligibility requirements, call (909) 652-6349/6358 or visit www.chaffey.edu/eops.

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 Campus Store 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.

GPS CENTER (Guiding Panthers to Success)

The GPS center supports student planning and achievement by providing assistance with registration, orientation, evaluation of progress on goal, completion of the Abbreviated Education Plan, and workshops on educational planning and college success. The center is staffed by counseling faculty and Success Guides. Walk-in services are available Monday – Friday. GPS Center locations:

Rancho Campus	VSS-111	(909)652-6466
Chino Campus	CHMB-240	(909)652-8030
Fontana Campus	FNFC-121	(909)652-7460

LEARNING AND EDUCATIONAL DEVELOPMENT

The Learning and Educational Development (LED) program 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 Cybraries located on the Chino and Fontana Campuses provide services and resources necessary to maintain effective learning programs and empower the diverse student population toward successful goal achievement. We provide reference assistance and navigation to various and carefully chosen information sources. These include book, periodical, video and electronic resources which also support and enhance the cultural and educational 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 in their 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 library orientation sessions and workshops
- Assistance from reference librarians in the use of library and information resources in all formats
- An interactive learning center with study table as well as access to networked computers with MS Office

- 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 depository for course documents
- 24/7 access to online databases with a wide variety of full-text resources including an extensive collection of eBooks

Contact the Libraries at: (909) 652-6800, Rancho Campus; (909) 652-8115, Chino Campus Cybrary; and (909) 652-7450, Fontana Campus Cybrary. Check our website at www.chaffey.edu/library for current hours and more detailed information on our resources and services.

PANTHER PANTRY

The Panther Pantry provides free basic food supplies to Chaffey College students who need access to emergency food and information about additional resources to address long term needs. Our goal is to inspire hope and academic excellence as we respect the dignity of each student we serve. For information about food distribution, dates, times, and locations, contact the Office of Special Populations and Equity Programs at (909) 652-6505 or equity.support@chaffey.edu.

SPECIAL POPULATIONS AND EQUITY PROGRAMS

The Office of Special Populations and Equity Programs implements and oversees the activities found in Chaffey College's Student Equity Plan. Our goal is to empower and support disproportionately impacted students; promote a culturally responsive campus environment; and identify solutions and resources that foster student success. We create opportunities for students to connect with resources and special programs both on and off campus in order to develop their leadership skills and engage in high-impact activities. Our office also houses Transitional Services and the Panther Pantry, which provide services to students experiencing housing and/or food insecurity. We work to build a network of support and collaboration between campus departments, programs, faculty, staff, and student groups. For more information, call (909) 652-6504 or e-mail equity.support@chaffey.edu.

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 health education resources 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 Services Fee waived. Applications for waiver are available in the Student Health Services office. Board of Governor's Fee Waiver (BOGW) eligible students will be responsible for all or a portion of the Health Services Fee as listed on the payment chart at www.chaffey.edu/cashier/fees.shtml.

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 8:00am to 4:00pm

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
For ESL and Modern Languages courses, call (909) 652-6907
For English courses, call (909) 652-6820

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-4:00pm. More information can be obtained by calling (909) 652-6233 or visiting the Transfer Center on Chaffey's website www.chaffey.edu/transfer.

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 such as; 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.

WELCOME CENTER

The Welcome Center at Chaffey College is designed to provide a warm welcome to new, continuing and prospective students. The Center makes available valuable information to simplify and enhance your experience at Chaffey College as it relates to getting to know the campus and all of its rich resources.

The Welcome Center is located on the first floor of the Student Services Administration Building (SSA). Office hours are generally Monday and Thursday 7:30am-7:00pm, Tuesday and Wednesday 7:30am-4:30pm and Fridays 7:30am-4:00pm.

Policies, Procedures, and Regulations

Policies, procedures, and regulations are subject to change. Visit www.chaffey.edu/policies for the most up-to-date information.

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 Life Office in Campus Center East (CCE) on the Rancho campus or by visiting 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.

Disciplinary Procedures

The student discipline procedure is available on the Chaffey College Policies website at www.chaffey.edu/policies (Administrative Procedure 5520) and in the Chaffey College Student Handbook available in the Student Activities Office in Campus Center East (CCE) on the Rancho Cucamonga campus and online at www.chaffey.edu/student_handbook.

Grievance Procedures

Student Grievance Process

A. Purpose

The purpose of this procedure is to provide a prompt and equitable means of resolving student grievances. These procedures are available to any student who reasonably believes a college decision or action has adversely affected his or her status, rights, or privileges as a student. The procedures shall include, but not be limited to, grievance regarding:

1. Sex discrimination as prohibited by Title IX of the Higher Education Amendments of 1972
2. Financial aid
3. Course grades, to the extent permitted by Education Code Section 76224(a), which provides: "When grades are given for any course of instruction taught in a community college district, the grade given to each student shall be the grade determined by the instructor of the course and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final."
   a. Mistake – unintentional error on part of the instructor
   b. Fraud – intentional misrepresentation of any or all facts, which lead to a negative outcome
   c. Bad faith –any other intentional act of the instructor, which negatively impacts the grade of the student
   d. Incompetency – there is evidence that the instructor does not have the knowledge, skills, and/or abilities to conduct and fairly grade the course. Incompetence is usually pervasive, and not restricted to one student or one incident
4. The exercise of rights of free expression protected by the state and federal constitutions and Education Code Section 76120.
5. The procedure does not apply to:
   a. Student disciplinary actions, which are covered under different board policies and administrative procedures
   b. Sexual harassment and illegal discrimination, which are covered under different board policies and administrative procedures
   c. Police citations (i.e., "tickets"), of which complaints regarding citations must be directed to the County Courthouse in the same way as any traffic violation.

B. Process

Any student who believes he or she has a grievance shall file a Statement of Grievance with the school dean or supervisor within thirty (30) instructional days of the incident on which the grievance is based, or thirty (30) instructional days after the student learns of the basis for the grievance, whichever is later. If a student fails to file a Statement of Grievance within thirty (30) days, he or she has forfeited his or her right to file a grievance for that alleged circumstance.

1. Informal Level

   Informal meetings and discussion between persons directly involved in a grievance are essential at the onset of a dispute and should be encouraged at all stages. Every effort shall be made to resolve a student complaint at the lowest level possible. Any discussion during the informal process must be held in confidence by all parties involved.

   a. A student will be encouraged to contact the appropriate faculty or staff member against whom the complaint exists and attempt, in good faith, to present his/her complaint and resolve the concern through the consultative process.
   b. If there is no resolution after meeting with the faculty/staff member, or the faculty/staff member refuses to meet or respond within ten (10) instructional days, the student may proceed to the next step by meeting with the faculty member's coordinator or staff member's immediate supervisor.
   c. If the complaint is still not resolved, the student must meet with the faculty or staff member's school dean or supervisor and submit to that person the Statement of Grievance.
   d. The appropriate administrator will convene a meeting with the student and the person the grievance was filed against.
   e. If the student has not been able to resolve the complaint/grievance at any of the informal steps above, the student may file a Request for Grievance Hearing with the Dean of Student Discipline within ten (10) instructional days after meeting with the school dean or supervisor.

2. Formal Level

   The student will complete all steps in the informal process prior to filing the Request for Grievance Hearing form.

   a. Grievance Hearing Request

      The student will submit to the Dean of Student Discipline a Request for Grievance Hearing form, including:

      1. Statement of Grievance form and all supporting facts and documentation.
      2. The following options will need to be included in the request if the student chooses to pursue:
         a. The hearing shall be conducted privately unless the student requests that it be open to the public. In the event the student requests a public hearing, the hearing will remain closed to the public during any portions that would lead to the giving out of information involving other students that would be in violation of state or federal law regarding the privacy of those students and/or their student records.
         b. The student may represent himself/herself, and may also have the right to be accompanied by a person of his/her choice; except that a party shall not be accompanied by an attorney unless, in the judgment of the Grievance Hearing Panel, complex legal issues are involved.
         c. If the student wishes to be accompanied by an attorney, the request must include the attorney's name and contact information.
            i. If the student is permitted to be accompanied by an attorney, the Dean of Student Discipline may request legal assistance through the Office of the Superintendent / President.
            ii. The Hearing Panel may also request legal assistance through the Office of the Superintendent/President; any legal advisor provided to the Hearing Panel may sit in an advisory capacity to provide legal counsel but shall not be a member of the Hearing Panel or vote with it.
            iii. In the event the Hearing Panel permits the student and the College to be accompanied by attorneys, the role of the attorneys shall be limited to providing advice to their respective clients. In no event shall the attorneys present their respective client's case to the Grievance Hearing Panel.
      3. If harassment or discrimination has been presented as a reason for the grievance, the college will conduct an investigation into the matter. As a result, the grievance will not move forward pending the investigation. Note: All harassment and discrimination complaints should be directed to Human Resources, (909) 652-6523.

   b. Grievance Hearing Panel

      Within five (5) instructional days after the filing of the Request for Grievance Hearing form, the Grievance Hearing Panel will be established by the Dean of Student Discipline. An independent five-member grievance hearing panel, including one (1) administrator, two (2) faculty members (not from the academic area involved), and two (2) student representatives shall be selected from the Student Grievance Committee as established by the District. The Dean of Student Discipline will name the chair of the Grievance Hearing Panel. Four members shall constitute a quorum by which Hearing Panel business may proceed. The quorum must include at least one student member, one faculty member, and one administrative member. Faculty representatives shall be selected by the Faculty Senate. Student representatives shall be selected by the Chaffey College Student Government (CCSG).

   c. Determination of Whether a Valid Grievance Exists

      Within ten (10) instructional days of the establishment of the Hearing Panel, the Hearing Panel shall meet in private and without the parties present to select a chair and to determine on the basis of the Statement of Grievance whether it presents sufficient grounds for a hearing. The determination of whether the Statement of Grievance presents sufficient grounds for a hearing shall be based on the following:

      1. the statement contains facts which, if true, would constitute a grievance under these procedures
      2. the grievant is a student, which includes applicants and former students
      3. the grievant is personally and directly affected by the alleged grievance
      4. the grievance was filed in a timely manner
      5. the grievance is not clearly frivolous, clearly without foundation, or clearly filed for the purpose of harassment
      6. the resolution sought is within the purview of the Grievance Hearing Panel

If the grievance does not meet each of the requirements for a grievance, the Grievance Hearing Panel chair shall notify the student in writing of the rejection of the Request for a Grievance Hearing, together with the specific reasons for the rejection and procedures for the appeal. This notice will be provided within five (5) instructional days of the date the decision is made by the Grievance Hearing Panel.

The student may submit a Hearing Appeal form within ten (10) instructional days of receiving notice directly to the Student Discipline Office. Appeals must cite one or more reasons that address the Panel's reason(s) for rejection which the student seeks reconsideration of the decision. Merely disagreeing with the outcome is not sufficient grounds to submit an appeal. This will be the student's final opportunity to request a hearing.

Within ten (10) instructional days of receipt of the Hearing Appeal form and supporting documentation, the Hearing Panel chair shall review all documentation and render a final decision on whether to move forward with conducting a hearing.

Failure to appeal any determination within the specified time limit constitutes a waiver of the right to appeal and shall be deemed acceptance of the last determination rendered.

If the Request for Grievance Hearing satisfies each of the requirements of a grievance, a grievance hearing will be scheduled.

d. Notice of Grievance Hearing

If the Request for Grievance Hearing satisfies the requirements of a grievance, the person against whom the grievance is directed will be requested to submit to the Dean of Student Discipline, a written response to the allegations. This grievance response must be submitted within five (5) instructional days of the receiving notice that the Request for Grievance Hearing meets the requirements of a grievance.

Within ten (10) instructional days after a determination is made that the Request for Grievance Hearing meets the requirements of a grievance, the Dean of Student Discipline will notify the parties, in writing, of the date, time, location and guidelines of the grievance hearing. At the time of notification that the hearing will convene, members of the Grievance Hearing Panel shall be provided with a copy of the statement of grievance provided by the student and any written response provided by the person against whom the grievance is directed.

e. Conduct of Grievance Hearing

All appropriate parties shall receive no less than ten (10) instructional days' notice prior to the date of the hearing.

The grievance hearing shall be conducted privately with the student, the Grievance Hearing Panel, the Dean of Student Discipline, the Grievance Process Facilitator, and the person against whom the grievance is directed in attendance, unless all parties request that it be open to the public.

If the student and/or the administrator do not appear and no satisfactory explanation for the absence is made at the earliest opportunity, or if the student and/or the administrator leave the hearing before its conclusion, the hearing shall proceed without the absent party, and the Panel shall reach a decision based on the evidence presented.

The Grievance Hearing Panel will hear the alleged complaint and the response and will examine all supporting facts and documents. The student and the person against whom the grievance is directed shall each be permitted to make an opening statement. Technical rules of evidence shall not apply, but relevant evidence may be admitted and given probative effect only if it is the kind of evidence upon which reasonable persons are accustomed to rely in the conduct of serious affairs. The student may present rebuttal evidence after the person against whom the grievance is directed completes his or her evidence. The burden shall be on the student to prove by substantial evidence that the facts alleged are true.

All testimony will be taken under oath; the oath will be administered by the Due Process Hearing Facilitator. The Due Process Hearing Facilitator shall, at the beginning of the hearing, ask each person present to identify himself/herself by name. The Hearing Panel may dismiss any witness who fails or refuses to comply with the Panel's instructions.

Witnesses shall not be present at the grievance hearing when not testifying. No witness who refuses to be recorded may be permitted to give testimony. Written statements of witnesses under penalty of perjury shall not be used unless the witness is unavailable. Written statements from individuals not present at the hearing will not be permissible without some authentication of the statement, such as a notary signature and seal.

The grievance hearing shall be recorded by the District and that recording shall be the only recording made. The record may be maintained by any means, including electronic recording, so long as a reasonably accurate and complete written transcription of the proceedings can be made. The recording shall remain in the custody of the Chaffey College at all times, unless released to a professional transcribing service. Either party may request a copy of the recording by submitting a written request to the Dean of Student Discipline.

f. Grievance Hearing Panel Recommendation

Within five (5) instructional days, the Grievance Hearing Panel chair will submit a recommendation in writing with all supporting reasons to the Dean of Student Discipline. The recommendation shall include specific factual findings regarding the grievance, and shall include specific conclusions regarding whether a grievance has been established as defined above. The decision shall also include a specific recommendation regarding the relief to be afforded the grievant, if any. The decision shall be based only on the record of the hearing, and not on matter outside of that record. The record consists of the original grievance, any written response, and the oral and written evidence produced at the hearing. Written documentation pertaining to the grievance will be confidentially maintained by the Dean of Student Discipline.

g. Dean of Student Discipline's Decision

Within five (5) instructional days following receipt of the Grievance Hearing Panel's recommendation(s), the Dean of Student Discipline shall send to all parties his or her written decision, together with the Grievance Hearing Panel's recommendation(s). The Dean of Student Discipline shall adopt, amend, modify, or reject the Grievance Hearing Panel's recommendation(s).

h. Right to Appeal

If either party is not satisfied by the decision of the Dean of Student Discipline, then either party may submit an appeal within ten (10) instructional days of the close of the grievance hearing directly to the Superintendent/President of Chaffey College or designee by submitting a Hearing Appeal form to the Student Discipline Office. Appeals must cite one or more specific flaws on which the student seeks reconsideration of the decision. Merely disagreeing with the outcome is not sufficient grounds to submit an appeal.

Within ten (10) instructional days of receipt of the Hearing Appeal form and supporting documentation, the Superintendent/President or designee shall review all documentation and render a final decision.

Failure to appeal any determination within the specified time limit constitutes a waiver of the right to appeal and shall be deemed acceptance of the last determination rendered.

i. General Provisions

1. A student's refusal to receive or sign a receipt of notice shall not cause the notice to be defective. A student's failure to provide updated address information to the College shall not cause the notice to be defective so long as the College sends notice to the last known address provided to the College by the student.
2. All grievance proceedings shall be confidential and shall be closed to everyone other than those involved in the conduct to the hearing, witnesses while testifying, and the student. In compliance with the Family Education Rights and Privacy Act, persons not party to the proceedings shall be informed of their outcomes only on a "need to know" basis.
3. Any timelines specified in the above procedures may be shortened or lengthened if there is mutual concurrence by all parties.
4. A grievance may be withdrawn by the student at any time. However, the same grievance shall not be filed again by the same student.

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, sections 51006 and 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 nonstudents do not enjoy. Similarly, the body of people who work and go to classes at Chaffey do so in the spirit of community, a fact which imposes responsibilities of college citizenship.

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

The Chaffey Community College District is committed to providing equal educational and employment opportunity. The District affirms its commitment with policies that include fair and equitable treatment of students and employees, and prohibits discrimination in its admission, access, and treatment in College programs and activities, and application for and treatment in College employment on the basis of race, religion, color, sex (including gender, gender identity, gender expression, pregnancy, and breastfeeding), sexual orientation, national origin, ancestry, marital status, age, medical condition, genetic characteristics or information, military and veteran status, physical or mental disability or the perception that a person has one or more of these perceived characteristics, or based on association with a person or group with one or more of these actual or perceived 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, Vice President, Student Services, may be contacted at (909) 652-6502, email to eric.bishop@chaffey.edu, or at 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 seek information and/or resolution of alleged acts of unlawful discrimination, retaliation, or harassment are directed to contact the District's Compliance Officer, Susan Hardie, Director, Human Resources, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; by telephone to (909) 652-6531, or by email to susan.hardie@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, Susan Hardie, Director of Human Resources, Chaffey College, 5885 Haven Avenue, Rancho Cucamonga, CA 91737-3002; telephone (909) 652-6531, email susan.hardie@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 Director of Human Resources, Susan Hardie, at (909) 652-6531, email susan.hardie@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 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 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 Office of Human Resources, Susan Hardie, Director of Human Resources, at (909) 652-6531, or e-mail to susan.hardie@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 who has a legitimate educational need to inspect the record.
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 Associate Superintendent of Instruction and Institutional Effectiveness, or the Director of Admissions and Records that such release is appropriate and not likely to put students at risk.

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.

Annual Notification to Students

The Family Educational Rights and Privacy Act (FERPA) affords eligible students certain rights with respect to their education records. These rights include:

1. The right to inspect and review the student's education records within 15 days after the date Chaffey College receives the request for access. Students should submit to the Director of Admissions and Records or other appropriate official, a written request that identifies the record(s) the student wishes to inspect. The school official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the school official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request amendment of education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. A student who wishes to ask the school to amend a record should write the school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the school decides not to amend the record as requested, the school will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before the college discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent. The college may disclose education records without a student's prior written consent to school officials with legitimate educational interests. A school official is a person employed by Chaffey College in an administrative, supervisory, academic, research, or support staff position (including law enforcement unit personnel and health staff); a person serving on the Governing Board; or a student serving on an official committee, such as a disciplinary or grievance

committee. A school official may also include a volunteer or contractor outside of Chaffey College who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the college with respect to the use and maintenance of PII from education records, such as an attorney, auditor, collection agent, or a student volunteering to assist another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for Chaffey College. Upon request, Chaffey College may disclose education records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Chaffey College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202

Directory Information may include, but is not limited to:
Student's name, address, phone number, dates of attendance, major field of study, awards and degrees received, most recent institutions 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.

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 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. 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 nonstudent 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.

DECLARACIÓN DE IGUALDAD DE OPORTUNIDADES

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, Dr. Eric Bishop , puede ser contactado al teléfono (909) 652-6502, 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, Susan Hardie, Director de Recurso Humano al teléfono (909) 652-6531, correo electrónico susan.hardie@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, Susan Hardie, Director de Recurso Humano, al teléfono (909) 652-6531, correo electrónico susan.hardie@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 que 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 opiniones 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 de alojamientos deberán ponerse en contacto con la Director de Recurso Humano, Susan Hardie, al teléfono (909) 652-6531, o al correo electrónico susan.hardie@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 de Orientacion y Matricula, y William 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, por correo electrónico amy.nevarez@chaffey.edu; o William Miller (909) 652-6390, o al 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 Susan Hardie, Director de Recurso Humano, al teléfono (909) 652-6531, o al correo electrónico susan.hardie@chaffey.edu.

College Personnel

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President

Gloria Negrete McLeod
Vice President

Gary C. Ovitt
Clerk

Lee C. McDougal
Member

Katherine Roberts
Immediate Past President

Moises Rosales
Student Trustee/CCSG President

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Superintendent/President
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M.A., Ph.D., Washington University, St. Louis

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M.A., California State University, Los Angeles

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Vice President, Student Services
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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

McCall, Arlene
Physical Education

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

Navarette, D. Lynn
Sociology

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

Osgood, Joanne
Business and Office Technologies

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

Pender, Karen
Mathematics

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

Preble, Kipp
Communication Studies

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

Rivas, Henry
Correctional Science

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 Programs and Services

Stewart, Marie Frank
Home Economics

Stewart, Susan
Director, Student Activities

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

Van Riper, Maggie
Counseling

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

Wall, Jacqueline
Computer Information

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

Wilson, Katherine M.
Counseling

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

Woods, Darcel
Correctional Science

Zimmermann, Muriel
Dean, Physical, Life, and Health Sciences

Zust, George
Machine Tool Technology

PHONE DIRECTORY

Phone numbers are subject to change • All phone numbers are area code 909

CHINO CAMPUS NUMBERS:

Main 652-8000
Administration 652-8010
Admissions and Records 652-8001
Assessment/Orientation Appts 652-8120
Campus Store 652-8170
CalWORKs 652-6045
Cashier 652-8001
Chino Success Center 652-8150
Community Center 652-8200
Contract Ed/Customized Training 652-7791
Counseling 652-8120
Extended Opportunity Programs & Services 652-6349/6358
Financial Aid 652-8140
GPS Center 652-8120
Library/Cybrary 652-8115

FONTANA CAMPUS NUMBERS:

Main 652-7400
Admissions & Records 652-7400
Assessment/Orientation Appts 652-7400
Campus Store 652-6560
CalWORKs 652-6045
Cashier 652-7400
Counseling 652-7460
Extended Opportunity Programs & Services 652-6349/6358
Financial Aid 652-7417
Fontana Success Center 652-7408
GPS Center 652-7460
Library/Cybrary 652-7450

RANCHO CAMPUS NUMBERS:

Main 652-6000
Admissions and Records 652-6600
AMAN / AWOMAN – Umoja 652-6000
Articulation 652-6920
Assessment/Orientation Appts 652-6200
Athletics 652-6290
Campus Store 652-6577
Breeze, The (Student Newspaper) 652-6934
CalWORKs 652-6045
Campus Police (non-emergency) 652-6632
(Emergency – on/off campus) 652-6911
Career Center 652-6511
Career Transitions 652-6831
Cashier 652-6600
Child Development Center 652-6875
Community Education 652-6041
Counseling 652-6200
Disability Programs & Services 652-6379/6380
TDD/TTY Service 466-2829
Discipline 652-6510
Distance Education 652-6975
Extended Opportunity Programs and Services 652-6349/6358
Faculty Advisor Program 652-6971
Financial Aid 652-6199
Foundation Office 652-6545
GPS Center 652-6466
Health Services 652-6331
Honors Program 652-6263
Independent Scholars 652-6506
International Student Center 652-6195
Language Success Center
ESL and Modern Languages 652-6907
English 652-6820
Library 652-6800
Lost and Found 652-6634
Mathematics Success Center 652-6452
Multidisciplinary Success Center 652-6932
Museum, Wignall Museum of Contemporary Art 652-6490
Opening Doors 652-6201
Probation and Dismissal 652-6201
Puente Project 652-6200
Scholarship Information 652-6545/6589
Student Employment Office 652-6511
Student Government / CCSG 652-6594
Student Health Services 652-6331
Student Life 652-6589
Supplemental Instruction 652-6468
Theatre Box Office 652-6067
Transfer Center 652-6233
Upward Bound 652-7445
Veteran Services 652-6611

SUBJECT AREA / SCHOOL NUMBERS:

Accounting & Financial Services 652-6830
Administration of Justice (see Criminal Justice)
Aeronautics (see Aviation Maintenance Tech)
American Sign Language 652-6902
Anthropology 652-6253
Arabic 652-6902
Art 652-6066
Art History 652-6066
Astronomy 652-6404
Automotive Technology 652-6830
Aviation Maintenance Technology 652-6865
Biology 652-6404
Broadcasting 652-6066
Business 652-6830
Business: Legal Studies 652-6830
Business: Management 652-6830
Business: Marketing 652-6830
Business and Applied Technology, School of 652-6830
Business and Office Technologies 652-6830
Chemistry 652-6404
Child Development & Education 652-6253
Chinese 652-6902
Cinema 652-6066
Communication Studies 652-6902
Computer Information Systems 652-6830
Computer Information Systems: CISCO 652-7660
Computer Science 652-6830
Cooperative Education 652-6097
Correctional Science (see Criminal Justice)
Criminal Justice 652-6253
Culinary Arts 652-8010
Dance 652-6066
Dental Assisting 652-6675
Disability Programs & Services ..652-6379/6380
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 652-6902
Fashion (Design and Merchandising) 652-8010
Fire Technology 652-6830
French 652-6902
Geography 652-6404
Geology 652-6403
Gerontology 652-6675
Guidance 652-6202
Health Sciences, School of 652-6695
History 652-6253
Homeland National Security 652-6253
Hospitality Management 652-8010
Humanities 652-6253
Industrial Electrical Technology 652-7657
Interior Design 652-8010
Journalism 652-6902
Kinesiology: Activity, Lecture, and Team 652-6290
Language Arts, School of 652-6904
Mathematics 652-6403
Mathematics & Science, School of 652-6402
Music 652-6066
Nursing: Acute Care Technician 652-8215
Nursing: Assistant 652-6675
Nursing: Associate Degree 652-6671
Nursing: Home Health Aide 652-6675
Nursing: Vocational 652-8215
Nutrition & Food 652-8019
Pharmacy Technician 652-6675
Philosophy 652-6253
Photography 652-6066
Physical Science 652-6404
Physics 652-6404
Political Science 652-6253
Psychology 652-6253
Radiologic Technology 652-7606
Real Estate 652-6830
Social and Behavioral Sciences, School of 652-6253
Social Science 652-6253
Sociology 652-6253
Spanish 652-6902
Statistics 652-6403
Theatre Arts 652-6066
Visual & Performing Arts, School of 652-6066

Chaffey College 2018–2019 Academic Calendar

Fall Semester 2018 — August 20 – December 20

88 service days

Schedule of Classes on the website	April 21
Application Period (online with OpenCCC)	October 1, 2017
Registration Notification	April 22
Registration Period	April 30-August 18
Payment Deadline	(For specific details, refer to the payment table and drop process for non-payment in the Schedule of Classes)
Convocation	August 15
Institutional Flex Days	August 16-17
INSTRUCTION BEGINS	**August 20**
Late Registration	August 20-August 31
Refund deadline for full-term classes	August 31
Deadline to ADD full-term classes	August 31
Labor Day Holiday	September 3
Census submission for full-term classes due from faculty	September 5
Deadline to DROP full-term classes without a "W" grade	September 9
14 Week Session Begins	September 10
Deadline to DROP full-term classes with a "W" grade	November 2
Veterans Day Holiday (observed)	November 12
Deadline to ADD open-entry/exit classes	November 21
Thanksgiving Holiday (college closed)	November 22-25
Deadline to apply for degrees and certificates	November 30
FINAL EXAMINATIONS	**December 14-20**
INSTRUCTION ENDS	**December 20**
Winter Recess (college closed)	December 22 – January 1
Grades due from Faculty	January 5
Grades available online	January 8

Registration for Short Term Classes

FAST TRACK I CLASSES (8/20/18 – 10/10/18)

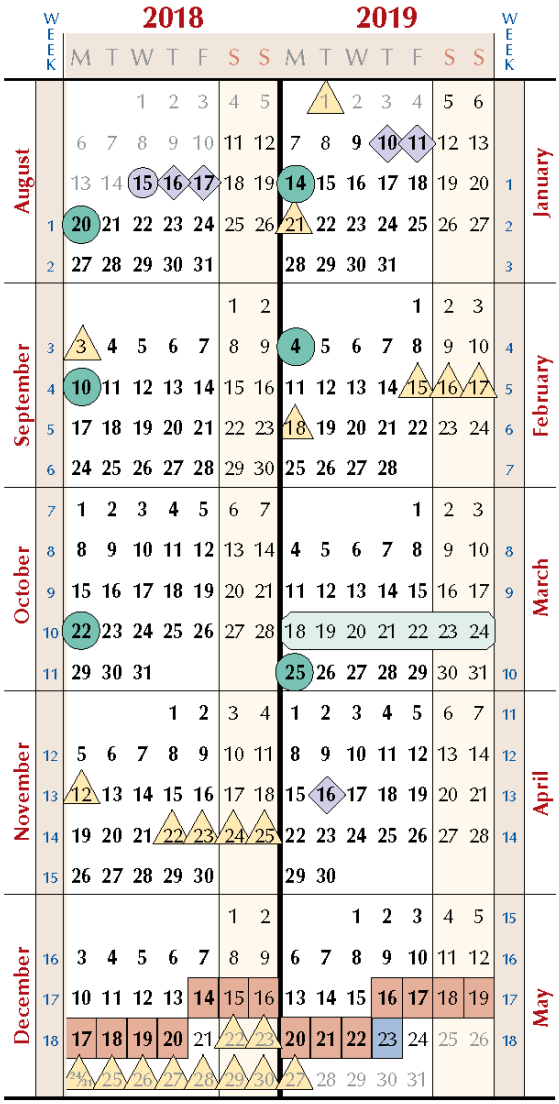
Registration Period	April 30-August 18
Late Registration	August 20-27
Deadline to ADD Track 1 classes	August 27
Census submission due from Faculty	August 28
Deadline to DROP Track 1 classes without a "W" grade	August 28
Deadline to DROP Track 1 classes with a "W" grade	September 20
Grades due from Faculty	October 17

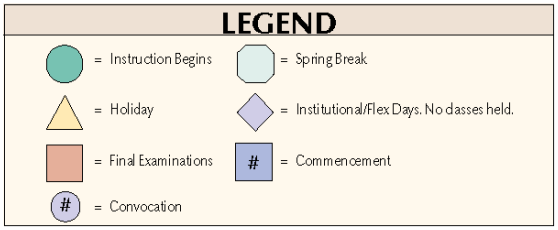
SECOND START 14-WEEK CLASSES (9/10/18 – 12/13/18)

Registration Period	August 20-September 8
Late Registration	September 10-14
Deadline to ADD 14-week classes	September 14
Census submission due from Faculty	September 27
Deadline to DROP 14-week classes without a "W" grade	September 27
Deadline to DROP 14-week classes with a "W" grade	November 8
Grades due from Faculty	January 5

FAST TRACK II CLASSES (10/22/18 – 12/13/18)

Registration Period	August 20-October 19
Late Registration	October 22-26
Deadline to ADD Track 2 classes	October 26
Census submission due from Faculty	October 30
Deadline to DROP Track 2 classes without a "W" grade	October 30
Deadline to DROP Track 2 classes with a "W" grade	November 21
Grades due from Faculty	January 5



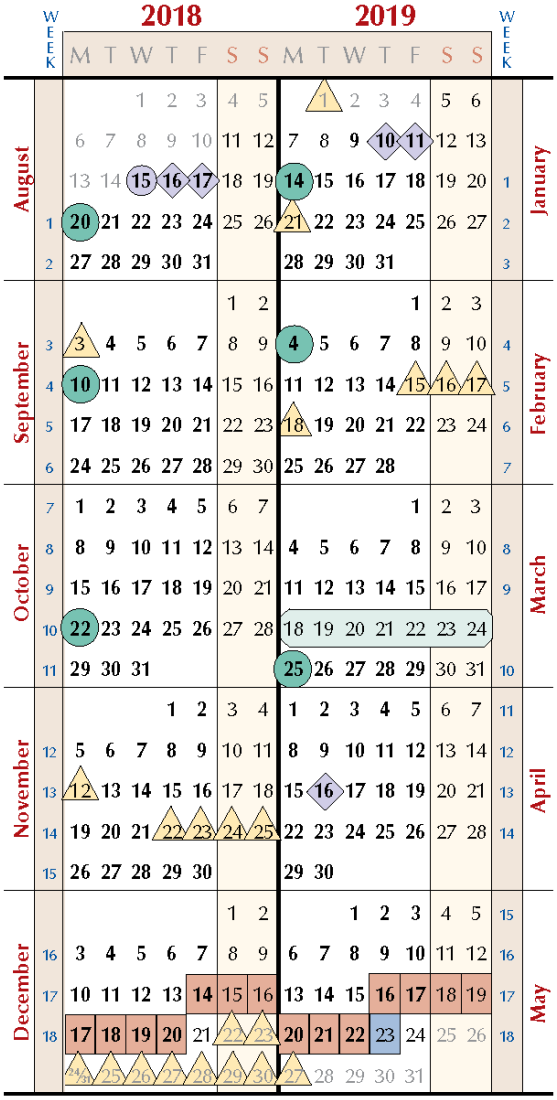


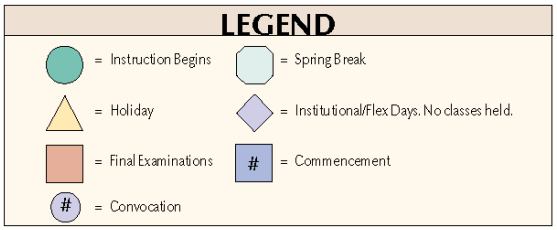
Chaffey College 2018–2019 Academic Calendar

88 service days

Spring Semester 2019 — January 14 – May 22

Schedule of Classes on the website	June 4
Application Period (online with OpenCCC)	September 1
Registration Notification	October 22
Registration Period	November 5-January 12
Payment Deadline	(For specific details, refer to the payment table and drop process for non-payment in the Schedule of Classes)
Institutional Flex Days	January 10-11
INSTRUCTION BEGINS	**January 14**
Martin Luther King, Jr. Holiday	January 21
Deadline to ADD full-term classes	January 28
Refund deadline for full-term classes	January 28
Census submission for full-term classes due from Faculty	January 30
Deadline to DROP full-term classes without a "W" grade	February 3
14 Week Session Begins	February 4
Lincoln Holiday	February 15
Washington Holiday	February 18
Spring Break	March 18-24
Deadline to apply for degrees and certificates	March 29
Deadline to DROP full-term classes with a "W"	April 9
Faculty Lecture (no classes held)	April 16
Deadline to ADD open-entry/exit classes	April 26
FINAL EXAMINATIONS	**May 16-22**
INSTRUCTION ENDS	**May 22**
Commencement	May 23
Memorial Day Holiday	May 27
Grades due from Faculty	May 30
Grades available online	May 31





Registration for Short Term Classes

FAST TRACK I CLASSES (1/14/19 – 3/11/19)

Registration Period	November 5-January 12
Late Registration	January 14-18
Deadline to ADD Track 1 classes	January 18
Census submission due from Faculty	January 23
Deadline to DROP Track 1 classes without a "W" grade	January 23
Deadline to DROP Track 1 classes with a "W" grade	February 19
Grades due from Faculty	March 25

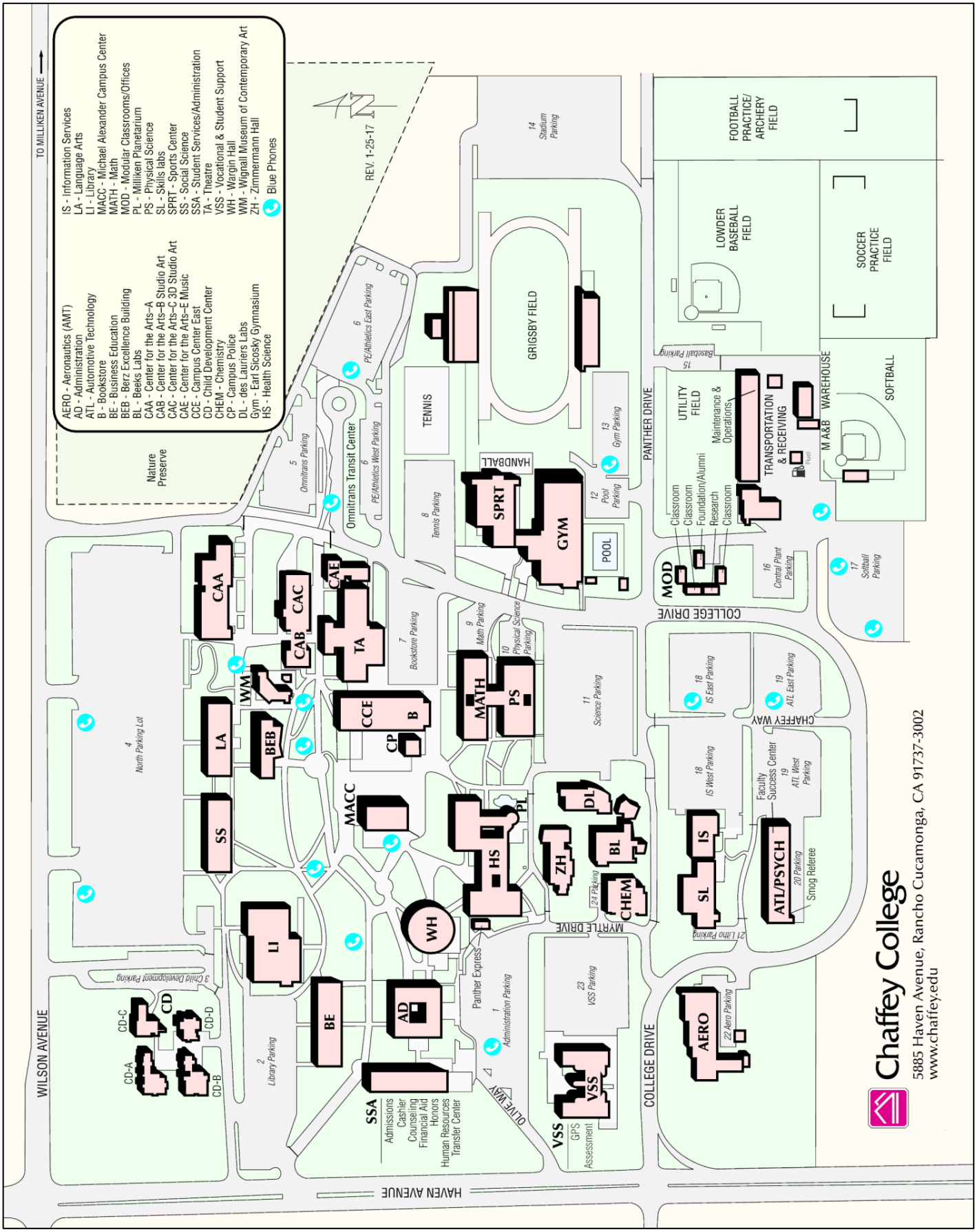
SECOND START 14-WEEK CLASSES (2/4/19 – 5/22/19)

Registration Period	January 14-February 1
Late Registration	February 4-8
Deadline to ADD 14-week classes	February 8
Census submission due from Faculty	February 24
Deadline to DROP 14-week classes without a "W" grade	February 24
Deadline to DROP 14-week classes with a "W" grade	April 12
Grades due from Faculty	May 30

FAST TRACK II CLASSES (3/25/19 – 5/16/19)

Registration Period	January 14-March 22
Late Registration	March 25-29
Deadline to ADD Track 2 classes	March 29
Census submission due from Faculty	April 2
Deadline to DROP Track 2 classes without a "W" grade	April 2
Deadline to DROP Track 1 classes with a "W" grade	April 26
Grades due from Faculty	May 30

RANCHO CUCAMONGA CAMPUS MAP



DISTRICT MAP