



**Chaffey College**  
*Providing Quality Education Since 1883*

# CATALOG 2020-2021



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**ACKNOWLEDGEMENTS  
2020-2021 CATALOG PRODUCTION**

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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 [ryan.sipma@chaffey.edu](mailto:ryan.sipma@chaffey.edu).

# Chaffey College

1883 - 2019

*Providing quality education since 1883.*

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# A MESSAGE FROM THE PRESIDENT

Welcome to Chaffey College! If you are reading this, you have decided to continue on your educational journey despite all of the challenges that have come your way in the last year. I am proud of you for persevering.

As you know, Chaffey College has transitioned much of its instruction online due to COVID-19, and with that, we have had to be as nimble and determined as the students we serve. We have allocated nearly \$6 million in funding to help our students get through this crisis, and loaned thousands of laptops to students so that they can continue their education online.

Our faculty have worked hard to restructure in-person courses for online and our staff have reimagined ways to deliver their services remotely. It hasn't been easy, but we cannot let this pandemic sway us from our vision of transforming lives through education.

We ended the 2019-2020 year strong, with a record-breaking 6,400 degrees and certificates awarded to our graduating class. This represents a 10.5 percent increase from the previous year. And while we couldn't celebrate with a traditional graduation ceremony, hundreds of students participated in Grad Fest instead. Faculty and staff put on their regalia to hand out caps, tassels and swag to hundreds of students at our three campuses in an exciting drive-thru event in late May. We all look forward to honoring the Class of 2020 during an in-person commencement in the near future.

The state, country and world have already experienced a financial toll from the Coronavirus, but through this struggle, we have continued to advocate for the needs of our students. While cuts must be made for California to remain fiscally solvent, we must not lose sight of the long-term economic benefit that higher education has on our communities. All you need to do is look at the millions of dollars that our alumni give back every year to see this benefit.

As we regain our footing following this crisis, I humbly ask that you keep doing what you've been doing: working hard to reach your goals. Education may look different now than it did a year ago, but your need for a better life has not changed. And our belief in you has not changed either. We are here to support you every step of the way.

Have a happy and safe 2020-2021 academic year.

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

**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.*

## Chaffey College Senior Management

### Laura Hope

*Associate Superintendent,  
Instruction and  
Institutional Effectiveness*

### Lisa Bailey

*Associate Superintendent,  
Business Services and  
Economic Development*

### Alisha Rosas

*Interim Vice President,  
Student Services / Executive Director,  
Equity, Outreach and  
Communications*

### Melanie Siddiqi

*Associate Superintendent,  
Administrative Affairs*

# CHAFFEY COLLEGE GOVERNING BOARD 2020-2021

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/leadership/governingboard.php](http://www.chaffey.edu/leadership/governingboard.php).



**Gary C. Ovitt**  
*President*



**Lee C. McDougal**  
*Vice President*



**Kathleen Brugger**  
*Clerk*



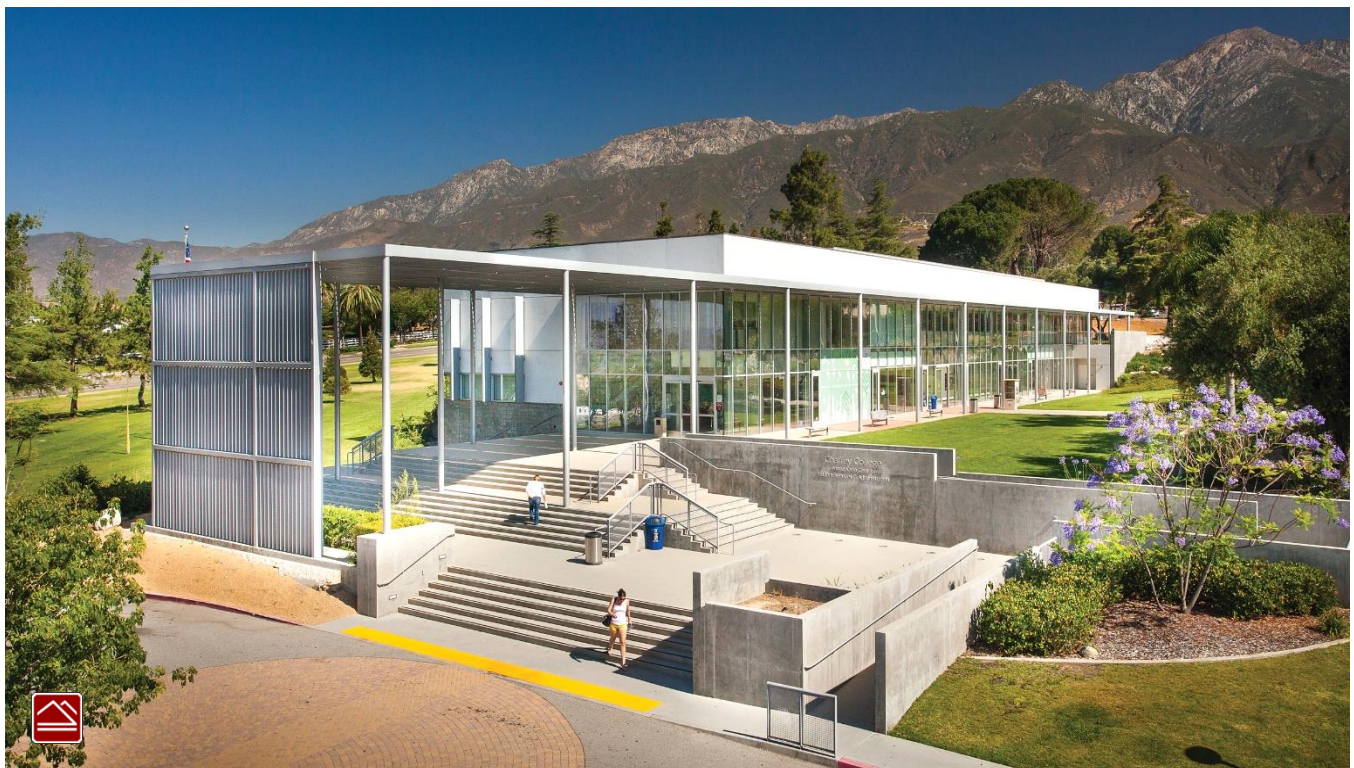
**Katherine Roberts**  
*Member*



**Gloria Negrete McLeod**  
*Immediate  
Past President*



**Lauren Sanders**  
*Student Trustee / CCSG  
President*



# SCHOOLS AND SERVICES OF THE COLLEGE

## OFFICE OF INSTRUCTION AND INSTITUTIONAL EFFECTIVENESS

**Laura Hope**, *Associate Superintendent*

Accreditation  
CCFA Liaison  
Curriculum  
Educational Planning  
Faculty Senate Liaison  
Institutional Effectiveness  
Instructional Services

## INSTITUTIONAL EFFECTIVENESS AND INTERSEGMENTAL PARTNERSHIPS

**Robert Rundquist**, *Interim Dean*

Basic Skills Grant  
College Catalog / Schedule of Classes  
Distance Education  
Faculty Advising  
Faculty Success Center  
Guided Pathways  
Library/Cybrary  
Professional Development  
Success Centers  
Supplemental Instruction  
Title V Grant  
Turning Point

## OFFICE OF BUSINESS SERVICES AND ECONOMIC DEVELOPMENT

**Lisa Bailey**, *Associate Superintendent*

## OFFICE OF STUDENT SERVICES AND LEGISLATIVE ENGAGEMENT

**Alisha Rosas**, *Interim Vice President*

Admissions and Records  
Career and Transfer Centers  
Cashier's Office  
Financial Aid

## SCHOOL OF BUSINESS AND APPLIED TECHNOLOGY

**Vacant**, *Dean*

Accounting and Financial Services  
Automotive Technology  
Aviation Maintenance Technology  
Business  
Business: Legal Studies  
Business: Management  
Business: Marketing  
Business Technology (BUSTEC)  
CISCO  
Computer Information Systems and sub-disciplines  
Computer Science  
Criminal Justice  
CTE Career Transitions  
Emergency Medical Technician  
Fire Technology  
HVACR  
Industrial Electrical Technology  
Industrial Maintenance Mechanic  
InTech Center  
Professional Development  
Real Estate

## SCHOOL OF HEALTH SCIENCES

**Sherrie Loewen**, *Dean*

BUSTEC: Medical Coding and Billing  
Dental Assisting  
Gerontology  
Nursing Assistant and Home Health Aide  
Nursing: Acute Care Technician  
Nursing: Associate Degree Nursing (ADN)  
Nursing: Vocational Nursing (VN)  
Pharmacy Technician  
Public Health Science  
Radiologic Technology

## SCHOOL OF HOSPITALITY, FASHION, INTERIOR AND CULINARY ARTS

**Teresa Hull**, *Dean*

Chino Community Center  
Culinary Arts  
Fashion Design and Merchandising  
Hospitality Management  
Interior Design

## SCHOOL OF KINESIOLOGY, NUTRITION AND ATHLETICS

**Michael McClellan**, *Dean*

Kinesiology: Activity, Lecture, and Team  
Nutrition and Food

## SCHOOL OF LANGUAGE ARTS

**Jason Chevalier**, *Dean*

American Sign Language  
Arabic  
Chinese  
Communication Studies  
English  
English as a Second Language  
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  
Economics  
Education

History  
Homeland National Security  
Honors Program  
Humanities  
Philosophy  
Political Science  
Psychology  
Social Science  
Sociology

## SCHOOL OF VISUAL AND PERFORMING ARTS

**Misty Burrell**, *Interim Dean*

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

## COUNSELING AND ENROLLMENT PATHWAYS

**Michael McClellan**, *Dean*

Admissions and Records  
Career and Transfer Centers  
Cashier's Office  
Counseling  
Financial Aid  
GPS Centers  
Guidance  
Learning and Educational Development (LED)  
Opening Doors to Excellence  
Puente Project  
Senior Early Transition  
Student Placement  
Umoja

## STUDENT AFFAIRS

**Christopher Brunelle**, *Dean*

Behavioral Intervention Team (BIT)  
International Students  
Mental Health Partnerships  
Student Discipline / Grievances  
Student Health

## STUDENT SUPPORT SERVICES AND PROGRAMS, AND STUDENT LIFE

**Amy Nevarez**, *Dean*

CalWORKs  
CARE  
DPS  
EOPS  
Intramurals  
NextUp  
Student Government  
Student Life  
Upward Bound

## FONTANA CAMPUS

**Yolanda Friday**, *Dean*

# 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:

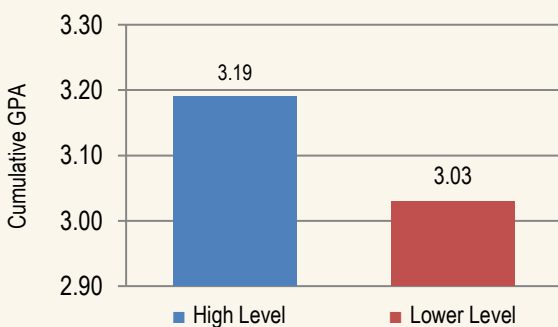
- Identify and apply the social and ethical responsibilities of the individual in society.
- Demonstrate social and ethical responsibility within a community.
- Demonstrate commitment to active citizenship by recognizing and evaluating important social, ecological, economical, and political issues.
- 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 prior graduates. This competency focuses on the valuation of others' rights and feeling informed about cultural diversity. In a study conducted by college researchers, graduating students possessing a high level of global awareness were found to have 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



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](http://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](http://www.rn.ca.gov)

[www.rn.ca.gov/education/rnprograms.shtml#adn](http://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](http://www.acenursing.org)



#### Aviation Maintenance Technology (AMT) Program

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://www.faa.gov)

<https://av-info.faa.gov/MaintenanceSchool.asp>



#### Certified Nursing Assistant (CNA) Program

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

California Department of Public Health  
PO Box 997377, MS 0500  
Sacramento, CA 95899-7377  
(916) 558-1784

[www.cdph.ca.gov/Programs/CHCQ/LCP](http://www.cdph.ca.gov/Programs/CHCQ/LCP)



#### 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](http://www.ada.org/en/coda)

[www.ada.org/en/coda/find-a-program/search-dental-programs](http://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](http://www.dbc.ca.gov)

[www.dbc.ca.gov/applicants/rda/courses.shtml](http://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](http://www.sbcounty.gov/icema)



**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  
Radiologic Health Branch  
P.O. Box 997414, MS 7610  
Sacramento, CA 95899-7414  
(916) 558-1784

[www.cdph.ca.gov/Programs/CEH/DRSEM/Pages/RHB.aspx](http://www.cdph.ca.gov/Programs/CEH/DRSEM/Pages/RHB.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](http://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/](http://www.bvnpt.ca.gov/)  
[www.bvnpt.ca.gov/applicants/schools/vocational\\_nursing\\_schools.shtml](http://www.bvnpt.ca.gov/applicants/schools/vocational_nursing_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 has enabled 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, 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 placement 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 is home to the Hospitality Management, Interior Design, Fashion Design, Fashion Merchandising, and Culinary Arts programs, and also the Robert Pile Information Technology Center which houses Computer Information Systems and Industrial Electrical Technology programs.

The passage of Measure P (\$700 million) in 2018 will enable the college to construct and/or renovate a number of buildings on all three campuses. Various projects are identified in the District's Vision 2020 Facilities Master Plan and related addendum and include a new library/learning commons, student services building, and campus center on the Rancho Cucamonga campus, new instructional buildings at all three campuses, and a new, permanent presence in the City of Ontario.



**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, English/math/ESL placement, test proctoring, foreign language diagnostics, 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, Fashion 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, financial aid, and Disability Programs and Services (DPS). 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 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, English/math/ESL placement, test proctoring, foreign language diagnostics, Orientation, CTE Counseling, and Career Center Counseling. 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 Chaffey College Foundation's mission is to seek and secure financial support, resources, and partnerships to enhance continuous learning, education, and career opportunities for the students and local communities served by the Chaffey Community College District. The Foundation is committed to supporting student success through scholarship and program support. 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](mailto: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](http://www.chaffey.edu). Additional application guidelines may be required for special programs such as High School Partnership, international students and dependents, career transitions, and health science.

## WHO MUST APPLY

Applicants who will attend Chaffey College for the first time or former students who have not attended for two or more primary terms (fall and spring) must complete an application for admission. Graduating high school seniors who have been enrolled through the High School Dual Enrollment program 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 if all requirements for eligibility have been met.

### Nonresident

A nonresident is a student who does not have residence in the state for more than one year immediately preceding the Residency Determination Date [EC 68018] and/or is in a status that precludes establishing residence. Students who provide information on the admission application that is inconsistent with California residency requirements indicated above must complete a Residency Questionnaire (title 5, section 54012). Once the questionnaire has been reviewed, additional documentation may be required in order to make a final determination. Required documentation is at the discretion of the District.

## 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 placement, 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 enrolling for the first time
3. Students seeking to use high school math courses to meet Associate Degree mathematics competency requirement

**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, Canvas, 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, PLACEMENT, COUNSELING

All new and returning students are required to participate in orientation and placement, 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](http://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 placement 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 TRANSITION

The Chaffey College Senior Early Transition (SET) Program provides a seamless service delivery to Chaffey College District high school students in the fall or spring semesters of their senior year. High school seniors participate in Chaffey College orientation and placement and meet with a Chaffey College counselor to plan first year courses. Participating high school seniors are also informed about Chaffey College programs and services, including Admissions and Records, Financial Aid, Counseling, Disability Programs and Services (DPS), Independent Scholars, and Extended Opportunities Programs and Services (EOPS). Students who complete the entire SET sequence (orientation, placement, and counseling) and live in the Chaffey College district boundaries are eligible for an earlier privileged registration date for the summer and fall semesters following their graduation from high school.

## 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 headwear 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 and Records Office at [admissions@chaffey.edu](mailto:admissions@chaffey.edu) for further information.

## SCHEDULE OF CLASSES

The schedules of classes are available on the college website at [www.chaffey.edu/register/schedule](http://www.chaffey.edu/register/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
- Placement – for math and English courses is determined based on multiple measures and is no longer conducted through the use of tests; for ESL courses, students must take the Classic Accuplacer ESL Sentence Meaning and ESL Language Use tests.
- Education Plan – approved by a counselor
- Maintain Good Academic Standing (cumulative GPA 2.0 or better)
  - Financial Aid Students – Eligibility for the California College Promise Grant (CCPG) is impacted if academic and progress standards are not met 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, the placement process, 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, the placement process, 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, the placement process, and an education plan, and/or are not in good academic standing.

Note: Students who have completed a bachelor's degree or higher are not eligible for priority registration.

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](http://www.californiacommunitycolleges.cccco.edu) or the Chaffey College website at [www.chaffey.edu/register/](http://www.chaffey.edu/register/). 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. 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/register/schedule](http://www.chaffey.edu/register/schedule).

## 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, if available, 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. If permission to register is not received before the first day of instruction, 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. During campus closures, this can be facilitated online with a counselor through the Student Support Hub in Canvas online at [www.chaffey.edu](http://www.chaffey.edu).

## 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:

- Students with special petitions or corequisite waivers
- Students with financial or other restrictions
- Students who are auditing

Note: During campus closures, this can be facilitated online with a counselor through the Student Support Hub in Canvas online at [www.chaffey.edu](http://www.chaffey.edu).

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 at the same time. 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.

Placement results from other colleges may not be used to meet prerequisites, so new students must arrange to take Chaffey's placement process 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 placement 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. Once the department coordinator processes your form, you will be notified via email whether you were approved or denied.
6. If the form was denied and you were enrolled in the course, 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 a 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 Placement and Testing 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 Placement and Testing Center at (909) 652-6239.

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) 652-6901.

#### **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 placement 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](http://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, placement, and complete an abbreviated education plan in order to receive a preferred registration date. High School Dual Enrollment students must complete a dual enrollment orientation before they may register for classes.

#### **PLACEMENT**

California Assembly Bill (AB) 705 gives more students the opportunity to enroll directly in transfer-level math and English courses via the placement process. Placement into mathematics and English courses is no longer conducted through the use of tests. Students are placed using multiple measures such as high school GPA and grades earned in prior English and mathematics courses. For placement into ESL courses, students must take the Classic Accuplacer ESL Sentence Meaning and ESL Language Use tests.

Students who meet one or more of the following conditions: are international students, completed secondary/high school outside of the U.S., received a GED, or did not complete high school, will be placed via the Guided Self-Placement process. Students who graduated from high school more than ten years ago may choose to use Guided Self-Placement or high school performance data for placement.

Students can call (909) 652-6239 to schedule an appointment for in-person placement at the Rancho Cucamonga, Chino, or Fontana campuses. Students who would like to complete the placement process online may email [assessment.staff@chaffey.edu](mailto:assessment.staff@chaffey.edu) to request a remote placement voucher; a Chaffey student ID number and date of birth must accompany this request. Additional information about the placement process can be found by visiting the Counseling Department's website at <https://www.chaffey.edu/register/placement.php>.

#### **RE-TESTING PROCEDURES**

Students may take the ESL 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](http://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: challenging course placements; 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 placement, 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 placement 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 placement, 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 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](http://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), Student Representation 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](http://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 \$352 per unit (\$290 per unit, plus \$16 capital outlay charge, plus \$46 per unit enrollment fee).

### HEALTH SERVICES FEE

\$21.00 Fall and Spring; \$18.00 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](http://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 Rancho Cucamonga, Chino, and Fontana Campuses)

- Auto Parking:
  - \$55.00 Fall and Spring Non CCP Grant
  - \$35.00 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](mailto:cashier.staff@chaffey.edu) on or before the refund deadline for the applicable term.

### STUDENT REPRESENTATION FEE

The \$2 Student Representation fee was established as part of the California Education Code, Section 76060.5. This fee supports student participation and engagement in higher education policy and advocacy activities that benefit community college students.

### 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.

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, 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](mailto: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, 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/admissions](http://www.chaffey.edu/admissions).

### 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](http://www.icanaffordcollege.com)
- [www.chaffey.edu/financialaid](http://www.chaffey.edu/financialaid)

### FINANCIAL AID

#### 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) or Dream Act application.

#### How & When to Apply

Students must apply or reapply every year for financial aid by completing the Free Application for Federal Student Aid (FAFSA) which is available at [www.fafsa.gov](http://www.fafsa.gov). Students who are not eligible for the FAFSA application and meet the AB 540 residency requirements may complete the California Dream Act Application (CADAA) online at <http://dream.csac.ca.gov>. **Students can apply for financial aid as early as October 1 for the new academic year.** The ideal time to apply is between October and March 2 to ensure your application is processed in a timely manner in preparation for summer, fall, and spring terms. The priority deadline to apply is March 2; however, you can still apply after this date. Filing after the priority deadline may make students ineligible for certain types of aid. If you are planning on attending Chaffey College, you will need to indicate Chaffey College's school code of **001163** on your FAFSA.

When submitting a FAFSA or CADAA for the 2021-2022 Award Year, students (and parents, if dependent) are able to use prior-prior year income data (2019 tax year).

The 2021-2022 application is available beginning October 1, 2020. Complete the 2021-2022 FAFSA or CADAA by March 2, 2021, to meet the California state grant application deadline. Students (and parents, if dependent) will be able to use prior-prior year income data (2019 tax year).

When completing the FAFSA, use your FSA ID to electronically sign the online FAFSA. Dependent students will have a parent apply for their own FSA ID number. Parents will need to sign the FAFSA until the student is 24 years of age or no longer considered a dependent student. Students that complete a CADAA can apply for a PIN number to sign the application through the Dream Act Application website.

### 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 MyChaffey Portal at MyChaffeyView, then click on Financial Aid Self Service and view the checklist.

### Basic Financial Aid Eligibility Criteria

- 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

### Disbursement 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. 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](http://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 [www.chaffey.edu/financialaid](http://www.chaffey.edu/financialaid) for more information regarding the Dream Act Application or visit the Dream Act website at <https://www.csac.ca.gov/california-dream-act>.

### Eligibility Requirements for California Dream Act

The California Dream Act allows undocumented and non resident documented students who meet AB 540/AB 2000 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:

#### Requirement 1: Attendance at California schools.

#### Two paths:

- Total attendance (or the attainment of credits earned) in California equivalent to three or more years of full-time attendance at California high schools, California high schools established by the State Board of Education, California adult schools (established by a county office of education, a unified school district or high school district, or the Department of Corrections and Rehabilitation), campuses of the California Community Colleges, or a combination of these; OR
- Three or more years of full-time high school coursework in California, and a total of three or more years of attendance in California elementary schools, California secondary schools, or a combination of California elementary and secondary schools.

**Requirement 2: Completion of a course of study.**

*This requirement may be met in any of the following ways:*

- Graduation from a California high school or equivalent.
- Attainment of an associate degree from a California Community College.
- Fulfillment of the minimum transfer requirements established for the University of California or the California State University for students transferring from a California Community College. [EC 68130.5(a)(2).]

**Requirement 3: Registration.**

Requires registration as an entering student at, or current enrollment at, an accredited institution of higher education in California.

**Requirement 4: Affidavit of student without lawful immigration status.**

Students without lawful immigration status must file an affidavit with their college or university stating that the student has either filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.

Note: All students seeking the AB 540 exemption must complete the affidavit.

**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 CCPG.

**Panther Promise**

Chaffey College's Panther promise provides 1 year of FREE tuition to all first-time full-time (enrolled in 12 units) college students. For eligibility requirements and to apply visit [www.chaffey.edu/howtoapply](http://www.chaffey.edu/howtoapply).

**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 [https://nslsdfap.ed.gov/nsls\\_fap/](https://nslsdfap.ed.gov/nsls_fap/) 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 2).

**Federal Work Study (FWS)**

Federal Work Study is a need-based federally funded part-time employment program, which allows eligible students to earn money to help pay for educational expenses. Students may work up to 20 hours per week and earn a monthly paycheck. Federal Work Study awards are determined by financial need and are available to students enrolled in six (6) units or more per semester. FWS job listings are posted in the Student Employment Office for eligible FWS students and are filled on a first-come, first-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 CADAA and your verified Cal Grant GPA by March 2 (priority deadline). If you do not meet the March 2 priority filing deadline, you may have a second chance to compete for a Cal Grant by filing the FAFSA or CADAA and your verified Cal Grant GPA by September 2.

**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](http://www.csac.ca.gov).

**AB 2248**

If you are eligible for and receiving a Cal Grant award you will need to take at least 15 semester units per fall/spring terms, or 30 semester units per academic year, in order to complete an Associate's Degree within two years at Chaffey College. If you plan to transfer to a university, you will need to take at least 15 semester units per fall/spring terms, or 30 semester units per academic year, to complete a Bachelor's Degree within four years. Cal Grant A and B awards are limited to four academic years, except for students enrolled in an institutionally required five-year undergraduate program, or for students with Bachelor's degrees admitted to and enrolled in a professional teacher preparation program.

**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/>.

**Student Success Completion Grant (SSCG) formerly the Full Time Student Success Grant (FTSSG) and the California Community College Completion Grant (CCCCG) as of fall 2018.** Beginning fall 2018, the SSCG is a new California Community College financial aid program for students who receive a Cal Grant B or Cal Grant C and are enrolled at least full time (12+ units). The purpose of the SSCG is to facilitate student persistence, retention, and success. The SSCG provides additional financial assistance to students attending at least 12 to 15 units per semester (24 to 30 plus units per academic year).

Students will be automatically reviewed for eligibility for the SSCG. Students can receive \$1,298 annually (\$649 per semester) for eligible students who enroll and attend 12 through 14.99 units per term and a maximum of \$4,000 annually (\$2,000 per semester) for eligible students who enroll and attend 15 units or more per term.

SSCG Eligibility Criteria:

- Must be a Cal Grant B or C recipient that received a full-time Cal Grant payment
- Must be enrolled full-time (12 units or more)
- Must be meeting Federal Satisfactory Academic Progress (SAP) standards
- Must have unmet need to receive the SSCG

### 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 Chaffey College Foundation website at [www.chaffey.edu/foundation](http://www.chaffey.edu/foundation). 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/financialaid](http://www.chaffey.edu/financialaid).

### 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](http://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)). All high school students attending Chaffey for the first time must complete an online application, the Dual Enrollment Agreement, Waiver of Liability Form (if applicable), and official high school transcripts showing most recent grade level. Continued enrollment in subsequent semesters will only require the Dual Enrollment Agreement and Waiver of Liability (if applicable).

**Students who attend a local district high school** should submit the electronic Dual Enrollment Form. This form will be automatically routed directly to the high school and returned to Chaffey Admissions and Records once approved. Students eligible to submit the electronic form do not need to submit the additional Waiver of Liability Form.

Note: If your high school is not listed in the drop-down menu on the form you will need to submit a PDF agreement form and Waiver of Liability Form.

**Students who attend a private school or are home-schooled** must submit the PDF version of the Dual Enrollment Agreement and the Waiver of Liability Form, available at <https://www.chaffey.edu/admissions/dual-enrollment.php>. The student will be responsible for obtaining the required signatures from the principal/designee of the high school to approve the requested course. Home-schooled students must also submit a valid Home School Affidavit from the California Department of Education.

High school students are eligible to enroll in any approved courses except those that are remedial in nature (courses numbered 500-599) or KINACT (PE activity) courses. Students may enroll in KINLEC lecture courses with permission from the high school. Select seniors may be eligible to enroll in KINTM courses if recruited by a Chaffey College coach. An official letter from the coach will be required at time of registration.

Students may take up to 11 units in fall and spring and 6 units in summer, from the list of approved courses on the Dual Enrollment Agreement for that term.

Enrollment, health, and college service fees are waived for Dual Enrollment students. Other costs (e.g., materials fees, transportation, technology, and student representation fees, books, and parking) must be paid by the student. Students enrolling in 12 or more units in a semester will lose special-admit status and will be responsible for payment of all assessed fees. Students residing out of state will be responsible for payment of all assessed fees, including nonresident and capital outlay fees.

For more information on Dual Enrollment, visit our website at <https://www.chaffey.edu/admissions/dual-enrollment.php>. For information on placement, orientation, and counseling, contact the Counseling Department at (909) 652-6200 or visit [www.chaffey.edu/counseling](http://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](http://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 Strong Workforce Department. Students may contact the Cooperative Education Office at (909) 652-6852 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 or email [facultyadvisor@chaffey.edu](mailto:facultyadvisor@chaffey.edu).

## HONORS PROGRAM

The Honors Program is an intellectual and cultural community for capable and motivated students at Chaffey College seeking to transfer to competitive universities. The program works with students to help accomplish their transfer and career goals in myriad ways. Some benefits of joining the program include:

- Preferred registration for classes
- Preparation for upper-division and graduate level academic work
- Smaller classes that foster meaningful relationships with professors and peers
- Intellectually stimulating curriculum
- Opportunities to participate in local, state, and national research conferences
- Opportunities to publish original work in honors journals
- University library access and invitations to special events
- Scholarships and internships available upon application and verification of honors program status
- Distinctive transcript notations indicating the honors course and grade
- Certificate of completion of the Honors Program and acknowledgment at a special graduation ceremony
- Honors transfer agreements with designated universities guaranteeing priority consideration or acceptance

### Honors Program Eligibility Requirements

Students must apply in order to join the Honors Programs. The application can be found on the program's website at <https://www.chaffey.edu/programsacademics/honors.php>. In addition to the application, students must meet minimum qualifications.

Requirements for college students:

- GPA of 3.2 after completion of 12 transferable units at Chaffey College
- Enrollment in at least 12 units each semester
- Obtain a nomination from a Chaffey College faculty member

Requirements for recent high school graduates:

- Unweighted high school GPA of 3.2
- Must be registered for 12 units at Chaffey College for the upcoming semester
- Two letters of reference from high school instructors
- A combined SAT score of 1000 or above or ACT score of 26 or higher, or the successful completion of three advanced placement (AP) classes in high school with a grade of "B" or better

### Program Completion Requirements

- Submission of an "Intent to Complete the Honors Program" application
- Enrollment in a minimum of two semesters
- Participation in the Honors Program for a minimum of two semesters
- Completion of 10 hours of on-campus service or community service
- Completion of 15 units in honors classes and contracts with a "B" or better
- Completion of an associate degree or fulfillment of admissions requirements to a four-year institution

### Affiliation

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

## 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 email: [isolar@chaffey.edu](mailto:isolar@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 <https://www.chaffey.edu/student-support/international-center.php> 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 email [intlstudents@chaffey.edu](mailto: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 <https://www.chaffey.edu/academicsupport/openingdoors.php>.

## PUEENTE 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 <https://www.chaffey.edu/spops/puente.php> 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 <https://www.chaffey.edu/eoc/upward-bound.php> or call (909) 652-7445.

### VETERANS

The Veterans Administration (VA) specifies a minimum load for educational benefits (these apply to full-term classes only; see Veterans Certifying Official for information regarding short-term classes). Please note: the unit ranges noted below are for non-Chapter 33 benefits:

FALL AND SPRING	STATUS
12 units or more	Full-time Student
9-11.5 units	3/4 time Student
6-8.5 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 Education Benefits while attending Chaffey College are required to meet with the Veteran Certifying Official to begin the process. Official transcripts of all previous college coursework must be submitted to the college for evaluation. Completing new student orientation and the placement process is required. For more information on veterans' benefits, please contact the Veterans Resource Center at (909) 652-6235. Veterans interested in using the Post 911 GI Bill®, please contact the Department of Veterans Affairs at (888) 442-4551 or visit the GI Bill® website at [www.gibill.va.gov](http://www.gibill.va.gov) for more information. Veterans are welcome to visit our Veterans' Resource Center in AD-125.

Before the semester begins, students are allowed 10 calendar days (including weekends and holidays) from the date of registration to submit full payment. If payment is not received within the 10 calendar days, students will be dropped for non-payment. For payment deadlines, please refer to the Schedule of Classes Payment Chart. **Students with veteran benefits including active duty or dependent eligible for VA Chapter Benefits 31 and 33 will have their fees deferred while being certified by the VA and the Veteran Services office and no late fees shall be incurred.** The veteran, active duty or dependent eligible for chapter benefits 31 and 33 will need to provide a Certificate of Eligibility, a Statement of Benefits, or VA Authorization Notification form either before or during the first semester of benefits. Please see [38 USC 3679\(e\)](#) for complete details.

Veterans and active duty service members are eligible for priority registration. Students requesting priority registration must submit a DD214 Member-4 copy showing type of discharge or an active military ID as proof of service. Students are not required to use Veterans Education benefits to receive priority registration. You may submit your military documentation to the Veterans Resource Center at the Rancho Cucamonga campus or the Admissions and Records Office at the Chino and Fontana campuses. For more information, please visit <https://www.chaffey.edu/spops/veterans.php>.

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 1036).

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 2020, Spring 2021, or Summer 2021 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)

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 email at [onlineed@chaffey.edu](mailto:onlineed@chaffey.edu) or visit the Distance Education (DE) website at [www.chaffey.edu/onlineed](http://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 Associate Superintendent 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.

## VALEDICTORIAN FOR SPRING COMMENCEMENT CEREMONIES

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

## PARTICIPATION IN COMMENCEMENT CEREMONIES

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

## CREDIT BY EXAMINATION

### Chaffey College Internal Testing

Registered students who have substantial prior experience in the content of college-level courses and who can present evidence may petition to receive credit for courses listed in the college catalog which are approved for Credit by Examination. Any course listed in the course description section of the Chaffey College catalog bearing the designation [Cx] after the course title 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:

- 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.
- Applications for credit by examination are available in the Admissions and Records Office at any of our three campus locations.
- There is a \$25 fee for credit by examination testing.
- 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.

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-2019-03 at [www.calstate.edu/AcadAff/CodedMemos](http://www.calstate.edu/AcadAff/CodedMemos). For UCs, see "Exam Credit" at <http://admission.universityofcalifornia.edu/counselors/exam-credit>. For IGETC, see the most recent "IGETC Standards" document at <http://icas-ca.org/standards-policies-and-procedures-manual>.

### Advanced Placement (AP) Examinations

The AP Examination Table on pages 27-28 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 29 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 30-31 indicates the CLEP examination, minimum required score, and 3 semester units awarded for Chaffey General Education categories and CSU GE Breadth areas.

### DANTES/DSST

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

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

# 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.

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	Auto 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 Drive Trains	5
BIOL-424	Anatomy and Physiology	3
BRDCAST-60	Beginning Single Camera Production	3
BUS-10	Introduction to Business	3
BUS-61	Introduction to Global 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-480	Principles of Supervision	3
BUSMKT-40	Marketing Principles	3
BUSTEC-40A	Beginning Computer Keyboarding	3
BUSTEC-40B	Computer Keyboarding: Speed and Accuracy	3
BUSTEC-50	Filing and Records Management	3
BUSTEC-60A	Microsoft Office Word - Specialist	3
BUSTEC-60B	Microsoft Office Word - Expert	3
BUSTEC-61	Microsoft Office PowerPoint	1.5
BUSTEC-62	Microsoft Office Outlook	1.5
BUSTEC-63	Microsoft Office Excel - Comprehensive	3
BUSTEC-64	Microsoft Office Access - Comprehensive	3
BUSTEC-410	MS Publisher Comprehensive	3
BUSTEC-455	Fundamentals of English for Business	3
BUSTEC-460	Proofreading: Text-Editing Skills	3
BUSTECM-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

Course Number	Course Title	Units
CIS-15	Introduction to Database & Database Management Systems	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-405	Basic Dental Sciences	3
DENTAL-415	Dental Chairside Skills I	2.5
DENTAL-425	Dental Materials	2
DENTAL-425L	Dental Materials Lab	1
DENTAL-435	Infection Control in Dentistry	2
DENTAL-445	Oral Radiology	2
DENTAL-445L	Oral Radiology Lab	1.5
DENTAL-455	Dental Office Procedures	2
DENTAL-460	Clinical Experience I	2
DENTAL-465	Clinical Experience II	1
DENTAL-465L	Clinical Experience II Lab	4
DENTAL-475	Dental Specialty Skills	2
DENTAL-475L	Dental Specialty Skills Lab	0.5
DENTAL-480	Dental Chairside Skills II	2
DENTAL-480L	Dental Chairside Skills II Lab	1
DENTAL-490	Advanced Clinical Procedures	1
DENTAL-490L	Advanced Clinical Procedures Lab	0.5
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-11	Emergency Medical Technician	7
EMT-405	Emergency Medical Technician Preparation	3
FASHD-20	History of Fashion	3
FASHD-40	Beginning Clothing Construction	2
FASHD-61	Pattern Drafting I	3
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

# CHAFFEY COLLEGE COURSES ELIGIBLE FOR CREDIT BY EXAMINATION [Cx]

Course Number	Course Title	Units
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 & Survival	3
FIRETEC-10	Wildland Fire Control	3
FIRETEC-11	Legal Aspects of Emergency Services	3
FIRETEC-12	Occupational Safety and Health for Emergency	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 and Gases	1.5
FIRETEC-423	Fire Inspector 1D - Field Inspection- California Specific	1
GERO-463	Social Work Designee/Assistant Training	3
HVACR-608	HVAC Troubleshooting	0
HVACR-609	Advanced Commercial HVAC Systems	0
HVACR-610	Building Automation Control Systems	0
HVACR-611	HVAC Management Topics	0
ID-10	Introduction to Interior Design	3
ID-15	Architectural Drafting for Interior Designers	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
IETELMT-436	Pneumatics Fundamentals	2
IETELMT-438	Electrical Control of Pneumatic Systems	2
INDMM-400	Intro to Const. Safety, Trade Math, Rigging, and Tools	3
INDMM-401	Basic Comm. and Employability Skills, and Core Testing	2.5
INDMM-402	Fund. of Ind. Maintenance, Oxyfuel, and Craft Skills	3.5
INDMM-403	Trade Math/Drawings, Mat. Handling, and Mobile Equip.	2.5
INDMM-600	Intro to Const. Safety, Trade Math, Rigging, and Tools	0
INDMM-601	Basic Comm. and Employability Skills, and Core Testing	0
INDMM-602	Fund. of Ind. Maintenance, Oxyfuel, and Craft Skills	0
INDMM-603	Trade Math/Drawings, Mat. Handling, and Mobile Equip.	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

Course Number	Course Title	Units
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 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-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/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-1	History of Photography	3
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-410	Real Estate Principles	3
SCSCI-13	Introduction to Social Work	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 (unless otherwise noted below). 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\*.

AP EXAM	Chaffey College Credit			Chaffey College General Education Pattern (AP Scores of 3, 4, or 5)	
	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 <i>or</i> C2: Humanities	3 units
Biology	3, 4, 5	BIOL-1	4 units	B: Natural Sciences	4 units
Calculus AB or AB Subscore <sup>1</sup>	3, 4, 5	MATH-65A	4 units	A2: Communication and Analytical Thinking <i>and</i> Math Competency	3 units
Calculus BC <sup>1</sup>	3, 4, 5	MATH-65A <i>and</i> MATH-65B	4 units + 4 units	A2: Communication and Analytical Thinking <i>and</i> 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 <i>and</i> 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 <sup>2</sup>	3, 4, 5	COMPSCI-1	3 units	N/A	3 units
Computer Science AB <sup>2</sup>	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 <i>and</i> ENGL-1C	3 units + 3 units	A1: English Composition <i>or</i> 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 <i>or</i> D2: Behavioral Sciences	3 units
French Language and Culture	3, 4, 5	FR-1 <i>and</i> 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 <sup>3</sup>	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
Latin – Literature <sup>3</sup>	3, 4, 5	No equivalent course	8 units	C2: Humanities	3 units
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

ACADEMIC INFORMATION

<sup>1</sup>AP Calculus Exam Limitations: Only one exam may be used for unit credit.  
<sup>2</sup>AP Computer Science Exam Limitations: Only one exam may be used for unit credit.  
<sup>3</sup>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-2019-03 at [www.calstate.edu/AcadAff/CodedMemos](http://www.calstate.edu/AcadAff/CodedMemos). For UCs, see “Exam Credit” at <http://admission.universityofcalifornia.edu/counselors/exam-credit>. For IGETC, see the most recent “IGETC Standards” document 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 (unless otherwise noted below). 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\*.

AP EXAM	Chaffey College Credit			Chaffey College General Education Pattern (AP Scores of 3, 4, or 5)	
	AP Score	Course Equivalency	Unit Credit (Semester)	Subject Area	Minimum GE Credits (Semester)
Music Theory	3, 4, 5	MUSIC-5	4 units	C1: Arts	3 units
Physics 1: Algebra-based <sup>4</sup>	3, 4, 5	PHYS-5 <u>and</u> PHYS-6	3 units + 1 unit	B: Natural Sciences	4 units
Physics 2: Algebra-based <sup>4</sup>	3, 4, 5	PHYS-5 <u>and</u> PHYS-6	3 units + 1 unit	B: Natural Sciences	4 units
Physics B <sup>4</sup>	3, 4, 5	PHYS-5 <u>and</u> 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 <u>and</u> 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 <u>and</u> 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	3, 4, 5	HIST-17 <u>and</u> HIST-18	3 units + 3 units	C2: Humanities <u>or</u> D1: American Institutions	3 units
World History	3, 4, 5	No equivalent course	3 units	C2: Humanities <u>or</u> D1: American Institutions	3 units

<sup>4</sup>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-2019-03 at [www.calstate.edu/AcadAff/CodedMemos](http://www.calstate.edu/AcadAff/CodedMemos). For UCs, see "Exam Credit" at <http://admission.universityofcalifornia.edu/counselors/exam-credit>. For IGETC, see the most recent "IGETC Standards" document 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 CSU GE 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 <sup>1</sup> (any language) HL	4	5	6 semester	3 units toward Humanities	3 semester units	C2	Area 3B (and 6A)
Language A2 <sup>1</sup> (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	Area 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 Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education Breadth 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

<sup>1</sup>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
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

\*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 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
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

## 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 21)
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:

- Students with special petitions or co-requisite waivers
- Students who are auditing

Note: During campus closures, this can be facilitated online with the Admissions and Records office by visiting <https://www.chaffey.edu/admissions/index.php> and selecting "Join our Virtual Line".

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. Students with financial or other restrictions must visit the Admissions and Records Office in person. 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 if the drop occurs after the refund deadline indicated on the registration receipt.

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. During campus closures, students may reach out to the Admissions and Records Office by visiting <https://www.chaffey.edu/admissions/index.php> and selecting "Join our Virtual Line".

### GRADES AND GRADE POINT AVERAGES

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

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

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

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

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.
EW	N/A	Excused withdrawal. Students who are compelled to withdraw from classes due to extenuating circumstances beyond their control may be permitted to withdraw at any time during a term with no adverse impact on academic records or enrollment status. Upon verification of extenuating circumstances, the EW symbol shall be assigned. Requests for EW must be submitted by petition, available in the Admissions and Records Office.

\*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. A petition is required to request a change from "F" to "W", removal of "W", or to request an "EW". Petitions are available in 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.

Withdraw/Unofficially/Withdraw Passing ("W"/"U"/"WP") grades were authorized by the catalog from the 1939-40 school year through the 1969-70 school year. These grades will be changed to W (Withdraw) on the student's permanent record prior to the release of the transcript. No grade point average computation penalty is associated with the W grade.

### 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") or have been approved for excused withdrawal ("EW") may repeat courses from which they have withdrawn. "MW" and "EW" do not affect GPA, nor do they 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, section 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



Chaffey College

# 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

Students shall obtain a satisfactory grade ("C" or better) in an English course at the level of the course typically known as Freshman Composition. The demonstration of this competency is locally determined and is met by the satisfactory completion of English 1A.

#### B. MATHEMATICS

Students shall complete a high school course or one-year sequence of courses typically known as Intermediate Algebra (e.g., Algebra 2, Integrated Math 3 or above) with a "C" or better – or in a sequence of courses with at least a 2.0 grade point average ("C" or better), with the second semester course being satisfactory completion with a "C" or better. The demonstration of that completion is locally determined.

Competency can also be demonstrated with the satisfactory completion ("C" or better) of one of the Chaffey courses listed below:

Accounting and Financial Services 30

Computer Science 4

Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81, 85, 420, 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/index.php](http://www.chaffey.edu/counseling/index.php)). 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 2020-2021 school year. Students who enrolled at Chaffey prior to Fall 2020 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

## 2020-2021

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)*

Accounting and Financial Services 30

Communication Studies 2, 4, 6, 8, 72

Computer Information Systems: Programming 1

Computer Science 1, 2, 4

English 1B

Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81, 85, 420, 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, 40, 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, 79, 80, 81, 82

Spanish 1, 2, 3, 3SS, 4, 4SS, 8, 13, 14

### 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, 25, 41, 65

Sociology 10, 14, 15, 16, 18, 25, 26

# CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION 2020-2021 CERTIFICATION COURSE PATTERN

Each candidate for the bachelor's degree from a CSU institution shall complete a pattern of general education courses which total a minimum of 48 semester units. Chaffey may certify a maximum of 39 semester units toward meeting this requirement; the remaining 9 semester units must be completed at the CSU at the upper-division level. CSU GE for STEM is a separate CSUGE track for students completing an associate degree for transfer (ADT) that permits the use of CSU GE for STEM. The CSU GE 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. A course may be used in only one area of the CSU GE certification and must be on the approved list in the year completed. Coursework used to fulfill areas A1, A2, A3, and B4 must be completed with a grade of "C-" or better.

**Courses count in one area only. 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, 12<sup>SP07</sup>, 24A, 24B, 70, 76A, 76B  
 Earth Science 1, 1 & 1L, 5, 5 & 5L  
 Geography 2, 4, 4 & 5, 6<sup>SP05</sup>  
 Geology 1, 2  
 Physical Science 10  
 Physics 5, 5 & 6, 20A, 20B, 30A, 30B, 44<sup>SP07</sup>, 45, 46, 47
- B2 Life Science**  
 Anthropology 1, 1 & 1L  
 Biology 1, 2, 3, 10, 12, 20, 22, 23, 23 & 23L, 40, 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**  
 Accounting and Financial Services 30  
 Computer Science 4  
 Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81<sup>FA03</sup>, 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, 15<sup>FA15</sup>, 16, 18, 20, 44, 50  
 Art History 3, 5, 7, 9, 11, 19  
 Cinema 25, 26  
 Communication Studies 14  
 Dance 1, 12<sup>FA19</sup>  
 Fashion Design 20, 45  
 Interior Design 11, 12  
 Music 2A, 2B, 4, 5, 21, 22<sup>SP06</sup>, 26  
 Photography 1, 7<sup>FA18</sup>, 10  
 Theatre Arts 1, 4, 5, 10, 12

**C2 Humanities**

- American Sign Language 1<sup>FA03</sup>, 2, 3, 4  
 Arabic 1, 2, 3, 4  
 Chinese 1, 2, 3, 4, 18  
 English 1C, 7A<sup>SP18</sup>, 7B<sup>SP18</sup>, 7D<sup>SP18</sup>, 7E<sup>SP18</sup>, 32, 33, 68, 70A, 70B, 73<sup>FA20</sup>, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81  
 French 1, 2  
 History 1, 2, 4<sup>FA03</sup>, 7, 12, 16<sup>FA03</sup>, 20, 21<sup>FA11</sup>, 25, 37, 40<sup>SP06</sup>  
 Humanities 5, 6, 20  
 Philosophy 70, 71<sup>FA17</sup>, 72, 73, 77, 78, 79, 80, 81, 82  
 Spanish 1, 2, 3, 3SS, 4, 4SS, 8, 9, 13, 14

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

- American Sign Language 18  
 Anthropology 2, 3  
 Business: Legal Studies 10<sup>FA19</sup>  
 Child Development 2, 4, 6  
 Communication Studies 12, 74, 76, 78  
 Criminal Justice 1<sup>FA03</sup>, 55<sup>FA17</sup>, 58<sup>FA17</sup>  
 Economics 1, 2, 4, 7<sup>FA17</sup>, 8  
 Geography 1, 3, 11<sup>SP06</sup>  
 Gerontology 11, 18, 22, 23  
 History 1, 2, 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16, 17, 18, 19, 20, 21<sup>FA11</sup>, 37, 40<sup>SP06</sup>, 50, 51, 70, 71  
 Kinesiology Lecture 18<sup>FA19</sup>  
 Political Science 1, 2, 3<sup>FA12</sup>, 4, 7, 10, 21<sup>FA12</sup>, 25, 32<sup>FA12</sup>  
 Psychology 1, 20, 25, 65, 80<sup>FA20</sup>  
 Sociology 10, 14, 15<sup>SP05</sup>, 16<sup>SP07</sup>, 18, 25, 26, 30, 32, 33, 70, 80<sup>FA15</sup>

**AREA E LIFELONG LEARNING AND SELF-DEVELOPMENT**

- (Minimum 3 units) Veterans may meet Area E requirements via DD-214*  
 Biology 14  
 Child Development 2<sup>FA05</sup>  
 Gerontology 22  
 Guidance 3  
 Kinesiology Lecture 15, 18<sup>FA19</sup>, 32<sup>FA19</sup> (2 units) plus any 1 unit KINACT course  
 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 CSU GE 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.

# INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM 2020-2021 CERTIFICATION COURSE PATTERN

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, 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 2020 must follow the 2020-2021 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 2 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (Required CSU/UC - 1 course)

Computer Science 4  
Mathematics 25<sup>FA03\*</sup>, 60\*, 61\*, 65A\*, 65B, 75, 81, 85  
Social Science 10<sup>FA03\*</sup>  
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, 12<sup>FA19</sup>  
Music 2A, 2B, 4, 5, 21<sup>SP07</sup>, 22<sup>SP06</sup>, 26<sup>SP07</sup>  
Photography 1<sup>FA19</sup>, 10<sup>FA19</sup>  
Theatre Arts 1, 4, 5

### B. Humanities:

American Sign Language 3, 4  
Arabic 3, 4  
Chinese 3, 4, 18<sup>FA16</sup>  
English 1C, 32, 33, 68, 70A, 70B, 73<sup>FA19</sup>, 74<sup>FA03</sup>, 75A, 75B, 76, 77, 79, 80A, 80B, 81  
History 1, 2, 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16<sup>FA03</sup>, 20, 21<sup>FA19</sup>, 25, 40<sup>SP06</sup>, 50, 51, 70, 71  
Humanities 5, 6, 20  
Philosophy 70, 71<sup>FA19</sup>, 72, 73, 77, 78, 79<sup>FA19</sup>, 80, 81, 82  
Photography 1<sup>FA19</sup>  
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 10<sup>FA16</sup>  
Child Development and Education 2\*, 4  
Communication Studies 12, 74  
Economics 1\*, 2, 4, 7, 8  
Geography 1<sup>SP07</sup>, 3, 10, 11<sup>SP06</sup>  
Gerontology 18\*  
History 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16<sup>FA03</sup>, 17, 18, 19, 20, 21<sup>FA19</sup>, 37, 40<sup>SP06</sup>, 50, 51, 70, 71  
Political Science 1, 2, 4, 7, 10, 21<sup>FA12</sup>, 25, 32<sup>FA12</sup>  
Psychology 1, 20\*, 25\*, 65, 80<sup>FA15</sup>  
Sociology 10, 14, 15<sup>SP05</sup>, 16<sup>SP07</sup>, 18\*, 25, 26, 30<sup>FA19</sup>, 32, 33<sup>FA19</sup>, 70, 80<sup>FA15</sup>

## 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\*, 27<sup>FA19</sup>, 35  
Chemistry 7<sup>FA16\*</sup>, 8<sup>SP07\*</sup>, 9\*, 10\*, 12<sup>SP07</sup>, 24A, 24B, 70, 76A, 76B  
Earth Science 1, 1 & 1L, 5<sup>SP07</sup>, 5 & 5L<sup>SP07</sup>  
Geography 2, 4, 4 & 5, 6<sup>SP05</sup>  
Geology 1, 2  
Physical Science 10  
Physics 5\*, 5 & 6\*, 20A\*, 20B\*, 30A\*, 30B\*, 44<sup>SP07\*</sup>, 45\*, 46\*, 47\*

### B. Biological Sciences:

Anthropology 1, 1 & 1L  
Biology 1\*, 2, 10\*, 12, 20, 22, 23, 23 & 23L, 40, 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 a UC requirement. 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 AND IGETC FOR STEM MAJORS WITHIN ADTs

Students pursuing Biology, Chemistry or Environmental Science 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](http://www.c-id.net).

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

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

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

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

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

Various differences between CSU GE Breadth and IGETC:

Topic	GE Breadth (CSU only)	IGETC (CSU and UC)
Units	A single course may carry any number of units. However, courses of less than 3 semester (or 4 quarter) units are rarely approved for CSU GE (except for physical activity courses). Stand-alone lab courses, which have a prerequisite or co-requisite of the corresponding lecture course, must be a minimum of 1 semester/quarter unit.	Each course must carry a minimum of 3 semester (or 4 quarter) units. Stand-alone lab courses which have a prerequisite or co-requisite of the corresponding lecture course must be a minimum 1 semester/quarter unit.
Oral Communication	Requires Oral Communication.	Does not require oral Communication for students transferring to the UC.
Minimum Grade	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.
Mathematics and Quantitative Reasoning	Courses in Subarea B4 will have a prerequisite reflective only of the skills and knowledge needed to succeed in the course.	Requires intermediate algebra or equivalent* as prerequisite for courses in Area 2A, Mathematics. <i>*The equivalent should cover the content and mathematical practices of the Common Core State Standards for Mathematics, or CCSSM.</i>
Lifelong Learning	Includes an area in Lifelong Understanding and Self-Development.	No area in Lifelong Understanding and Self-Development.
Language Other than English	Does not require Language Other than English (LOTE).	Requires Language Other than English (LOTE) for students transferring to the UC.

# 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/academicsupport/transfer.php](http://www.chaffey.edu/academicsupport/transfer.php).

## 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

Explore campuses, plan for transfer, and apply to any of the twenty-three California State University campuses.

[www2.calstate.edu/apply](http://www2.calstate.edu/apply)  
<https://adegreewithaguarantee.com>

CAL STATE APPLY

### UC ADMISSIONS

Access general information and apply online to any of the nine University of California campuses.

[www.universityofcalifornia.edu/admissions](http://www.universityofcalifornia.edu/admissions)  
<http://ucal.us/transferpathways>

UNIVERSITY  
OF  
CALIFORNIA

### ASSOCIATION OF INDEPENDENT CALIFORNIA COLLEGES AND UNIVERSITIES

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

[www.aiccu.edu](http://www.aiccu.edu)



### CALIFORNIA COLLEGES

Research careers and learn about higher education opportunities throughout California.

[www.californiacolleges.edu](http://www.californiacolleges.edu)



### ICANAFFORDCOLLEGE.COM

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

[www.icanaffordcollege.com](http://www.icanaffordcollege.com)



### ASSIST

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

[www.assist.org](http://www.assist.org)



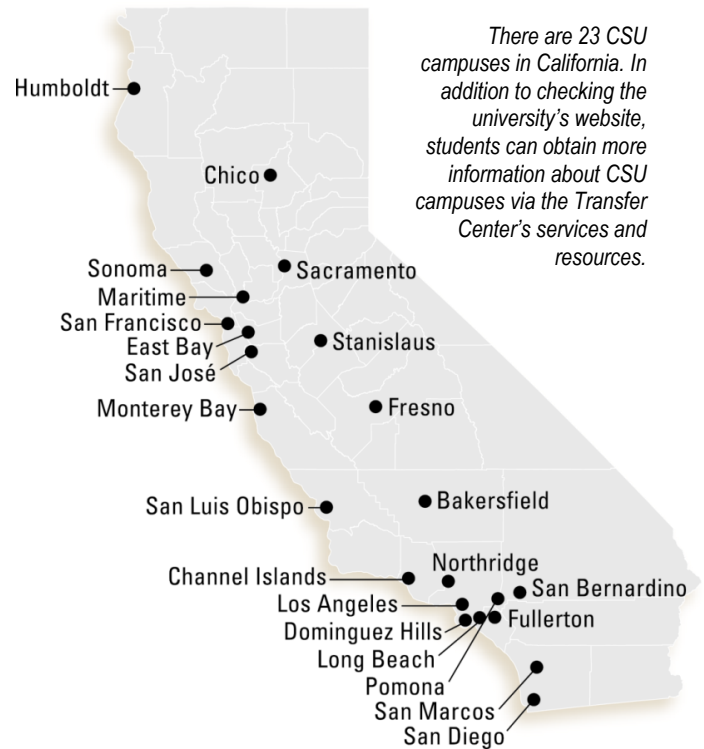
All the campuses of the California State University welcome applications from community college transfer students. Students who complete any college units after high school are considered transfer students. The number of units a student has completed at the time he/she enters the CSU determines the admission 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.csusb.edu](http://www.csusb.edu)
- CSU - Channel Islands** [www.csuci.edu](http://www.csuci.edu)
- CSU - Chico** [www.csuchico.edu](http://www.csuchico.edu)
- CSU - Dominguez Hills** [www.csudh.edu](http://www.csudh.edu)
- CSU - East Bay** [www.csueastbay.edu](http://www.csueastbay.edu)
- CSU - Fresno** [www.csufresno.edu](http://www.csufresno.edu)
- CSU - Fullerton** [www.fullerton.edu](http://www.fullerton.edu)
- Humboldt State University** [www.humboldt.edu](http://www.humboldt.edu)
- CSU - Long Beach** [www.csulb.edu](http://www.csulb.edu)
- CSU - Los Angeles** [www.calstatela.edu](http://www.calstatela.edu)
- California Maritime Academy** [www.csum.edu](http://www.csum.edu)
- CSU - Monterey Bay** [www.csUMB.edu](http://www.csUMB.edu)
- CSU - Northridge** [www.csun.edu](http://www.csun.edu)
- California State Polytechnic University, Pomona** [www.cpp.edu](http://www.cpp.edu)
- CSU - Sacramento** [www.csus.edu](http://www.csus.edu)
- CSU - San Bernardino** [www.csusb.edu](http://www.csusb.edu)
- San Diego State University** [www.sdsu.edu](http://www.sdsu.edu)
- San Francisco State University** [www.sfsu.edu](http://www.sfsu.edu)
- San Jose State University** [www.sjsu.edu](http://www.sjsu.edu)
- California Polytechnic State University, San Luis Obispo** [www.calpoly.edu](http://www.calpoly.edu)
- CSU - San Marcos** [www.csusm.edu](http://www.csusm.edu)
- Sonoma State University** [www.sonoma.edu](http://www.sonoma.edu)
- CSU - Stanislaus** [www.csustan.edu](http://www.csustan.edu)



During this trip to CSU Los Angeles in April 2017 students were given a tour of the CSULA campus 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 (CSU GE) 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](http://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](http://www.universityofcalifornia.edu/admissions) and on each campus' website:

**University of California, Berkeley**  
**University of California, Davis**  
**University of California, Irvine**  
**University of California, Los Angeles**  
**University of California, Merced**  
**University of California, Riverside**  
**University of California, San Diego**  
**University of California, Santa Barbara**  
**University of California, Santa Cruz**

[www.berkeley.edu](http://www.berkeley.edu)  
[www.ucdavis.edu](http://www.ucdavis.edu)  
[www.uci.edu](http://www.uci.edu)  
[www.ucla.edu](http://www.ucla.edu)  
[www.ucmerced.edu](http://www.ucmerced.edu)  
[www.ucr.edu](http://www.ucr.edu)  
[www.ucsd.edu](http://www.ucsd.edu)  
[www.ucsb.edu](http://www.ucsb.edu)  
[www.ucsc.edu](http://www.ucsc.edu)

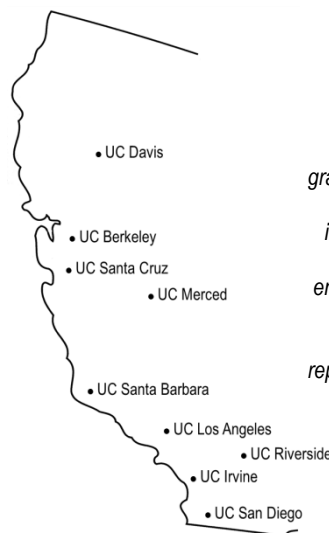
## UPPER DIVISION TRANSFER REQUIREMENTS

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 <https://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](http://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/academicsupport/transfer.php](http://www.chaffey.edu/academicsupport/transfer.php).

## 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/academicsupport/transfer.php](http://www.chaffey.edu/academicsupport/transfer.php).

## THE ASSOCIATION OF INDEPENDENT CALIFORNIA COLLEGES AND UNIVERSITIES

The Association of Independent California Colleges and Universities (AICCU) represents 84 California private nonprofit colleges and universities. AICCU institutions are located throughout the state with 27 main campuses located in Northern California and 57 main campuses located in Southern California. Visit [www.aiccu.edu](http://www.aiccu.edu) to research member colleges and access a college planning guide for high school students.



*During this trip to Loma Linda University, 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 37 participating institutions are:

- Alabama State University, Montgomery AL
- Alcorn State University, Lorman, MS
- Arkansas Baptist College, Little Rock, AR
- Benedict College, Columbia, SC
- Bennett College, Greensboro, NC
- Bethune-Cookman University, Daytona Beach, FL
- Bowie State University, Bowie, MD
- Central State University, Wilberforce, OH
- Claffin 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
- Xavier University of Louisiana, New Orleans, LA

For more information, visit <https://ccctransfer.org/hbcu/>.



# 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 degree and certificate programs may be found on pages 48-49. Detailed information about each program’s constituent coursework and any additional requirements may be found on pages 50-158.

## ASSOCIATE DEGREES FOR TRANSFER



The Student Transfer Achievement Reform Act (Senate Bill 1440, 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 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 thirty-one (31) approved transfer degrees: Administration of Justice; Anthropology; Art History; Biology; Business Administration; Chemistry; Communication Studies; Computer Science; Early Childhood Education; Economics; Elementary Teacher Education; English; Film, Television and Electronic Media; Geography; Geology; History; Journalism; Kinesiology; Mathematics; Music; Nutrition and Dietetics; Philosophy; Physics; Political Science; Psychology; Public Health Science; 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).

## UNIVERSITY OF CALIFORNIA TRANSFER PATHWAY ASSOCIATE DEGREES

In April 2018 the California Community Colleges (CCC) and University of California (UC) signed a Memorandum of Understanding to enhance student transfer and increase academic preparation for CCC students as they transfer into a UC campus. The MOU initiated a comprehensive effort to guarantee admission for all qualifying CCC transfer students to the UC system. Students completing one of these University of California Transfer Pathway (UCTP) degrees has completed lower division preparation in the specified major, should be able to graduate within two years attending at full time status, and is guaranteed admission to the UC system with a minimum 3.5 GPA. Similar to Associate Degrees for Transfer created for the CSU system, guaranteed admission is to the system, not an individual campus.

At press date, Chaffey has two (2) approved UCTP degrees: Chemistry; and Physics. Additional transfer degree majors are being developed. Please see a counselor for more information.

## ASSOCIATE DEGREES

Chaffey offers both Associate in Arts (A.A.) and Associate in Science (A.S.) 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 A.A. degree and many A.S. 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 four types of certificates:

### Certificates of Achievement (state-approved)

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)

Certificate programs consisting of fewer than 18 units of degree-applicable coursework. These certificates do not appear on student’s transcripts.

### Certificates of Competency (noncredit)

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 (noncredit)

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.

Programs of Study are further organized into six Academic and Career Communities (ACC) based on job families, interest areas, and similarities in coursework. Program maps representing the order and/or combinations of major coursework recommended by discipline faculty needed to complete a certificate or degree are available online at <https://www.chaffey.edu/acc/index.php>, and are organized according to the ACC to which they belong.

<b>AA-T / AS-T</b>	Associate in Arts for Transfer degree / Associate in Science for Transfer degree
<b>UCTP</b>	University of California Transfer Pathway Associate degree
<b>AA / AS</b>	Associate in Arts degree / Associate in Science degree
<b>CA</b>	Certificate of Achievement
<b>CCP</b>	Certificate of Career Preparation ( <i>not shown on transcripts</i> )
<b>NCCL</b>	Noncredit Certificate of Completion
<b>NCCC</b>	Noncredit Certificate of Competency

## ACADEMIC AND CAREER COMMUNITIES (ACC)

1. **ACD** Arts, Communication, & Design
2. **BTH** Business, Technology, & Hospitality
3. **HWA** Health, Wellness, & Athletics
4. **MIT** Manufacturing, Industrial Design, & Transportation
5. **PCS** Public Service, Culture, & Society
6. **STEM** Science, Technology, Engineering, & Mathematics

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

## PROGRAMS

	AA-T / AS-T / UCTP	AA / AS	CA	CCP	NCCL	NCCC	ACC		AA-T / AS-T / UCTP	AA / AS	CA	CCP	NCCL	NCCC	ACC
<b>Accounting*</b>							2	<b>Business: Legal Studies</b>							
Accounting for Government and Not-For-Profit Organizations*							2	Paralegal Studies*							2
Accounting Paraprofessional*							2	Pathway to Law School							5
Bookkeeping*							2	<b>Business: Management</b>							
Financial Planning*							2	Arts Business Management*							2
Payroll and Income Tax Preparer*							2	Facilities Management*							2
<b>Anthropology</b>							5	Management*							2
<b>Art - Studio Arts</b>							1	Retail Management*							2
Art: Art (Emphasis)							1	Supervision*							2
Art: Ceramics Studio (Emphasis)							1	Supply Chain Management*							2
<b>Art/Digital Media</b>								<b>Business Technology</b>							
Computer Graphic Design for Print Media (Emphasis)*							1	Business Information Worker (BIW) Stage One*							2
Design for Multimedia (Emphasis)*							1	Business Information Worker (BIW) Stage Two*							2
Web Design (Emphasis)*							1	Electronic Health Records Specialist*							2
<b>Art History</b>							1	Inpatient Medical Coder Specialist*							2
<b>Automotive Technology</b>								Medical Biller Specialist*							2
Automotive Electrical Systems*							4	Medical Insurance Billing Specialist*							2
Engine Performance (Smog Check) Technician*							4	Microsoft Excel*							2
Engine Rebuilding*							4	Microsoft Office*							2
General Automotive Service Technician*							4	Microsoft Word*							2
High Performance Engines Building & Blueprinting*							4	Outpatient Medical Coder Specialist*							2
Master Automotive Technician*							4	Professional Administrative Management*							2
<b>Aviation Maintenance Technology</b>								Professional Office Skills*							2
Aircraft Electrical and Avionics Technician*							4	<b>California State University GE (CSU GE)</b>							
Aviation Maintenance*							4	<b>Chemistry</b>							6
Aviation Maintenance Technology: Airframe*							4	<b>Child Development*</b>							5
Aviation Maintenance Technology: Powerplant*							4	Early Childhood Education*							5
<b>Biology</b>							6	<b>Chinese Studies</b>							1
Biological Sciences							6	<b>Communication Studies</b>							1
<b>Broadcasting and Cinema*</b>							1	<b>Computer Information Systems*</b>							2
Film, Television and Electronic Media*							1	Cisco CCNA Examination Preparation Level I*							2
Motion Picture Production*							1	Cisco CCNA Examination Preparation Level II*							2
On-Air Radio Production*							1	Cisco CCNA Examination Preparation Level III*							2
Post Production Editing*							1	Cisco CCNA Examination Preparation Level IV*							2
Screenwriting*							1	Cisco CCNA Security Examination Preparation*							2
Television and Video Production*							1	Cisco CCNP Examination Preparation Level V*							2
<b>Business</b>								Cisco CCNP Examination Preparation Level VII*							2
Business Administration*							2	Cisco CCNP Examination Preparation Level VIII*							2
General Business*							2	Cisco CCNP Examination Preparation Level IX*							2
International Business*							2	Computer Foundations*							2
Marketing*							2	Computer Game Development*							2
Small Business Entrepreneur*							2	Computer Support Technician (A+ Certification Prep)*							2

**PROGRAMS CONT.**

	AA-T / AS-T / UCTP	AA / AS	CA	CCP	NCCL	NCCC	ACC
Cyber Security Analyst*							2
Cyber Security Defender*							2
Cyber Security Professional*							2
Network Specialist*							2
Programming Foundations*							2
Project Management*							2
Social Media Technician*							2
Web Page Developer*							2
<b>Computer Science</b>							6
<b>Criminal Justice*</b>							5
Administration of Justice*							5
Correctional Science*							5
Homeland National Security*							5
Leadership in Criminal Justice*							5
<b>Culinary Arts*</b>							2
Professional Baking and Patisserie*							2
<b>Dance</b>							1
<b>Dental Assisting*</b>							3
<b>Drafting</b>							
CAD/CAM Operator*							4
Drafting Technician: Architectural*							4
Drafting Technician: Mechanical*							4
<b>Economics</b>							5
Political Economics							5
<b>Elementary Teacher Education</b>							5
<b>Emergency Medical Provider*</b>							5
<b>Employability Skills in the 21st Century</b>							2
<b>Engineering</b>							6
<b>Engineering Technology*</b>							4
<b>English</b>							1
<b>Fashion Design*</b>							1
Custom Dressmaking*							1
Industrial Sewing*							1
Patternmaking for Apparel*							1
<b>Fashion Merchandising*</b>							1
<b>Fire Technology</b>							
Fire Prevention Inspector*							5
Fire Technology: Professional Firefighter*							5
<b>Geography</b>							5
<b>Geology</b>							6
<b>Gerontology*</b>							5
Caregiving Essentials*							3
Community Caregiver*							5
<b>Heating, Ventilation, Air Conditioning and Refrigeration (HVACR)</b>							
HVACR Level I*							4
HVACR Level II*							4
<b>History</b>							5
<b>Hospitality Management*</b>							2
Event Planning*							2
Hospitality Management: Food Service*							2
Hospitality Management: Hotel Management*							2
<b>Industrial Electrical Technology*</b>							4
Electromechanical Technology Level I*							4
Industrial Electrical Technology Level I*							4
Industrial Electrical Technology Level II*							4
Industrial Electrical Technology Level III*							4

	AA-T / AS-T / UCTP	AA / AS	CA	CCP	NCCL	NCCC	ACC
<b>Industrial Maintenance Mechanic*</b>							4
Industrial Maintenance Mechanic Skills Builder I*							4
Industrial Maintenance Mechanic Skills Builder II*							4
Industrial Maintenance Mechanic Skills Builder III*							4
<b>Interior Design*</b>							1
Interior Design Visual Communication*							1
<b>Intersegmental GE Transfer Curriculum (IGETC)</b>							
<b>Journalism*</b>							1
<b>Kinesiology</b>							3
Athletic Trainer Aide*							3
Physical Education							3
<b>Mathematics</b>							6
<b>Mechatronics*</b>							4
Mechatronics Level I*							4
Mechatronics Level II*							4
<b>Music</b>							1
Commercial Music*							1
Recording Arts Technician*							1
<b>Nursing</b>							
Home Health Aide*							3
Nursing: ADN*							3
Nursing Assistant*							3
Nursing VN to RN*							3
Nursing: Vocational*							3
<b>Nutrition and Dietetics*</b>							3
Dietetic Service Supervisor (DSS)/Certified Dietary Manager (CDM)*							3
Nutrition and Food*							3
<b>Pharmacy Technician*</b>							3
<b>Philosophy</b>							5
Philosophy: Religious Studies							5
<b>Photography*</b>							1
Still Photography*							1
<b>Physical Science</b>							6
<b>Physics</b>							6
<b>Political Science</b>							5
<b>Psychology</b>							5
<b>Public Health Science*</b>							3
<b>Radiologic Technology*</b>							3
<b>Real Estate*</b>							2
Real Estate Salesperson*							2
<b>Sign Language Studies</b>							1
<b>Social Justice Studies</b>							5
<b>Sociology</b>							5
<b>Spanish</b>							1
<b>Theatre Arts</b>							1
Technical Theatre*							1
Theatre Performance							1
<b>University Studies</b>							
University Studies: Arts & Humanities (Emphasis)							
University Studies: Social & Behavioral Sciences (Emphasis)							
University Studies: Mathematics & Science (Emphasis)							
University Studies: Business & 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:

	Units
[S005/04756/0502.00*/52.0302]	
ACCTG 1A Financial Accounting	4
ACCTG 1B Managerial Accounting	4
ACCTG 70 Cost Accounting	3
(or ACCTG 430*, Accounting for Governmental and Not-for-Profit Organizations, 4, or ACCTGFS 453*, U.S. and California Income Tax Preparation, 4)	
BUSL 28A Business Law I	3
BUSTEC 63 Microsoft Office Excel - Comprehensive	3
CIS 1 Introduction to Computer Information Systems	3
STAT 10 Elementary Statistics	4
<b>Total units for the major</b>	<b>24-25</b>

## 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 of Achievement:

[T005/20675/0502.00*/52.0302]	Units
Same as the major requirements for the A.S. Degree, <b>plus nine units from the following:</b>	24-25
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
<b>Total units for the certificate</b>	<b>33-34</b>

\*ACCTG 430 and ACCTGFS 453 may not be counted twice

### Accounting for Government and Not-For-Profit Organizations (Certificate)

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 Accounting for Government and Not-for-Profit Organizations Certificate of Career Preparation

[L008/99999/0502.00*/52.0302] ( <i>Non-transcripted</i> )	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
<b>Total units for the certificate</b>	<b>14</b>

## Accounting Paraprofessional (Certificate)

*(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 of Achievement:

[L006/07370/0502.00*/52.0302]	Units
ACCTG 1A Financial Accounting	4
ACCTG 1B Managerial Accounting	4
BUSTEC 60A Microsoft Office Word - Specialist	3
BUSTEC 63 Microsoft Office Excel - Comprehensive	3
BUSTEC 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 (Certificate)

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 of Career Preparation:

[E115/99999/0502.00*/52.0302] ( <i>Non-transcripted</i> )	Units
ACCTG 435 Payroll Accounting	3
ACCTG 460 Commercial Accounting Software	3
ACCTG 480 Applied Accounting I	3
ACCTG 481 Applied Accounting II	3
BUSTEC 63 Microsoft Office Excel - Comprehensive	3

**Total units for the certificate** 15

## Financial Planning (Certificate)

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 of Achievement:

[B101/37202/0504.00*/52.0803]	Units
ACCTGFS 30 Personal Finance	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 (Certificate)

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 of Career Preparation:

[E117/99999/0502.10*/52.1601] ( <i>Non-transcripted</i> )	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



## 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 (AA-T) Degree [A016/32166/2202.00/45.0201]

		Units
<b>Core – (9 units):</b>		
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
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### List B – One or two\* courses (4 units):

BIOL 20	Human Anatomy	4
ESC 1	Earth Science	3
	<u>and</u>	
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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>19</b>	<b>19</b>
<b>Elective (CSU transferable) units</b>	<b>21-24</b>	<b>19-22</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

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



## 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 CSU 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 (AA-T) Degree [A038/33239/1002.00/50.0701]

Units

<b>Required Core (14 units)</b>		
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)	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**

### General Education

	<b>IGETC</b>
<b>Total units that may be double-counted</b>	<b>37</b>
<b>Elective (CSU transferable) units</b>	<b>6</b>
<b>Total units required for the degree</b>	<b>0-3</b>
	<b>60</b>

## ART

The Associate in Arts in Art is a comprehensive, student-centered program serving a diverse population of students. The degree prepares students for transfer to the University of California system and private art colleges. Students choose between an Emphasis in Art or Ceramics Studio. Critical thinking and problem-solving skills are emphasized across the curriculum in both lecture and studio courses. Coursework requires students to examine the world from alternate cultural, ethnic, gender, and personal perspectives. Professional practices and vocational skills are integral to the program. Students should consult with an academic counselor, as well as the intended transfer institution, for more information on university admission, general education patterns, and other transfer requirements (e.g. portfolios).

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 14	Introduction to Drawing	3
ARTH 5	Survey of Western Art from Renaissance to Contemporary	3

#### Plus completion of one of the following emphases:

### Art: 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]

#### Core requirements, plus two courses from the following: Units

ART 10	Fundamentals of Design in Two Dimensions	4
ART 12	Fundamentals of Design in Three Dimensions	4
ART 15	Color Theory	3
ART 16	Introduction to Painting	3
ART 30	Figure Drawing	3

#### Plus one course from the following:

ARTH 3	Contemporary Art: 1945-Present	3
ARTH 7	Arts of Africa, Oceania, and Indigenous North America	3
ARTH 9	Art of Ancient Americas	3
ARTH 11	Survey of Asian Arts	3
ARTH 19	Contemporary Art: 1945-Present	3

#### Plus three courses from the following:

ART 32	Intermediate Drawing	4
ART 34	Intermediate Painting	4
ART 44	Mixed-Media Studio and Theory	3
ART 50	Introduction to Sculpture	4
ART 62A	Illustration I	3
ART 89	Student Invitational Exhibition	4
ART 460	Portfolio and Presentation	2

#### Plus one course from the following:

ART 18	Introduction to Ceramics	3
ART 63	Introduction to Graphic Design	4
ART 82	Introduction to Digital Media	4
PHOTO 7	Introduction to Digital Photography	4
PHOTO 10	Beginning Photography	4

**Total units for the major 26-33**

### Art: 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]

#### Core requirements, plus: Units

ART 18	Introduction to Ceramics	3
ART 20	Ceramic Sculpture	4
ART 35	Intermediate Ceramics	3
ART 40	Advanced Ceramics	3

#### Plus one course from the following:

ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
ARTH 19	Contemporary Art: 1945-Present	3

#### Plus two courses from the following:

ART 12	Fundamentals of Design in Three Dimensions	4
ART 44	Mixed-Media Studio and Theory	3
ART 50	Introduction to Sculpture	4
ART 89	Student Invitational Exhibition	4
ART 460	Portfolio and Presentation	2

**Total units for the major 27-30**



## 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.

<b>Major requirements for the Associate in Arts Degree:</b>		Units
<i>Core requirements:</i>		
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.

<b>Major requirements for the Computer Graphic Design for Print Media Emphasis:</b>		Units
[A045/12210/0614.60*/11.0803]		
<i>Core requirements, plus:</i>		
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
<b>Total units for the major</b>		<b>37</b>

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

### 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
<i>Core requirements, plus:</i>		
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.

### 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
<i>Core requirements, plus:</i>		
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.

## ART/DIGITAL MEDIA CERTIFICATE PROGRAMS

### 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 of Achievement:

[T046/20696/0614.60*/11.0803]	Units
<b>Core requirements, plus:</b>	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
<b>Total units for the certificate</b>	<b>37</b>

**Recommended Courses:** ART 12, ARTH 5, PHOTO 9

### 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 of Achievement:

[T047/20691/0614.10*/10.0304]	Units
<b>Core requirements, plus:</b>	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 (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 of Achievement:

[T049/20692/0614.30*/11.0801]	Units
<b>Core requirements, plus:</b>	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
<b>Total units for the certificate</b>	<b>41</b>

**Recommended Course:** PHOTO 9



## 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 (AA-T) Degree [A037/32344/1001.00/50.0101]

Units

<b>Core – (9 units):</b>		
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

<b>List A – One course (3 units):</b>		
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

<b>List B – One course (3-4 units):</b>		
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

<b>List C – One course (3-4 units):</b>		
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	CSU GE
<b>General Education</b>	37	39
<b>Total units that may be double-counted</b>	6	6
<b>Elective (CSU transferable) units</b>	9-11	7-9
<b>Total units required for the degree</b>	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:

	Units
[S056/30658/0948.00*/47.0604]	
AUTOTEC 450 General Automotive Technician A (or AUTOTEC 10, Service and Repair, 4 <u>and</u> AUTOTEC 417, Brakes, 4 <u>and</u> AUTOTEC 418, Suspension and Steering Systems, 4)	12
AUTOTEC 455 General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 <u>and</u> AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 <u>and</u> AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)	12
<b>Total units for the major</b>	<b>21-24</b>

### 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:		Units
[S055/04770/0948.00*/47.0604]		
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 <u>and</u> AUTOTEC 417, Brakes, 4 <u>and</u> AUTOTEC 418, Suspension and Steering Systems, 4)		12
AUTOTEC 455 General Automotive Technician B (or AUTOTEC 15, Auto Electricity and Electronics, 2 <u>and</u> AUTOTEC 416, Basic Auto Air Conditioning Systems, 2 <u>and</u> AUTOTEC 422, Fuel, Ignition, and Emission Control Systems, 5)		12
<b>Total units for the major</b>		<b>39-42</b>

## AUTOMOTIVE TECHNOLOGY CERTIFICATE PROGRAMS

### Automotive Electrical Systems (Certificate)

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 of Career Preparation:

[E445/99999/0948.00*/47.0604] ( <i>Non-transcripted</i> )	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
<b>Total units for the certificate</b>	<b>14.5</b>

### Engine Performance (Smog Check) Technician (Certificate)

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 of Achievement:

[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
<b>Total units for the certificate</b>	<b>23</b>

### Engine Rebuilding (Certificate)

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 of Career Preparation:

[L449/99999/0948.00*/47.0604] ( <i>Non-transcripted</i> )	Units
AUTOTEC 430 Engine Rebuilding - Upper Engine	5
AUTOTEC 431 Engine Rebuilding - Lower Engine	5
<b>Total units for the certificate</b>	<b>10</b>

### General Automotive Service Technician (Certificate)

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 of Achievement:

[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
<b>Total units for the certificate</b>	<b>21-24</b>

## AUTOMOTIVE TECHNOLOGY CERTIFICATE PROGRAMS, Cont.

### High Performance Engines Building and Blueprinting (Certificate)

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 of Career Preparation:

[E110/99999/0948.00*/47.0604] ( <i>Non-transcripted</i> )	Units
AUTOTEC 430 Engine Rebuilding – Upper Engine	5
AUTOTEC 431 Engine Rebuilding – Lower Engine	5
AUTOTEC 435 High Performance Engine Building and Blueprinting	5
<b>Total units for the certificate</b>	<b>15</b>

### Master Automotive Technician (Certificate)

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 of Achievement:

[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
<b>Total units for the certificate</b>	<b>39-42</b>

## 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.

<b>Major requirements for the Associate in Science Degree:</b>		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:**

### Aviation Maintenance Technology: 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
<i>Core requirements, plus:</i>		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
<b>Total units for the major</b>		<b>40</b>

### Aviation Maintenance Technology: 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
<i>Core requirements, plus:</i>		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
<b>Total units for the major</b>		<b>40</b>

## AVIATION MAINTENANCE TECHNOLOGY CERTIFICATE PROGRAMS

### Aircraft Electrical and Avionics Technician (Certificate)

This certificate is a skills building certificate in the field of Aviation Electronics and Avionics Technology. It builds upon the skills and knowledge of the general aviation and airframe programs of study. This certificate 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 certificate 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. An FAA Airframe Certificate would serve in lieu of AMT 15-38C requirements for this certificate.

#### Program Learning Outcomes:

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

1. Enhance employability.
2. Communicate using professional terminology expected within the field of avionics.
3. Employ critical thinking skills expected within the field of avionics.

#### Requirements for the Aircraft Electrical and Avionics Technician Certificate of Achievement:

		Units
	[T013/36885/0950.00*/47.0607]	
AMT 15	Introduction to Aviation Maintenance for Airframe and Powerplant	14
AMT 16A	Aviation Materials, Processes, Inspections & Regulations	1
AMT 16B	Aviation Science	1
AMT 35	Airframe Structures: Fabrication, Inspection and Repair	7
AMT 36	Airframe Primary Systems	7
AMT 37	Airframe 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
AMT 400	Aircraft Electronics	5
	<b>Total units for the certificate</b>	<b>45</b>

### 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 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 Aviation Maintenance Certificate of Achievement:

		Units
	[F010/32996/0950.00*/47.0607]	
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
	<b>Total units for the certificate</b>	<b>64</b>



**Aviation Maintenance Technology: Airframe (Certificate)**

This certificate meets requirements for the Federal Aviation Administration (FAA) Airframe Certificate. 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 experience required to become an Airframe or Powerplant technician.

**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 of Achievement:**

[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**

**Aviation Maintenance Technology: Powerplant (Certificate)**

This certificate meets requirements for the Federal Aviation Administration (FAA) Powerplant Certificate. 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 experience required to become an Airframe or Powerplant technician.

**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 of Achievement:**

[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**



## 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:

- Completion of 60 semester units which are eligible for transfer to the California State University, including both of the following:
  - The Intersegmental General Education Transfer Curriculum for STEM or the California State University General Education – Breadth for STEM Requirements\*.
  - 35 units in the major or area of emphasis, as determined by Chaffey College.
- 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:

- Demonstrate skill in scientific thinking, communication, problem solving and experimental methodology.
- Discuss current scientific hypotheses of the evolutionary origins of organismal diversity.
- 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 for Transfer (AS-T) Degree [S066/35060/0401.00/26.0101] Units

#### Required core (13 units):

BIOL 40	Introduction to Cell and Molecular Biology	4
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 35**

	IGETC STEM	CSU GE STEM
General Education	31	33
Total units that may be double-counted	10	10
Elective (CSU transferable) units	4	2
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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:

- Demonstrate skill in scientific thinking, communication, problem solving and experimental methodology
- Discuss current scientific hypotheses of the evolutionary origins of organismal diversity.
- 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:

	Units	
[S065/04755/0401.00/26.0101]		
BIOL 40	Introduction to Cell and Molecular Biology	4
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:

CHEM 76A	Organic Chemistry I	4
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 31-32**



## 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 for Transfer (AS-T) Degree: [S142/36201/0604.20\*/09.0701]

	Units
BRDCAST 3 Introduction to Electronic Media (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**

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>6</b>	<b>6</b>
<b>Elective (CSU transferable) units</b>	<b>11</b>	<b>9</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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
<b>Plus nine units from the following:</b>		
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
<b>Total units for the major</b>		<b>30</b>

## BROADCASTING AND CINEMA CERTIFICATE PROGRAMS

### Motion Picture Production (Certificate)

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 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 of Achievement:

[B001/33195/0612.20*/50.0602]		Units
BRDCAST 70	Postproduction for Broadcasting and Cinema	3
BRDCAST 74	High Definition Cinematography (or CINEMA 80, Producing for Broadcast and Cinema (or CINEMA 96, Internships in Cinema, Television or Radio)	3
CINEMA 20	Screenwriting – Cinema	3
CINEMA 26	Survey of American Cinema	3
CINEMA 30	Beginning Motion Picture Production	3
<b>Total units for the certificate</b>		<b>15</b>

### On-Air Radio Production (Certificate)

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 of Achievement:

[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 (or CINEMA 96, Internships in Cinema, Television or Radio)	3
<b>Total units for the certificate</b>		<b>12</b>

### Post Production Editing (Certificate)

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 of Achievement:

	Units
[B002/33194/0612.20*/50.0602]	
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)	
<b>Total units for the certificate</b>	<b>15</b>

### Screenwriting (Certificate)

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 of Achievement:

	Units
[B003/33226/0604.20*/09.0701]	
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)	
<b>Total units for the certificate</b>	<b>15</b>

### Television and Video Production (Certificate)

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 of Achievement:

	Units
[B004/33193/0604.20*/09.0701]	
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
<b>Total units for the certificate</b>	<b>15</b>



## 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. 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 for Transfer (AS-T) Degree [S076/31737/0505.00\*/52.0201]

		Units
<b>Required (17 units):</b>		
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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>9</b>
<b>Elective (CSU transferable) units</b>	<b>4-5</b>	<b>2-3</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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]

#### Core courses (15-16 units)

	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 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 441 Principles of Leadership	3
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
BUSMKT 410 Marketing Using Social Media	3
BUSMKT 420 Customer Service	3
ECON 1 Introduction to Economics (or ECON 2, Principles of Macroeconomics or ECON 4, Principles of Microeconomics)	3

**Total units for the major 30-33**

## 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.

## 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:

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 30	Personal Finance	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 441	Principles of Leadership	3
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
BUSMKT 410	Marketing Using Social Media	3
BUSMKT 420	Customer Service	3

**Total units for the major 30-32**



## BUSINESS CERTIFICATE PROGRAMS

### 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 of Achievement:

[L075A/20677/0505.00*/52.0201]		Units
BUS 10	Introduction to Business	3
BUS 88	Business Communication	3
BUSMGT 40	Introduction to Management	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 441	Principles of Leadership	3
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
BUSMKT 410	Marketing Using Social Media	3
ECON 1	Introduction to Economics	3
	(or ECON 2, Principles of Macroeconomics or ECON 4, Principles of Microeconomics)	

**Total units for the certificate** 18-20

### International Business (Certificate)

The International Business Program integrates the foundation of international trade, marketing, law, management, and global business practices used in a culturally diverse, global economy. Courses are designed to create technical skills and cultural sensitivity in the dynamic international business environment. This certificate prepares students for occupations such as logistics management, operations management, and export operation management.

#### Program Learning Outcomes:

Upon the successful completion of this certificate, students shall:

1. Examine and consider the social and/or ethical responsibilities of business and business persons.
2. Demonstrate a working knowledge of the functional areas of international business.
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 International Business Certificate of Achievement:

[L085/36090/0508.00*/52.1101]		Units
BUS 61	Introduction to Global Business	3
BUSL 410	International Business Law	3
BUSMKT 405	International Marketing	3

#### Plus three courses from the following:

BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUS 60	Business Ethics	3
BUSL 28A	Business Law I	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	3
	(or ECON 2, Principles of Macroeconomics)	

**Total units for the certificate** 18

In addition, we recommend that students take the following courses: 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 CERTIFICATE PROGRAMS, Cont.

### Marketing (Certificate)

The Marketing Certificate prepares students for entry level marketing positions. The program is designed so students will obtain a working knowledge of the marketing mix concepts of product, price, promotion and distribution in both domestic and international marketplaces.

#### 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 of Career Preparation:

[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

### 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 of Achievement:

[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 30	Personal Finance	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 441	Principles of Leadership	3
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
BUSMKT 410	Marketing Using Social Media	3
BUSMKT 420	Customer Service	3

**Total units for the certificate** 18-19

# 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. The Certificate in Paralegal studies is appropriate for students who have already earned, or are presently earning, a college or university degree in another field of study.

**Program Learning Outcomes:**

- Upon the successful completion of this degree, students should be able to:
1. Demonstrate competence and understanding of basic job skills to enter the paralegal profession.
  2. Have a basic understanding of different career opportunities for paralegals in the business and legal sectors.
  3. Demonstrate legal problem solving skills, supported by appropriate analytical and critical thinking techniques.
  4. Produce professional quality documents of the type used in the legal profession.
  5. Demonstrate effective interpersonal communication and teamwork skills in a collaborative setting.
  6. 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.*

**Major requirements for the 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 405	Legal Document Preparation and Law Office Procedures	3
BUSL 406	Advanced Legal Research and Writing	3

**Plus a minimum of 6 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
BUSL 496ABC	Internships in Paralegal	1-3

**Total units for the major** **30**

**Requirements for the Certificate of Achievement:**

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

**Total units for the certificate** **30**

## Pathway to Law School (Certificate)

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.

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.

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.

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:

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

1. Develop critical thinking skills that help prepare them for success in the study of law.
2. Develop oral communication and argumentation skills that help prepare them for success in the study of law.
3. Develop an understanding of American history and government that help prepare them for success in the study of law.
4. Develop 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 of Achievement:

[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:

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: MANAGEMENT

### Arts Business Management (Certificate)

The Arts Business Management program provides students of the creative industries (those industries that comprise the creative economy, defined as the businesses, organizations, and individuals involved in producing cultural, artistic, and design goods and services) with an introduction to business management, finance and accounting, marketing strategy, and relevant legal issues to assist them in navigating the business side of the creative economy, while also providing business students the opportunity to expand their education into an additional area of the economy. The certificate prepares students for employment in, creation, or management of small business creative industry entities. It is also appropriate for students seeking to enhance their skills as a creative entrepreneur or freelance worker. The Arts Business Management certificate is also stackable with the Small Business Entrepreneur certificate.

#### Program Learning Outcomes:

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

1. Understand the social and ethical responsibilities of business and businesspersons.
2. Demonstrate a working knowledge of the functional areas of small business entrepreneurship in the creative industries (in both for-profit and not-for-profit sectors).
3. Demonstrate the ability to conduct business research, analyze and interpret findings, and convey them both orally and in writing.

#### Requirements for the Arts Business Management Certificate of Achievement:

	Units
ARTMGT 410 Introduction to Arts Management	3
BUSMGT 45 Small Business Ownership and Management	3
BUSMKT 40 Marketing Principles	3
ACCTG 1A Financial Accounting (or ACCTGFS 465, Financial Accounting for Non-Accounting Majors, 3)	4
BUSL 28A Business Law I (or BUSL 435, The Law of Marketing and Business Competition, 3)	3

#### Plus one course from the following:

ARTMGT 420 Introduction to Project Funding	1.5
ARTMGT 430 Introduction to Collection Management	1.5
ARTMGT 440 Creative Careers - Discovering Self-Directed Pathways	1.5
ARTMGT 496AB Arts Business Management Cooperative Education Internship	1-2
<b>Total units for the certificate</b>	<b>16-18</b>

## 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 degree, students shall:

1. Examine and consider the social and/or ethical responsibilities of business and businesspersons.
2. Demonstrate a working knowledge of the functional areas of Facilities 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.

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
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
<b>Total units for the major</b>	<b>28-32</b>

#### Requirements for the Certificate of Achievement:

[L290/36474/0510.00*/52.0203]	Units
Same as the major requirements for the A.S. Degree.	
<b>Total units for the certificate</b>	<b>28-32</b>

## 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]

#### Core courses (15-16 units)

	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 (6-7):

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 441 Principles of Leadership	3
BUSMGT 480 Principles of Supervision	3
BUSMKT 40 Marketing Principles	3
BUSMKT 410 Marketing Using Social Media	3
BUSMKT 420 Customer Service	3

**Total units for the major 30-32**

## 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 of Achievement:

[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
BUSMGT 441 Principles of Leadership	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 480 Principles of Supervision	3
BUSMKT 13 Professional Selling	3
BUSMKT 40 Marketing Principles	3
BUSMKT 410 Marketing Using Social Media	3
BUSMKT 420 Customer Service	3

**Total units for the certificate 21**

## 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:

	Units
[S295/04759/0506.50*/52.0212]	
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
<b>Total units for the major</b>	<b>24</b>

## 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 of Achievement:

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

## 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:

	Units
[S410/14401/0506.30*/52.0204]	
<b>Core courses (15-16 units)</b>	
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 (9 units)

BUSMGT 40 Introduction to Management	3
BUSMGT 441 Principles of Leadership	3
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 30-31**

## 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 of Career Preparation:

[L411/99999/0506.30*/52.0204] (Non-transcripted)	Units
BUSMGT 40 Introduction to Management	3
BUSMGT 44 Introduction to Human Relations	3
BUSMGT 441 Principles of Leadership	3
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** 18

## 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	4
(or SCSCI 10, Statistics for Social Science)	
<b>Total units for the major</b>	<b>30</b>

## 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
<b>Total units for the certificate</b>	<b>27</b>



## BUSINESS TECHNOLOGY

The Business Technology 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 (Certificate)

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 of Achievement:

[L357/35467/0514.00*/52.0401]		Units
BUSTEC 40A	Beginning Computer Keyboarding	3
BUSTEC 60A	Microsoft Office Word - Specialist	3
BUSTEC 62	Microsoft Office Outlook	1.5
BUSTEC 63	Microsoft Office Excel - Comprehensive	3
BUSTEC 455	Fundamentals of English for Business	3
BUSTEC 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
<b>Total units for the certificate</b>		<b>21</b>

### Business Information Worker (BIW) Stage Two (Certificate)

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 of Achievement:

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

### Electronic Health Records Specialist (Certificate)

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 of Achievement:

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

### Inpatient Medical Coder Specialist (Certificate)

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. Demonstrate critical thinking skills to appropriately match and encode diagnoses related to the systems of the human body.
2. Demonstrate critical thinking skills to appropriately match and encode inpatient procedures related to the systems of the human body.
3. Demonstrate ability to differentiate the process and structure to code inpatient procedures vs. outpatient procedures.

#### Requirements for the Inpatient Medical Coder Specialist Certificate of Achievement:

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

### Medical Biller Specialist (Certificate)

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 of Achievement:

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

### Medical Insurance Billing Specialist (Certificate)

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 of Achievement:

[L329/04762/0514.20*/51.0716]	Units
BIOL 30 Beginning Medical Terminology	3
BUSTEC 40B Computer Keyboarding: Speed and Accuracy Development	3
BUSTEC 60A Microsoft Office Word - Specialist	3
BUSTECM 408 Coding of Body Systems for Medical Billing and Coding	3
BUSTECM 410 CPT Current Procedural Terminology	3
BUSTECM 420 Basic ICD-10-CM Coding	3
BUSTECM 430 Intermediate Level ICD-10-CM, ICD-10-PCS Coding	3
BUSTECM 440 Medical Billing, Reimbursement, and Compliance	3
BUSTECM 475 Medical Office Procedures	3

#### Plus three units from the following:

BUSTEC 50 Filing and Records Management	3
BUSTEC 61 Microsoft Office PowerPoint	1.5
BUSTEC 62 Microsoft Office Outlook	1.5
BUSTEC 63 Microsoft Office Excel - Comprehensive	3
BUSTEC 64 Microsoft Office Access - Comprehensive	3
BUSTEC 452 Administrative Financial Bookkeeping	3
BUSTEC 455 Fundamentals of English for Business	3
BUSTEC 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 Applied Technology Department Proficiency Certificate.

### Microsoft Excel (Certificate)

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 of Achievement:

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

#### Plus three units from the following:

BUSTEC 50 Filing and Records Management	3
BUSTEC 60A Microsoft Office Word – Specialist	3
BUSTEC 61 Microsoft Office PowerPoint	1.5
BUSTEC 400 Job Search and Interviewing Techniques	1.5

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

### Microsoft Office (Certificate)

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 of Achievement:

[L354/15318/0514.00*/52.0401]	Units
BUSTEC 40B Computer Keyboarding: Speed and Accuracy Development	3
BUSTEC 60A Microsoft Office Word – Specialist	3
BUSTEC 60B Microsoft Office Word – Expert	3
BUSTEC 61 Microsoft Office PowerPoint	1.5
BUSTEC 62 Microsoft Office Outlook	1.5
BUSTEC 63 Microsoft Office Excel – Comprehensive	3
BUSTEC 64 Microsoft Office Access – Comprehensive	3
BUSTEC 400 Job Search and Interviewing Techniques	1.5
BUSTEC 410 Microsoft Office Publisher – Comprehensive	3
BUSTEC 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 Applied Technology Department Proficiency Certificate.

**Total units for the certificate 25.5**

**Microsoft Word (Certificate)**

The Microsoft Word Certificate of Achievement offers in-depth competency in utilizing current business word processing software. This certificate prepares students for employment requiring expertise in Microsoft Word in settings such as educational institutions, government agencies, small businesses, legal services, hospitals, non-profit organizations, and city/county offices.

**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 of Achievement:**

[B352/36493/0514.00*/52.0401]	Units
BUSTEC 40B Computer Keyboarding: Speed and Accuracy Development	3
BUSTEC 60A Microsoft Office Word – Specialist	3
BUSTEC 60B Microsoft Office Word – Expert	3
BUSTEC 455 Fundamentals of English for Business	3

**Plus one course from the following:**

BUSTEC 400 Job Search and Interviewing Techniques	1.5
BUSTEC 460 Proofreading: Text-Editing Skills	3
<b>Total units for the certificate</b>	<b>13.5-15</b>

**Outpatient Medical Coder Specialist (Certificate)**

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, surgicenters, 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 of Achievement:**

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

**Total units for the certificate** **18**

## PROFESSIONAL ADMINISTRATIVE MANAGEMENT

The Professional Administrative Management Associate Degree and Certificate of Achievement programs prepare students for business administrative 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
BUSTEC 40B Computer Keyboarding: Speed and Accuracy Development	3
BUSTEC 60A Microsoft Office Word – Specialist (or BUSTEC 60B, Microsoft Office Word – Expert)	3
BUSTEC 62 Microsoft Office Outlook	1.5
BUSTEC 63 Microsoft Office Excel - Comprehensive	3
BUSTEC 64 Microsoft Office Access - Comprehensive	3
BUSTEC 400 Job Search and Interviewing Techniques	1.5
BUSTEC 455 Fundamentals of English for Business (or BUS 88, Business Communication)	3
BUSTEC 471 Administrative Office Management	3
<b>Plus nine units from the following:</b>	
BUSTEC 50 Filing and Records Management	3
BUSTEC 60B* Microsoft Office Word – Expert (if not used above)	3
BUSTEC 61 Microsoft Office Word PowerPoint	1.5
BUSTEC 410 Microsoft Office Publisher – Comprehensive	3
BUSTEC 452 Administrative Financial Bookkeeping	3
BUSTEC 460 Proofreading: Text-Editing Skills	3
BUSTEC 470 Office Systems and Procedures	3
<b>Total units for the major</b>	<b>30</b>

### Professional Administrative 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 Administrative Management Certificate of Achievement:

[L321/20690/0514.40*/52.0204]	Units
Same as the major requirements for the A.S. Degree.	
<b>Total units for the certificate</b>	<b>30</b>

### Professional Office Skills (Certificate)

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 of Achievement:

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

## CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH (CSU GE BREADTH) (Certificate)

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:**

<b>AREA A</b>	9 units required
<b>AREAS B, C, &amp; D</b>	9 units is required in each area
<b>AREA E</b>	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. Courses count in one area only.**

### Program Learning Outcomes:

Upon the successful completion of this certificate, 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 CSU GE Certificate of Achievement:

[T001/30503/4901.10/24.0101]

AREA A	ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (Minimum 9 units)	Units
		9
<b>A1</b>	<b>Oral Communication</b> (one course) Communication Studies 2, 4, 6, 8	
<b>A2</b>	<b>Written Communication</b> (required) English 1A	
<b>A3</b>	<b>Critical Thinking</b> (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, 27, 35  
Chemistry 7, 8, 9, 10, 12<sup>SP07</sup>, 24A, 24B, 70, 76A, 76B  
Earth Science 1, 1 & 1L, 5, 5 & 5L  
Geography 2, 4, 4 & 5, 6<sup>SP05</sup>  
Geology 1, 2  
Physical Science 10  
Physics 5, 5 & 6, 20A, 20B, 30A, 30B, 44<sup>SP07</sup>, 45, 46, 47

#### B2 Life Science

Anthropology 1, 1 & 1L  
Biology 1, 2, 3, 10, 12, 20, 22, 23, 23 & 23L, 40, 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

Accounting and Financial Services 30  
Computer Science 4  
Mathematics 4, 25, 31, 60, 61, 65A, 65B, 75, 81<sup>FA03</sup>, 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, 15<sup>FA15</sup>, 16, 18, 20, 44, 50  
Art History 3, 5, 7, 9, 11, 19  
Cinema 25, 26  
Communication Studies 14  
Dance 1, 12<sup>FA19</sup>  
Fashion Design 20, 45  
Interior Design 11, 12  
Music 2A, 2B, 4, 5, 21, 22<sup>SP06</sup>, 26  
Photography 1, 7<sup>FA18</sup>, 10  
Theatre Arts 1, 4, 5, 10, 12

#### C2 Humanities

American Sign Language 1<sup>FA03</sup>, 2, 3, 4  
Arabic 1, 2, 3, 4  
Chinese 1, 2, 3, 4, 18  
English 1C, 7A<sup>SP18</sup>, 7B<sup>SP18</sup>, 7D<sup>SP18</sup>, 7E<sup>SP18</sup>, 32, 33, 68, 70A, 70B, 73<sup>FA20</sup>, 74, 75A, 75B, 76, 77, 79, 80A, 80B, 81  
French 1, 2  
History 1, 2, 4<sup>FA03</sup>, 7, 12, 16<sup>FA03</sup>, 20, 21<sup>FA11</sup>, 25, 37, 40<sup>SP06</sup>  
Humanities 5, 6, 20  
Philosophy 70, 71<sup>FA17</sup>, 72, 73, 77, 78, 79, 80, 81, 82  
Spanish 1, 2, 3, 3SS, 4, 4SS, 8, 9, 13, 14

**AREA D SOCIAL SCIENCES 9**

*(Minimum 9 units) Choose courses from at least two disciplines.*

American Sign Language 18  
 Anthropology 2, 3  
 Business: Legal Studies 10<sup>FA19</sup>  
 Child Development and Education 2, 4, 6  
 Communication Studies 12, 74, 76, 78  
 Criminal Justice 1<sup>FA03</sup>, 55<sup>FA17</sup>, 58<sup>FA17</sup>  
 Economics 1, 2, 4, 7<sup>FA17</sup>, 8  
 Geography 1, 3, 11<sup>SP06</sup>  
 Gerontology 11, 18, 22, 23  
 History 1, 2, 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16, 17, 18, 19, 20, 21<sup>FA11</sup>,  
 37, 40<sup>SP06</sup>, 50, 51, 70, 71  
 Kinesiology Lecture 18<sup>FA19</sup>  
 Political Science 1, 2, 3<sup>FA12</sup>, 4, 7, 10, 21<sup>FA12</sup>, 25, 32<sup>FA12</sup>  
 Psychology 1, 20, 25, 65, 80<sup>FA20</sup>  
 Sociology 10, 14, 15<sup>SP05</sup>, 16<sup>SP07</sup>, 18, 25, 26, 30, 32, 33, 70, 80<sup>FA15</sup>

**AREA E LIFELONG LEARNING AND SELF-DEVELOPMENT 3**

*(Minimum 3 units) Veterans may meet Area E requirements via DD-214*

Biology 14  
 Child Development and Education 2<sup>FA05</sup>  
 Gerontology 22  
 Guidance 3  
 Kinesiology Lecture 15, 18<sup>FA19</sup>, 32<sup>FA19</sup> (2 units) plus any 1 unit  
 KINACT course  
 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 CSU GE 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.



## ASSOCIATE IN SCIENCE IN CHEMISTRY FOR TRANSFER

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.

The goals and outcomes for the Chemistry major include the following:

1. Prepare students for seamless transfer to a California State University to major in chemistry.
2. Prepare students to complete their baccalaureate degree in chemistry.

To obtain the Associate in Science in Chemistry for Transfer, students must complete the following:

1. Completion of 60 semester units which are eligible for transfer to the California State University, following the Intersegmental General Education Transfer Curriculum for STEM (IGETC for STEM), 36 units of which are 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 the transferable general education pattern, IGETC for STEM is presumed. Permissible maximum units for the major may vary depending on the units necessary for completion of the general education requirement and the extent of double-counting permitted.

### 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 for Transfer (AS-T) Degree: [S086/37518/1905.00/40.0501]

	Units
<b>Required (36 units):</b>	
CHEM 24A General Chemistry I	5
CHEM 24B General Chemistry II	5
CHEM 76A Organic Chemistry I	4
CHEM 76B Organic Chemistry II	4
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
<b>Total units for the major</b>	<b>36</b>

	IGETC	CSU GE
<b>General Education</b>	<b>31</b>	<b>33</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>9</b>
<b>Elective (CSU transferable) units</b>	<b>2</b>	<b>0</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## UNIVERSITY OF CALIFORNIA TRANSFER PATHWAY: CHEMISTRY

The University of California (UC) Transfer Pathway for Chemistry degree curriculum provides students a basis for understanding the physical concepts and skills required for attainment of upper division status as a Chemistry major at a four-year college or university.

The student that earns this degree has completed lower division preparation for a Chemistry major at a UC and should be able to graduate with a Bachelor's degree within two years attending at full time status after transfer. After earning this degree and transferring to a UC, students will be expected to complete two more courses in IGETC Area 3 and two more courses in IGETC Area 4 to fulfill UC general education requirements. Successful completion of the UC Transfer Pathway Chemistry degree with a minimum GPA of 3.5 guarantees the student admission into the University of California system (but does not guarantee acceptance to a particular campus) to pursue a baccalaureate degree in Chemistry. Students will still be competitive at several UC campuses with a GPA below the 3.5 threshold, and all students who complete the degree are encouraged to apply to the UC.

To obtain the UC Transfer Pathway Physics degree, students must complete the following:

- 50 units of major preparation requirements.
- 16-20 units of IGETC general education requirements.

### Program Learning Outcomes:

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

1. Transfer successfully to a chemistry program at a UC, CSU, or private transfer institution.
2. Apply chemical and physical concepts, symbolism, language, atomic structure and mathematical skills to critical thinking and hypothesis driven methods of scientific inquiry.
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 propose laboratory techniques.
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.

### Major requirements for the University of California Transfer Pathway Associate in Science Degree

[S087/39317/1905.00/40.0501] Units

Required (50 units)		Units
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
CHEM 76A	Organic Chemistry I	4
CHEM 76B	Organic Chemistry II	4
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
MATH 85	Differential Equations	4
PHYS 45	Physics for Scientists and Engineers I	5
PHYS 46	Physics for Scientists and Engineers II	5
PHYS 47	Physics for Scientists and Engineers III	5

### General Education IGETC Area 1: English Composition Requirements (6 units)

ENGL 1A	Composition	3
ENGL 1B	Advanced Composition and Critical Thinking	3

### Additional General Education Requirements (10-14 units)

IGETC Area 3: Arts and Humanities	3
IGETC Area 4: Social and Behavioral Sciences	3
IGETC Area 5B: Biological Sciences	4
IGETC Area 6: Language Other Than English	0-4

**Total units for the major 66-74**

MATH 81 Linear Algebra, 4, is recommended pre-transfer for the following UCs: Berkeley, Davis, Merced, and Santa Barbara. Transfer students will not be negatively affected in competitiveness for admission if completed post-transfer as needed.



## 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](http://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 <https://www.chaffey.edu/childdevelopment/index.php> 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:

	Units
[S090/04797/1305.00*/19.0709]	
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
<b>Total units for the major</b>	<b>27</b>



## 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 for Transfer (AS-T) Degree:

	Units
[S091/31999/1305.00*/19.0709]	
<b>Required:</b>	
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
<b>Total units for the major</b>	<b>24</b>

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>6</b>	<b>9</b>
<b>Elective (CSU transferable) units</b>	<b>5</b>	<b>6</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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
<b>Total units for the major</b>		<b>19</b>



## 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 for Transfer (AA-T) Degree:

[A096/30702/1506.00/09.0101] Units

<b>Core (3 units)</b>		
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	CSU GE
General Education	37	39
<b>Total units that may be double-counted</b>	<b>12</b>	<b>15</b>
<b>Elective (CSU transferable) units</b>	<b>16-17</b>	<b>17-18</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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) provide skills to upgrade current skills to 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.

The A.S. degree includes coursework in General Education (English composition, arts and humanities, mathematics and natural sciences, and the social sciences) that provide a strong foundation in the major areas of human study and endeavor, as well as, a greater understanding of and appreciation for the world, its people, and the modern economy. In addition, these general education courses will enhance communication skills, improve critical thinking skills and help with a professional career in Computer Information Systems.

### 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

#### Core courses (24 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	Computer Security Basics	1.5
CIS 421	Social Media Technology	1.5
CIS 460	Fundamentals of Coding	1.5
CISHDSP 40	Microcomputer Hardware	3
CISPROG 1	Introduction to Computer Programming	3
CISIWEB 72	Web Page Development and Publishing	3
CISIWEB 424	WordPress Web Development	1.5

Plus a professional emphasis selection from the options below (minimum of 12 units):

#### Cisco Networking:

CISCO 1	Cisco Networking I	4
CISCO 2	Cisco Networking II	4
CISCO 3	Cisco Networking III	4
CISCO 4	Cisco Networking IV	4
CISCO 415	Cisco Networking V	4
CISCO 416	Cisco Networking VI	4
CISCO 417	Cisco Networking VII	4
CISCO 418	Cisco Networking VIII	4
CISCO 419	Cisco Networking IX	4
CISCO 420	Cisco Networking X	4

#### Computer Science:

CISPROG 1	Introduction to Computer Programming	3
CISPROG 5	Programming with Python	3
COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3
COMPSCI 3	Computer Architecture and Organization	3
COMPSCI 401	Introduction to Virtual and Augmented Reality	3

#### Cyber Security:

CISCO 416	Cisco Internetworking VI	4
CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 70	Virtualization, Cloud Essentials and Amazon Web Services (AWS)	4

#### Data Analytics:

BUS 49	Business Decisions Using Basic Quantitative Tools	3
BUSTEC 63	Microsoft Office Excel - Comprehensive	3
CIS 15	Introduction to Database & Database Management Systems	3
CISPROG 5	Programming with Python	3
CISPROG 6	Python Data Analytics	3
SCSCI 10	Statistics for Social Science	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

#### Networking:

CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 413	TCP/IP	1.5
CISNTWK 435	Introduction to the Linux Operating System	3

#### Programming:

CISIWEB 74	Creating Dynamic Web Content using Javascript	3
CISPROG 5	Programming with Python	3
COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3

#### Social Media:

ART 82	Introduction to Digital Media (or ART 83, Web Design)	4
BUSMKT 55	Advertising	3
COMSTD 12	Mass Communication and Society	3
JOUR 11	Multimedia Reporting (or JOUR 30, Student Media Practicum I)	3
PHOTO 7	Introduction to Digital Photography	4

#### Technology and Innovation:

CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 70	Virtualization, Cloud Essentials and Amazon Web Services (AWS)	4
CISNTWK 471	AWS Academy Cloud Computing Architecture	4
COMPSCI 401	Introduction to Virtual and Augmented Reality	3

#### Total units for the major

36

## Computer Information Systems (Certificate)

### 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 of Achievement:

[L100/20697/0702.00\*/11.0103] Units  
Core requirements, **plus a professional emphasis selection from the options below (minimum of 12 units):**

#### 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

#### Computer Science:

CISPROG 1	Introduction to Computer Programming	3
CISPROG 5	Programming with Python	3
COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3
COMPSCI 3	Computer Architecture and Organization	3
COMPSCI 401	Introduction to Virtual and Augmented Reality	3

#### Cyber Security:

CISCO 416	Cisco Internetworking VI	4
CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 70	Virtualization, Cloud Essentials and Amazon Web Services (AWS)	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

#### Networking:

CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 413	TCP/IP	1.5
CISNTWK 435	Introduction to the Linux Operating System	3

#### Programming:

CISIWEB 74	Creating Dynamic Web Content using Javascript	3
CISPROG 5	Programming with Python	3
COMPSCI 1	Programming Concepts and Methodology I	3
COMPSCI 2	Programming Concepts and Methodology II	3

#### Social Media:

ART 82	Introduction to Digital Media (or ART 83, Web Design)	4
BUSMKT 55	Advertising	3
COMSTD 12	Mass Communication and Society	3
JOUR 11	Multimedia Reporting (or JOUR 30, Student Media Practicum I)	3
PHOTO 7	Introduction to Digital Photography	4

#### Technology and Innovation:

CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 70	Virtualization, Cloud Essentials and Amazon Web Services (AWS)	4
CISNTWK 471	AWS Academy Cloud Computing Architecture	4
COMPSCI 401	Introduction to Virtual and Augmented Reality	3

**Total units for the certificate** 36

## Computer Foundations (Certificate)

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 of Career Preparation:

[E118/99999/0702.00*/11.0103] ( <b>Non-transcripted</b> )	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 (Certificate)

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 of Achievement:

[B124/36339/0707.10*/11.0201]	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) (Certificate)

The Computer Support Technician Certificate of Achievement prepares the student for positions in industry supporting microcomputer users in hardware and software areas as well as to prepare for the Comp TIA A+ examination. Coursework includes an introduction to computer information systems, Microsoft Windows, computer networks, coding, the basics of computer security and microcomputer hardware. Successful completion of this certificate prepares the student for the Comp TIA A+ examination. This industry-administered exam is designed to certify the competency of entry-level PC computer service professionals in installing, maintaining, customizing, and operating personal computers. The A+ certification is sponsored by the Computing Technology Industry Association (CompTIA). Successful completers of this certificate will be prepared for entry level positions such as IT support technicians, computer technicians, and information systems help desk technicians.

### 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 of Achievement:

[B118/36771/0708.20*/11.1001]	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 Computer Security Basics	1.5
CIS 460 Fundamentals of Coding	1.5
CISHDSP 40 Microcomputer Hardware	3
<b>Total units for the certificate</b>	<b>15</b>

## 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 Examination 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 Examination Preparation Level I Certificate of Career Preparation:

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

### Cisco CCNA Examination 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 Examination Preparation Level II Certificate of Career Preparation:

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

### Cisco CCNA Examination 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 Examination Preparation Level III Certificate of Career Preparation:

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

### Cisco CCNA Examination 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 Examination Preparation Level IV Certificate of Achievement:

[L454/15533/0708.10*/11.0901]	Units
CCNA Exam Prep Level III Certificate, or CISCO 3 or equivalent, <b>plus:</b>	0-15
CISCO 4 Cisco Internetworking IV	4
<b>Total units for the certificate</b>	<b>4-19</b>

### Cisco CCNA Security Examination 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 Examination Security Preparation Certificate of Achievement:

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

## CISCO CCNP EXAMINATION PREPARATION, LEVELS V & VII-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 Examination 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 Examination Preparation Level V Certificate of Achievement:

[L455/15534/0708.10*/11.0901]	Units
CISCO 4 or equivalent, or passing the Cisco CCNA examination, <b>plus:</b>	0-19
CISCO 415 Cisco Internetworking V	4
<b>Total units for the certificate</b>	<b>4-23</b>

### Cisco CCNP Examination 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 Examination Preparation Level VII Certificate of Achievement:

[T457/15534/0708.10*/11.0901]	Units
CISCO 4 or equivalent, or passing the Cisco CCNA examination, <b>plus:</b>	0-27
CISCO 417 Cisco Internetworking VII	4
<b>Total units for the certificate</b>	<b>4-31</b>

### Cisco CCNP Examination 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 Examination Preparation Level VIII Certificate of Achievement:

[T458/15534/0708.10*/11.0901]	Units
CISCO 4 or equivalent, or passing the Cisco CCNA examination, <b>plus:</b>	0-31
CISCO 418 Cisco Internetworking VIII	4
<b>Total units for the certificate</b>	<b>4-35</b>

### Cisco CCNP Examination 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 Examination Preparation Level IX Certificate of Achievement:

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

### Cyber Security Analyst (Certificate)

This certificate is where students can lay the foundation for a career in Cyber Security starting with the core competencies in Computer Information Systems and Cyber Security. Coursework includes networking, systems administration, and core Cyber Security topics. In addition to gaining a Chaffey Certificate, earning credits towards an accredited certificate and A.S. degree will prepare students to take five industry recognized certification exams: Network+, Network Pro, Client Pro, Server+ and Security+.

#### Program Learning Outcomes:

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

1. Analyze, apply, implement, and support multiple Cyber Security concepts and techniques to secure organizational information and systems. Core competencies: CTIC, PACD.
2. Apply networking, systems, access controls, and defensive concepts to design, implement and maintain security infrastructure and systems to ensure confidentiality of data. Core competencies: COMM, CTIC, PACD.
3. Identify and troubleshoot computer, networking, and redundancy issues to ensure availability of data. Core competencies: COMM, CTIC, PACD.
4. Identify and troubleshoot computer, networking and infrastructure and security issues in order to ensure integrity of data. Core competencies: COMM, CTIC, PACD.

#### Requirements for the Cyber Security Analyst Certificate of Achievement:

[B481/37641/0708.00*/11.1003]	Units
CIS 1 Introduction to Computer Information Systems	3
CIS 4 Fundamentals of Microsoft Windows	1.5
CIS 50 Introduction to Computer Networks	3
(or CISCO 1, Cisco Internetworking I, 4)	
CISNTWK 11 Microsoft Network Server	3
CISNTWK 12 Introduction to Network Security Administration	3
<b>Total units for the certificate</b>	<b>13.5-14.5</b>

## Cyber Security Defender (Certificate)

This certificate will build upon the foundations of the Analyst Certificate and equips the student with the skill set to defend an organization in cyber space. The curriculum will cover the tools, techniques and advanced topics in ethical hacking. Additionally, the coursework will introduce programming, automation, cyber ops, and legal aspects of Cyber Security. This accredited certificate earns credits towards an A.S. Degree in Cyber Security and prepares students to take six industry certification exams: Network+, Network Pro, Client Pro, Server+, Security+ and Ethical Hacking.

### Program Learning Outcomes:

- Upon the successful completion of this certificate, students should be able to:
1. Analyze, apply, implement, and support multiple Cyber Security concepts and techniques to secure organizational information and systems. Core competencies: CTIC, PACD.
  2. Apply networking, systems, access controls, and defensive concepts to design, implement and maintain security infrastructure and systems to ensure confidentiality of data. Core competencies: COMM, CTIC, PACD.
  3. Identify and troubleshoot computer, networking, and redundancy issues to ensure availability of data. Core competencies: COMM, CTIC, PACD.
  4. Identify and troubleshoot computer, networking and infrastructure and security issues in order to ensure integrity of data. Core competencies: COMM, CTIC, PACD.

### Requirements for the Cyber Security Defender Certificate of Achievement:

		Units
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Fundamentals of Microsoft Windows	1.5
CIS 50	Introduction to Computer Networks (or CISCO 1, Cisco Internetworking I, 4)	3
CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
COMPSCI 1	Programming Concepts and Methodology I	3
<b>Total units for the certificate</b>		<b>19.5-20.5</b>

## CYBER SECURITY PROFESSIONAL

This degree will help students enter the dynamic, opportunity filled, and high paying career of Cyber Security. This degree starts by introducing the core topics within Computer Information Systems, Computer Science and Cyber Security. After building a strong foundation, students learn advanced Cyber Security topics using hands-on labs and applications. Advanced topics include security tools, cyber ops, cloud computing, automation and advanced ethical hacking techniques. This will equip students with the skills needed to defend an organization from cyber-attacks. This curriculum prepares students to take many industry certification exams such as: Network+, Network Pro, Client Pro, Server+, Cloud+, Security+, CySA+, Ethical Hacking, the Computer Hacking Forensic Investigator, Amazon AWS certifications and more.

### Program Learning Outcomes:

- Upon the successful completion of this degree, students should be able to:
1. Analyze, apply, implement, and support multiple Cyber Security concepts and techniques to secure organizational information and systems. Core competencies: CTIC, PACD.
  2. Apply networking, systems, access controls, and defensive concepts to design, implement and maintain security infrastructure and systems to ensure confidentiality of data. Core competencies: COMM, CTIC, PACD.
  3. Identify and troubleshoot computer, networking, and redundancy issues to ensure availability of data. Core competencies: COMM, CTIC, PACD.
  4. Identify and troubleshoot computer, networking and infrastructure and security issues in order to ensure integrity of data. Core competencies: COMM, CTIC, PACD.

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
[S483/37643/0708.00*/11.1003]		
CIS 1	Introduction to Computer Information Systems	3
CIS 4	Fundamentals of Microsoft Windows	1.5
CIS 50	Introduction to Computer Networks (or CISCO 1, Cisco Internetworking I, 4)	3
CIS 65	Digital Forensics Fundamentals (or CISNTWK 471, AWS Academy Cloud Computing Architecture, 4)	3
CISNTWK 11	Microsoft Network Server	3
CISNTWK 12	Introduction to Network Security Administration	3
CISNTWK 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 25	Cyber Security Operations & Analysis	3
CISNTWK 70	Virtualization, Cloud Essentials and Amazon Web Services (AWS) (or CISCO 416, Cisco Internetworking VI, 4)	4
COMPSCI 1	Programming Concepts and Methodology I	3
<b>Total units for the major</b>		<b>29.5-31.5</b>

### Network Specialist (Certificate)

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 of Achievement:

		Units
[L475/15535/0708.10*/11.0901]		
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 20	Introduction to Cybersecurity: Ethical Hacking	3
CISNTWK 413	TCP/IP	1.5
<b>Total units for the certificate</b>		<b>24</b>

### Programming Foundations (Certificate)

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 of Achievement:

[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 (Certificate)

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 of Career Preparation:

[E127/99999/0702.10*/11.0601] ( <i>Non-transcripted</i> )	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

### Social Media Technician (Certificate)

Social media technicians communicate with the public through platforms that allow users to create and share content online. They run their employers' social media accounts, working to build a brand's reputation. These workers post content - such as images, text, or videos. The Social Media Technician certificate provides a foundation in the technology and use of current and emerging social media platforms (i.e., Facebook, Twitter, Instagram, etc.). Completing this program will provide students a foundation for entry level positions or employment advancement in a number of positions that utilize or specialize in social media, including roles in marketing, public relations, blogging, and information technology.

#### Program Learning Outcomes:

- Upon the successful completion of this certificate, students should be able to:
1. Demonstrate knowledge of the software, hardware, and networking principles applied to the Internet.
  2. Describe and evaluate the use and technology of social media including security, privacy, and ethics.
  2. Create and use various forms of social media.

#### Requirements for the Social Media Technician Certificate of Achievement:

[L120/36856/0702.00*/11.0103]	Units
CIS 68 Internet Technologies	1.5
CIS 421 Social Media Technology	1.5
CISIWEB 72 Web Page Development and Publishing	3
CISIWEB 424 WordPress Web Development	1.5
BUSMKT 55 Advertising	3
COMSTD 12 Mass Communication and Society	3
PHOTO 7 Introduction to Digital Photography	4
JOUR 11 Multimedia Reporting	3
	(or JOUR 30, Student Media Practicum I)
ART 82 Introduction to Digital Media	4
	(or ART 83, Web Design)

**Total units for the certificate** 24.5

### Web Page Developer (Certificate)

The Web Page Developer certificate prepares students for entry-level positions developing internet and intranet web pages using the languages and tools available for development.

#### 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 of Career Preparation:

[L108/99999/0709.00*/11.1004] ( <i>Non-transcripted</i> )	Units
CIS 1 Introduction to Computer Information Systems	3
CIS 68 Internet Technologies	1.5
CIS 460 Fundamentals of Coding	1.5
CISIWEB 72 Web Page Development and Publishing	3
CISIWEB 74 Creating Dynamic Applications using Javascript	3
CISIWEB 424 WordPress Web Development	1.5

**Total units for the certificate** 13.5





## ASSOCIATE IN SCIENCE IN COMPUTER SCIENCE FOR TRANSFER

The Associate in Science in Computer Science for Transfer degree will prepare students 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, which include areas such as representational computation, programming languages, algorithmic modeling, and software design, testing and development. Students in the Computer Science program will study and apply their knowledge of mathematics, physics, and logic to solve a variety of problems using current technology. Courses include programming languages and concepts, Systems Analysis, Mathematics, Physics, Computer Hardware, and Data Structures.

The Associate in Science in Computer Science for Transfer degree 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 CSU to complete their bachelor's degree. Successful completion of the transfer degree in Computer 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 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 CSU 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 (AS-T) Degree** [S103/32748/0706.00/11.0701]

		Units
<b>Required (30 units):</b>		
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

<b>Total units for the major</b>	<b>30</b>
	<b>IGETC</b>
<b>General Education</b>	<b>37</b>
<b>Total units that may be double-counted</b>	<b>7</b>
<b>Elective (CSU transferable) units</b>	<b>0</b>
<b>Total units required for the degree</b>	<b>60</b>

## 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.



### 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 for Transfer (AS-T) Degree: [S133/31248/2105.00\*/43.0107]

		Units
<b>Core (6 units)</b>		
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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>12</b>
<b>Elective (CSU transferable) units</b>	<b>13-14</b>	<b>14-15</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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

## CRIMINAL JUSTICE CERTIFICATE PROGRAMS

### 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 of Achievement:

[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.

### Requirements for the Criminal Justice Certificate of Achievement:

[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

## CRIMINAL JUSTICE CERTIFICATE PROGRAMS, Cont.

### Homeland National Security (Certificate)

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 of Achievement:

[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 of Achievement:

[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 10	Introduction to Homeland Security	3

#### Plus six units from the following:

BUSMGT 42	Human Resource Management	3
BUSMGT 441	Principles of Leadership	3
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

The Culinary Arts A.S. degree prepares students for the professional food industry. Training focuses on the fundamentals of classical and modern cooking techniques, world cuisine, and fusion cooking, including baking, menu development, and food safety. Students who successfully complete this degree will be proficient in monitoring sanitation practices to ensure that employees follow standards and regulations, checking the quality of raw or cooked food products to ensure that standards are met and estimating amounts and costs of required supplies, such as food and ingredients. Cooking, preparing and garnishing is a focus of the degree.

The Culinary Arts A.S. degree prepares students to continue their studies in Culinary Arts, as well as advance in the workforce. To become a well-rounded person capable of fully participating in society and the modern economy, the student will need a strong foundation in the major areas of human study and endeavor. This A.S. degree also includes coursework in General Education. Entry-level courses in General Education (arts and humanities, mathematics and natural sciences, and the social sciences) can help you gain a greater understanding of and appreciation for the world and its people. These general education courses will enhance communication skills, improve critical thinking skills and help with a professional career in culinary arts.

### Program Learning Outcomes:

Upon the successful completion of this degree, 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.*

### **Major requirements for the 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	Food and Beverage Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 482	Industry Internship: Hospitality Management	1
<b>Total units for the major</b>		<b>30</b>

## PROFESSIONAL BAKING AND PATISSERIE

The Professional Baking and Patisserie A.S. degree provides a hands-on experiential foundation in the baking and pastry arts, including laminated dough, occasional cakes, cake design, artisan breads, confectionary, production desserts, advanced baking principles, menu planning, and café style savory foods. Coursework includes principles of food preparation, introduction to baking, advanced professional baking, artisan breads, cake decorating, pastry art, and chocolates, and sanitation, safety and equipment management, and coursework in General Education. These general education courses will enhance communication skills, improve critical thinking skills and help with a professional career in baking and patisserie. The Professional Baking and Patisserie degree is designed to prepare students for a career in the baking sector of culinary arts and/or to transfer to a CSU to complete a four-year degree.

### Program Learning Outcomes:

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

1. Demonstrate the ability to work as an effective member of a team.
2. Perform a sequence of tasks assigned by a chef or food service supervisor that utilize industry practices.
3. Perform food preparation following the required sanitation and safety standards.
4. Demonstrate the proper equipment and facility sanitation required for clean-up.

*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:**

[S244/39410/1306.30*/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 441	Advanced Professional Baking	4
CUL 443	Artisan Breads	4
CUL 445	Cake Decorating and Pastry Art	3
<b>Total units for the major</b>		<b>24</b>

## CULINARY ARTS CERTIFICATE PROGRAMS

### Culinary Arts (Certificate)

The Culinary Arts Certificate of Achievement prepares students for the professional food industry. Training focuses on the fundamentals of classical and modern cooking techniques, world cuisine, and fusion cooking, including baking, menu development, and food safety. Students who successfully complete this degree will be proficient in monitoring sanitation practices to ensure that employees follow standards and regulations, checking the quality of raw or cooked food products to ensure that standards are met and estimating amounts and costs of required supplies, such as food and ingredients. Cooking, preparing and garnishing is a focus of the program.

#### 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 of a team.
2. Perform a sequence of tasks assigned by a chef or food service supervisor that utilize industry practices.
3. Perform food preparation following the required sanitation and safety standards.
4. Demonstrate the proper equipment and facility sanitation required for clean-up.
5. Develop the capacities of analysis, critical reflection and problem solving skills to anticipate the needs of food service operations.
6. Communicate effectively with fellow workers, supervisors and guests.

#### Requirements for the Culinary Arts Certificate of Achievement:

[L255/07398/1306.30\*/12.0500]

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

Units

**Total units for the certificate**

**30**

### 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. Observe safe and sanitary practices in the professional kitchen.
2. Practice professional standards in regards to baking, including breads, cakes and patisseries.
3. Demonstrate safe and professional standards involved in food preparation.

#### Requirements for the Professional Baking and Patisserie Certificate of Achievement:

[L244/36340/1306.30\*/12.0500]

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

Units

**Total units for the certificate**

**24**

## 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:

	Units
[A115/04781/1008.00/50.0301]	
DANCE 1 Survey of Dance	3
DANCE 7A Ballet IA	1
DANCE 7B Ballet IB	1
DANCE 8A Ballet IIA	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 25 Dance Conditioning and Somatic Techniques	2
DANCE 30A Tap Dance IA	1
DANCE 40A Modern Dance IIA	1
DANCE 50A Jazz Dance IIA	1
<b>Plus two courses from the following:</b>	
DANCE 2 Theatrical Dance	3
DANCE 42 Dance Production I	3
DANCE 450 Student Choreography for Performance	0.75
THEATRE 50 Main Stage Production Workshop - Rehearsal and Performance	3
<b>Plus two courses from the following:</b>	
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
DANCE 452 Student Choreography for Performance II	0.75
<b>Total units for the major</b>	<b>20.5-27</b>

## DENTAL ASSISTING

The Dental Assisting Program is accredited by the American Dental Association's Commission on Dental Accreditation and approved by the Dental Board of California. 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 (CRDA). Graduates are eligible for employment in private dental practices, clinics, and hospitals as assistants, technicians and dental practice management positions.

The A.S. degree is designed for those students who wish to transfer to complete a baccalaureate degree or become a well-rounded person capable of fully participating in society and the modern economy. The student will need a strong foundation in the major areas of human studies and endeavor. This A.S. degree also includes coursework in General Education. entry-level courses in General Education (arts, humanities, mathematics and natural sciences, and the social sciences) can help you gain a greater understanding of and appreciation for the world and its people. These general education courses will enhance communication skills, improve critical thinking skills, and help with a professional career in Dental Assisting.

### Notes:

- Applicants must be a high school graduate, pass the GED test, pass the High School Proficiency examination, or have an Associates Degree or higher. International transcripts must have AERC, IERF or approved agency evaluation.
- All courses required for the A.S. degree must be completed with a minimum grade of C.
- The following are required before entering the Dental Program:
  - completion of a health examination with required immunizations;
  - have a current cardiopulmonary resuscitation (CPR) card;
  - pass a background check.
- The student must have transportation to the clinical facilities.
- The Dental Assisting Program must be completed within a three-year period.
- 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.
- Candidates for the RDA Exam will complete fingerprinting.
- The Dental Assisting program has adopted policies and procedures on preventing transmission of blood-borne pathogens based upon CDC Guidelines. Compliance with these policies and procedures are an ethical obligation and responsibility of all participants in delivery of care in the Chaffey Dental Assisting Program.

### Program Learning Outcomes:

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

- Obtain employment in the dental profession or continue their education towards a degree.
- Critically think, apply, and anticipate needs within dental applications and procedures.
- Pass the Registered Dental Assistant (RDA) examination.
- 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.
- 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:

[S121/37119/1240.10*/51.0601]		Units
DENTAL 405	Basic Dental Sciences	3
DENTAL 415	Dental Chairside Skills I	2.5
DENTAL 415L	Dental Chairside Skills I Lab	2
DENTAL 425	Dental Materials	2
DENTAL 425L	Dental Materials Lab	1
DENTAL 435	Infection Control in Dentistry	2
DENTAL 435L	Infection Control in Dentistry Lab	0.5
DENTAL 445	Oral Radiology	2
DENTAL 445L	Oral Radiology Lab	1.5
DENTAL 455	Dental Office Procedures	2
DENTAL 455L	Dental Office Procedures Lab	0.5
DENTAL 460	Clinical Experience I	2
DENTAL 465	Clinical Experience II	1
DENTAL 465L	Clinical Experience II Lab	4
DENTAL 475	Dental Specialty Skills	2
DENTAL 475L	Dental Specialty Skills Lab	0.5
DENTAL 480	Dental Chairside Skills II	2
DENTAL 480L	Dental Chairside Skills II Lab	1
DENTAL 490	Advanced Clinical Procedures	1
DENTAL 490L	Advanced Clinical Procedures Lab	0.5
<b>Total units for the major</b>		<b>33</b>

### Strongly recommended:

DENTAL 600	Dental Basic Skills I	0
DENTAL 605	Dental Assisting Advanced Skills	0

## Dental Assisting (Certificate)

### Program Learning Outcomes:

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

- Obtain employment in the dental profession or continue their education towards a degree.
- Critically think, apply, and anticipate needs within dental applications and procedures.
- Pass the Registered Dental Assistant (RDA) examination.
- 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 of Achievement:

[T121/37118/1240.10*/51.0601]		Units
Same as the major requirements for the A.S. Degree		
<b>Total units for the certificate</b>		<b>33</b>



## 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
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/Graphics	4
EGTECH 30	Introduction to Additive Manufacturing - 3D Printing	4
PHYS 5*	The Ideas of Physics	3
PHYS 6*	The Ideas of Physics Laboratory	1
<b>Total units for the major</b>		<b>29</b>

\* or any advanced course in Physics with a laboratory

## 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.

The mechanical drafting technician degree and certificate programs provide students with competency skills in 2D and 3D CAD software tools, knowledge of drafting practices/standards and design/prototyping/manufacturing processes. They develop these skills performing real-world design tasks using industry standard software applications including AutoCad, SolidWorks and MasterCam. Students apply 3D CAD to drive Additive Manufacturing processes including 3D Printing. As part of their coursework they take the SolidWorks CSWA and CSWP exams. Students develop marketable skills that qualify them for positions such as CAD operators, CAD technicians, Design/Draftsmen, and 3D printing technicians in mechanical design, engineering and manufacturing 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	Mechanical Design and Drafting II	4
DRAFT 43	Advanced CAD Modeling and Applications	3
DRAFT 78	Advanced Mechanical Design Applications	4
EGTECH 10	Introduction to Engineering Design/Graphics	4
EGTECH 16	Computer Integrated Manufacturing - CNC Material Removal	3
EGTECH 30	Introduction to Additive Manufacturing - 3D Printing	4
PHYS 5*	The Ideas of Physics	3
PHYS 6*	The Ideas of Physics Laboratory	1
<b>Total units for the major</b>		<b>33</b>

\* or any advanced course in Physics with a laboratory

## DRAFTING CERTIFICATE PROGRAMS

### CAD/CAM Operator (Certificate)

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 of Career Preparation:

[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/Graphics	4
EGTECH 16	Computer Integrated Manufacturing – CNC Material Removal	3
<b>Total units for the certificate</b>		<b>17</b>

### 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 of Achievement:

[L125/20714/0953.10*/15.1303]		Units
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/Graphics	4
<b>Total units for the certificate</b>		<b>21</b>

### Drafting Technician: Mechanical (Certificate)

The mechanical drafting technician degree and certificate programs provide students with competency skills in 2D and 3D CAD software tools, knowledge of drafting practices/standards and design/prototyping/manufacturing processes. They develop these skills performing real-world design tasks using industry standard software applications including AutoCad, SolidWorks and MasterCam. Students apply 3D CAD to drive Additive Manufacturing processes including 3D Printing. As part of their coursework they take the SolidWorks CSWA and CSWP exams. Students develop marketable skills that qualify them for positions such as CAD operators, CAD technicians, Design/Draftsmen, and 3D printing technicians in mechanical design, engineering and manufacturing industries.

#### 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 of Achievement:

[L135/20715/0953.40*/15.1306]		Units
DRAFT 20	Computer-Aided Drafting and Design	4
DRAFT 21	Mechanical Design I	3
DRAFT 41	Mechanical Design and Drafting II	4
DRAFT 43	Advanced CAD Modeling and Applications	3
DRAFT 78	Advanced Mechanical Design Applications	4
EGTECH 10	Introduction to Engineering Design/Graphics	4
EGTECH 16	Computer Integrated Manufacturing - CNC Material Removal	3
EGTECH 30	Introduction to Additive Manufacturing - 3D Printing	4
<b>Total units for the certificate</b>		<b>29</b>



## 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 (AA-T) 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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>12</b>
<b>Elective (CSU transferable) units</b>	<b>9-12</b>	<b>10-13</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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 Arts Degree:

		Units
[A145/04815/2204.00/45.0601]		
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**



## 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 (AA-T) Degree [A120/33241/4901.20/24.0101]

		Units
<b>Required Core (43 units)</b>		
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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>34</b>	<b>40</b>
<b>Elective (CSU transferable) units</b>	<b>8</b>	<b>12</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## EMERGENCY MEDICAL PROVIDER

### Emergency Medical Provider (Certificate)

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 certificate, 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 of Achievement:

[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 11	Emergency Medical Technician	7
EMT 405	Emergency Medical Technician Preparation	3
FIRETEC 12	Occupational Safety and Health for Emergency Services	3
<b>Total units for the certificate</b>		<b>20</b>

## EMPLOYABILITY SKILLS IN THE 21<sup>ST</sup> CENTURY

### Employability Skills in the 21<sup>st</sup> Century (Certificate)

Besides computer and other technical skills, employers are in need of employees who possess the employability skills required to successfully perform their daily duties and responsibilities. In short, employability skills are the knowledge, habits, and character traits necessary to succeed in this rapidly changing world. Just like any other subject, these skills can be taught, practiced, and incorporated into everyone's life. Now, in the 21st Century, more than ever, employers are seeking candidates who have the following 10 employability skills: 1. Adaptability 2. Analysis/Solution Mindset (Problem Solving) 3. Collaboration 4. Communication 5. Digital Fluency (Good with Technology) 6. Empathy 7. Entrepreneurial Mindset 8. Resilience 9. Self-Awareness 10. Social/Diversity Awareness In addition to earning this Certificate of Completion from Chaffey College, students can also earn individual "21st Century Skills Digital Badges" from the New World of Work in each of these 10 skills which demonstrates competency in these skills to employers. The skills acquired through completion of this certificate will make students more competitive when applying for jobs.

#### Program Learning Outcomes:

- Upon the successful completion of this certificate, students should be able to:
1. Demonstrate professional communication appropriate for the job place.
  2. Demonstrate adaptability appropriate for the job place.
  3. Demonstrate self-awareness appropriate for the job place.
  4. Demonstrate digital fluency necessary for the job place.
  5. Demonstrate professional collaboration appropriate for the job place.
  6. Demonstrate empathy appropriate for the job place.
  7. Demonstrate professional problem analysis/solution mindset appropriate for the job place.
  8. Demonstrate resilience appropriate for the job place.
  9. Demonstrate entrepreneur mindset appropriate for the job place.

#### Requirements for the Employability Skills in the 21<sup>st</sup> Century Noncredit Certificate of Completion:

[O050/39628/1301.10*/19.0201]		Units
EMP 600	Adaptability on the Job	0
EMP 601	Self-Awareness on the Job	0
EMP 602	Digital Fluency on the Job	0
EMP 603	Communication on the Job	0
EMP 604	Collaboration on the Job	0
EMP 605	Empathy on the Job	0
EMP 606	Analysis/Solution Mindset on the Job	0
EMP 607	Resilience on the Job	0
EMP 608	Entrepreneurial Mindset on the Job	0
EMP 609	Social/Diversity Awareness on the Job	0
<b>Total units for the certificate</b>		<b>0</b>

## 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 positions 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.

### 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:

	Units
[S166/31876/0924.00*/15.0000]	
CHEM 24A General Chemistry I	5
EGTECH 10 Introduction to Engineering Design/Graphics	4
EGTECH 12 Principles of Engineering	4
EGTECH 14 Electronics for Engineering Technologists I (or EGTECH 30, Introduction to Additive Manufacturing - 3D Printing)	3 4
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 41 Mechanical Design and Drafting II	4
DRAFT 43 Advanced CAD Modeling and Applications	3
DRAFT 78 Advanced Mechanical Design Applications	4

**Total units for the major 29-32**

## Engineering Technology (Certificate)

The Engineering Technology Certificate of Achievement indicates that students have acquired 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, engineering principles, drafting, engineering design, computer-aided design (CAD), computer-aided manufacturing (CAM), computer numerical control (CNC) programming, manufacturing process, electronics and the application of those concepts and tools in the 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 of Achievement:

	Units
[L166/31873/0924.00*/15.0000]	
CHEM 10 Introductory Chemistry (or CHEM 24A, General Chemistry I, 5)	4
EGTECH 10 Introduction to Engineering Design/Graphics	4
EGTECH 12 Principles of Engineering	4
EGTECH 14 Electronics for Engineering Technologists I (or EGTECH 30, Introduction to Additive Manufacturing - 3D Printing)	3 4
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 41 Mechanical Design and Drafting II	4
DRAFT 43 Advanced CAD Modeling and Applications	3
DRAFT 78 Advanced Mechanical Design Applications	4

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

\* PHYS 20A, Algebra/Trigonometry College Physics I may substitute for PHYS 5 and PHYS 6.





## 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.

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 (AA-T) 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 II	3
ENGL 75A	American Literature	3
ENGL 75B	American Literature	3
ENGL 80A	Survey of British Literature I	3
ENGL 80B	Survey of British Literature II	3

### List B – Any one course (3 units)

Any List A course 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 course 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	CSU GE
<b>General Education</b>	37	39
<b>Total units that may be double-counted</b>	9	12
<b>Elective (CSU transferable) units</b>	13-14	14-15
<b>Total units required for the degree</b>	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
BUSTEC 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
<b>Total units for the major</b>		<b>37</b>

## FASHION DESIGN CERTIFICATE PROGRAMS

### Custom Dressmaking (Certificate)

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 of Achievement:

[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
<b>Total units for the certificate</b>		<b>25</b>

**Recommended Courses:** BUSMGT 45, FASHD 45.

### 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 of Achievement:

[L180/20729/1303.10\*/50.0407] Units  
Same as the major requirements for the A.S. Degree.

**Total units for the certificate** **37**

## Industrial Sewing (Certificate)

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 of Career Preparation:

[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
<b>Total units for the certificate</b>		<b>6</b>

## Patternmaking for Apparel (Certificate)

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 of Achievement:

[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
<b>Total units for the certificate</b>		<b>27</b>

### 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
BUSTEC 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 of Achievement:

[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) college transfer students pursuing a higher education degree in Fire Protection Administration and Technology.

To become a well-rounded person capable of fully participating in society and the modern economy, the student will need a strong foundation in the major areas of human study and endeavor. This A.S. degree also includes coursework in General Education. Entry-level courses in General Education (arts and humanities, mathematics and natural sciences, and the social sciences) can help you gain a greater understanding of and appreciation for the world and its people. These general education courses will enhance communication skills, improve critical thinking skills, and help with a professional career in fire 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.
5. Demonstrate critical thinking; effective communication; personal, academic, and career development; and community and global awareness.

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
EMT 11 Emergency Medical Technician	7
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** 31

## FIRE TECHNOLOGY CERTIFICATE PROGRAMS

### Fire Technology: Professional Firefighter (Certificate)

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 professionals 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) help college transfer students pursuing a higher education in Fire Administration and Technology.

### Program Learning Outcomes:

Upon the successful completion of this certificate, 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.
5. Demonstrate critical thinking; effective communication; personal, academic, and career development; and community and global awareness.

### Requirements for the Fire Technology: Professional Firefighter Certificate of Achievement:

[T141/20739/2133.00\*/43.0201] Units  
Same as the major requirements for the A.S. Degree.

**Total units for the certificate** 31

### Fire Prevention Inspector (Certificate)

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 of Achievement:

	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



## 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 (AA-T) Degree:

[A206/32073/2206.00/45.0701]

#### 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	Global Climate Change: An Introduction to Weather and Climate	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
GEOL 1	Physical Geology	4

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

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>13</b>	<b>16</b>
<b>Elective (CSU transferable) units</b>	<b>16-17</b>	<b>17-18</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>



## 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 (AS-T) Degree:

[S221/30941/1914.00/40.0601]

#### 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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>7</b>	<b>7</b>
<b>Elective (CSU transferable) units</b>	<b>4</b>	<b>2</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## GERONTOLOGY

Gerontology prepares students for occupations and professions that support the lives of aging adults and their families. As an interdisciplinary field, gerontology incorporates knowledge from several areas of study, including biology, psychology, sociology, and public policy. Careers in the field of aging include: Aging Services Administrator, Activity Coordinator, Caregiver, Housing Specialist, Social Work Designee/Assistant, and Aging Advocate as well as many other career paths. Gerontologists also work at the forefront of research in human aging and pathology. Gerontology education is increasingly important in many professions such as medicine, law, architecture, psychology, nutrition, criminal justice, finance, technology, education, and social work. Transfer students will find Gerontology programs at several colleges and universities.

### 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 (or PH 10, Personal Health and Wellness, 3)	3
GERO 455	Resources and Services for Older Adults	3
GERO 497ABCD	Gerontology Career Experience Internship	1 - 4

### Plus a minimum of six units from the following:

GERO 22	Dying and Death	3
GERO 98ABC	Independent Study: Gerontology	1 - 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**

Student must successfully complete at least 3 units of Gerontology Career Experience Internship (GERO 497ABCD) to earn this degree.

## GERONTOLOGY CERTIFICATE PROGRAMS

### Caregiving Essentials (Certificate)

The Caregiving Essentials Certificate of Completion provides students with the foundational skills needed to serve as an informal caregiver of family members and/or other older adults. Students also gain a competent understanding of the critical concepts and resources essential to caregiving. This certificate also prepares students for employment as a formal caregiver in a variety of settings, including residential care facilities, adult day care, and home care.

### Program Learning Outcomes:

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

1. Demonstrate the necessary understanding and skills necessary to assist community-dwelling and institutionalized individuals in attaining and maintaining independence.
2. Demonstrate the personal care and communication skills necessary for working in the patient's home, assisted living, independent living, and hospice environments.
3. Identify and analyze key community-level programs and services for older adults, as well as the potential barriers that may preclude utilization.

### Requirements for the Caregiving Essentials Noncredit Certificate of Completion:

[O230/37985/1309.00*/19.0702]		Units
GERO 600	Principles of Caregiving: Older Adults and Their Care	0
GERO 655	Resources and Services for Older Adults	0
<b>Total units for the certificate</b>		<b>0</b>

Note: Verification of valid CPR certification is required to be completed prior to certificate completion.

### Community Caregiver (Certificate)

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 of Achievement:

[B232/36475/1309.00*/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 (or PH 10, Personal Health and Wellness, 3)	3
GERO 455	Resources and Services for Older Adults	3
<b>Total units for the certificate</b>		<b>15</b>

Note: Verification of valid CPR certification is required to be completed prior to certificate completion.

## Gerontology (Certificate)

Gerontology prepares students for occupations and professions that support the lives of aging adults and their families. As an interdisciplinary field, gerontology incorporates knowledge from several areas of study, including biology, psychology, sociology, and public policy. Careers in the field of aging include: Aging Services Administrator, Activity Coordinator, Caregiver, Housing Specialist, Social Work Designee/Assistant, and Aging Advocate as well as many other career paths. Gerontologists also work at the forefront of research in human aging and pathology. Gerontology education is increasingly important in many professions such as medicine, law, architecture, psychology, nutrition, criminal justice, finance, technology, education, and social work. Continuing Education Units are also available.

### 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.
5. Identify new professions and careers for an aging society, in addition to "direct care" services.

### Requirements for the Gerontology Certificate of Achievement:

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

[L230/20736/1309.00\*/19.0702] Units

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

Student must successfully complete at least 3 units of Gerontology Career Experience Internship (GERO 497ABCD) to earn this certificate.

## HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION

### Heating, Ventilation, Air Conditioning and Refrigeration Level I (Certificate)

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 Heating, Ventilation, Air Conditioning and Refrigeration Level I Noncredit Certificate of Competency:

[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
<b>Total units for the certificate</b>	<b>0</b>

### Heating, Ventilation, Air Conditioning and Refrigeration Level II (Certificate)

This Certificate introduces students to the second level of HVACR: flues and ducts, commercial applications, trouble shooting, building automation control systems, and management and leadership techniques. This certificate will provide successful students the skills to become an 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.
4. Students will demonstrate the ability to monitor and coordinate the work of their co-workers.

### Requirements for the Heating, Ventilation, Air Conditioning and Refrigeration Level II Noncredit Certificate of Competency:

[O026/37263/0946.00*/15.0501]	Units
HVACR 606 HVAC Flues and Ducts	0
HVACR 607 HVAC Commercial Applications	0
HVACR 608 HVAC Troubleshooting	0
HVACR 609 Advanced Commercial HVAC Systems	0
HVACR 610 Building Automation Control Systems	0
HVACR 611 HVAC Management Topics	0
<b>Total units for the certificate</b>	<b>0</b>



## 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 (AA-T) 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 <i>(if not used in List A)</i>	3
HIST 2	World History: 1500 to Present <i>(if not used in List A)</i>	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	CSU GE
<b>General Education</b>	37	39
<b>Total units that may be double-counted</b>	15	15
<b>Elective (CSU transferable) units</b>	20	18
<b>Total units required for the degree</b>	60	60





## ASSOCIATE IN SCIENCE IN HOSPITALITY MANAGEMENT FOR TRANSFER

The Associate in Science for Hospitality Management for Transfer degree is designed to prepare students for transfer into the California State University system (CSU) to complete a baccalaureate in Hospitality Management. This program of study is suited to the needs of students who will complete their education at Chaffey College with an Associate in Science degree. Coursework includes introduction to hospitality, sanitation and safety, cost control, food and beverage management, hotel management, hospitality law, and culinary production and operation. Successful completion of the transfer degree in Hospitality Management guarantees student acceptance to a California State University (but does not guarantee acceptance to a particular campus or major) to pursue a baccalaureate degree in Hospitality Management.

The goals and outcomes for the Hospitality Management major include the following:

1. Prepare students for seamless transfer to a CSU to complete a Hospitality Management Baccalaureate degree.
  2. Provide students with a core body of knowledge in the study of Hospitality Management.
  3. Prepare students for advanced studies within the field of Hospitality Management.
- To obtain the AS-T in Hospitality Management, students must:
- Complete all major requirements listed below with grades of C or better.
  - Complete 60 CSU-Transferable units with a grade point average (GPA) of 2.0 or better.
  - Complete either the California State University-General Education-Breadth (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 four-year college and obtain a bachelor's degree in Hospitality Management.
2. Examine and identify challenges in the operations of lodging properties, and develop alternate solutions.
3. Communicate effectively and accurately, both verbally and in writing with a variety of departments at lodging properties.
4. Use critical thinking and problem-solving techniques common in the role of a training manager for lodging properties.
5. Supervise, lead and motivate workers in a variety of departments and job descriptions in lodging properties.
6. Train workers to provide consistent, quality guest services, with special attention given to legal and ethical business practices.

### Major requirements for the Associate in Science for Transfer (AS-T) Degree: [S254/38854/1307.00\*/52.0901] Units

#### Required Core:

HOTFS 10	Introduction to Hospitality Management	3
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#### List A - Select 9 units from the following:

CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
ECON 4	Principles of Microeconomics	3
HOTFS 14	Food and Beverage Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 42	Hotel Operations	3

#### List B - Select any two courses from List A and/or List B not already used (6-7 units):

ACCTG 1A	Financial Accounting	4
BUSL 28A	Business Law I	3

**Total units for the major 18-19**

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>3</b>	<b>3</b>
<b>Elective (CSU transferable) units</b>	<b>7-8</b>	<b>5-6</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## HOSPITALITY MANAGEMENT: FOOD SERVICE

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	Food and Beverage 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**

## HOSPITALITY MANAGEMENT: HOTEL MANAGEMENT

Students who are awarded the A.S. 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	Food and Beverage Management	3
HOTFS 21	Purchasing, Cost Controls, and Menu Planning	3
HOTFS 32	Hospitality Law	3
HOTFS 42	Hotel Operations	3
HOTFS 428	Human Resources Management in Hospitality	3
HOTFS 431	Hospitality Marketing Management	3
<b>Total units for the major</b>		<b>30</b>

## HOSPITALITY MANAGEMENT CERTIFICATE PROGRAMS

### Event Planning (Certificate)

Event Management is a growing field, which includes planning and execution of successful conferences, meetings, trade shows and social events hosted both locally and globally. Coursework covers principles of public and private events, social events and convention planning, catering sales and marketing, hospitality law, catering operations, principles of culinary techniques and safety and sanitation. Upon successful completion of this certificate, students will qualify for entry-level positions in catering, conference planning, convention services, and event planning.

### Program Learning Outcomes:

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

1. Effectively plan and execute special events.
2. Develop critical thinking skills to identify potential challenges to a successful event.
3. Develop necessary skills to identify event goals and objectives.
4. Employ professional marketing skills for their event.

### Requirements for the Event Planning Certificate of Achievement:

[L265/36884/1307.00*/52.0901]		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 32	Hospitality Law	3
HOTFS 450	Principles of Public Events and Convention Management	3
HOTFS 451	Social Events and Private Event Management	3
HOTFS 452	Event Sales, Marketing and Financial Management	3
HOTFS 482	Industry Internship: Hospitality Management	1
<b>Total units for the certificate</b>		<b>25</b>

### Hospitality Management: Food Service (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 Hospitality Management: Food Service Certificate of Achievement:

[T255/20733/1307.10*/12.0504]		Units
Same as the major requirements for the A.S. Degree, <b>plus:</b>		
HOTFS 482	Industry Internship: Hospitality Management	1
<b>Total units for the certificate</b>		<b>32</b>

### Hospitality Management: 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 Hospitality Management: Hotel Management Certificate of Achievement:

[L260/20735/1307.20*/52.0904]		Units
Same as the major requirements for the A.S. Degree, <b>plus:</b>		
HOTFS 482	Industry Internship: Hospitality Management	1
<b>Total units for the certificate</b>		<b>31</b>

## INDUSTRIAL ELECTRICAL TECHNOLOGY

The A.S. in Industrial Electrical Technology includes the core curriculum for the Level I, II, and III Certificates of Achievement, as well as the completion of a General Education pattern of curriculum. Entry-level courses in General Education (arts and humanities, mathematics and natural sciences, and the social sciences) can help you gain a greater understanding of and appreciation for the world and its people. These general education courses will enhance communication skills, improve critical thinking skills and help with a professional career in Industrial Electrical Technology. The Industrial Electrical Technology A.S. 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 Electrician Troubleshooting Expert Manufacturing Technician. Electricians 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:

	Units
[S150/07378/0934.40*/46.0301]	
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
IET 460 Introduction to Photovoltaic Installation	3
<b>Total units for the major</b>	<b>42</b>

### Strongly recommended:

IET 484ABCD Industrial Electricity Internship	1 - 4
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## INDUSTRIAL ELECTRICAL TECHNOLOGY CERTIFICATE PROGRAMS

### 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 of Career Preparation:

	Units
[L153/99999/0935.00*/15.0499] (Non-transcripted)	
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
<b>Total units for the certificate</b>	<b>15</b>

### Industrial Electrical Technology Level I (Certificate)

The Industrial Electrical Technology Level I Certificate of Achievement provides students the fundamental skills for career paths in the electrical trades, sales, construction, industry, and utility companies. Completing the certificate requirements students form a foundation in electrical theory, blueprint reading, and the ability to use the National Electrical Code book (NEC NFPA 70). They also gain knowledge of energy sources including photovoltaic systems. Courses assist students to develop communication, and teamwork skills. Knowledge acquired throughout the certificate program readies first time employees entering the trade.

#### 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.
4. Understand the fundamental principles of solar systems, basic controls, and installation.

#### Requirements for the Industrial Electrical Technology Level I Certificate of Achievement:

	Units
[L149/37426/0934.40*/46.0301]	
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 460 Introduction to Photovoltaic Installation	3
<b>Total units for the certificate</b>	<b>19</b>

#### Strongly recommended:

IET 484ABCD Industrial Electricity Internship	1 - 4
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## INDUSTRIAL ELECTRICAL TECHNOLOGY CERTIFICATE PROGRAMS, Cont.

### 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 prepares 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 of Achievement:

[T151/15317/0934.40*/46.0301]	Units	
Same requirements as for Level I Certificate, <i>plus</i> :	19	
IET 411 Programmable Logic Controllers	3	
IET 413 Intermediate Programmable Logic Controllers	3	
IET 417 Electrical Troubleshooting	3	
IET 420 Fundamentals of Control Systems Technology	4	
<b>Total units for the certificate</b>	<b>32</b>	

#### Strongly recommended:

IET 484ABCD Industrial Electricity Internship	1 - 4
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### Industrial Electrical Technology Level III (Certificate)

The Industrial Electrical Technology Level III 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 of Achievement:

[T154/20700/0934.40*/46.0301]	Units
Same as the major requirements for the A.S. Degree.	
<b>Total units for the certificate</b>	<b>42</b>

#### Strongly recommended:

IET 484ABCD Industrial Electricity Internship	1 - 4
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## INDUSTRIAL MAINTENANCE MECHANIC CERTIFICATE PROGRAMS

### Industrial Maintenance Mechanic (Certificate)

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. Demonstrate the technical knowledge necessary to achieve a satisfactory score for basic construction safety, drawings, and rigging.
2. Demonstrate the ability to recognize and understand the use of construction math, tools and equipment necessary for the trade.
3. Demonstrate the knowledge necessary to be successful in dealing with the associated fields of expertise required for the trade.
4. Describe OSHA safety work practices for employers in their respective workplace.

#### Requirements for the Industrial Maintenance Mechanic Certificate of Achievement:

[B272/36355/0945.00*/47.0303]	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
<b>Total units for the certificate</b>	<b>13.5</b>

**Industrial Maintenance Mechanic Skills Builder I (Certificate)**

This certificate of completion introduces students to the basic skills necessary for employment in the field of industrial maintenance mechanics. Coursework includes an introduction to construction safety, trade math, rigging, tools, as well as the fundamentals of oxyfuel and craft skills. Basic communication and employability skills are also covered. This certificate of completion 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. Demonstrate the technical knowledge necessary to achieve a satisfactory score for basic construction safety, drawings, and rigging.
2. Demonstrate the ability to recognize and understand the use of construction math, tools and equipment necessary for the trade.
3. Demonstrate the knowledge necessary to be successful in dealing with the associated fields of expertise required for the trade.

**Requirements for the Industrial Maintenance Mechanic Skills Builder I Noncredit Certificate of Completion:**

[O005/36679/0945.00*/47.0303]		Units
INDMM 600	Intro to Construction, Safety, Trade Math, Rigging, and Tools	0
INDMM 601	Basic Communication and Employability Skills, and Core Testing	0
INDMM 602	Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills	0
INDMM 603	Trade Math and Drawings, Material Handling, and Mobile Equipment	0
<b>Total units for the certificate</b>		<b>0</b>

**Industrial Maintenance Mechanic Skills Builder II (Certificate)**

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 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. Demonstrate critical thinking skills in troubleshooting problems with piping.
2. Demonstrate critical thinking skills in troubleshooting problems with valves and bearings.
3. Demonstrate critical thinking skills in troubleshooting problems with couplings, seals and drives.
4. Demonstrate professional communication, employing professional vocabulary expected in the field of industrial mechanics.

**Requirements for the Industrial Maintenance Mechanic Skills Builder II Noncredit Certificate of Completion:**

[O006/36610/0945.00*/47.0303]		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
<b>Total units for the certificate</b>		<b>0</b>

**Industrial Maintenance Mechanic Skills Builder III (Certificate)**

This certificate of completion builds upon skills developed in the Industrial Maintenance Mechanic Skills Builder I and II certificates. 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. Read and interpret blueprints.
2. Set baseplates and practice advanced principles of alignment.
3. Troubleshoot pumps and gearboxes.

**Requirements for the Industrial Maintenance Mechanic Skills Builder III Certificate of Completion:**

[O007/37256/0945.00*/47.0303]		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
<b>Total units for the certificate</b>		<b>0</b>

## INTERIOR DESIGN

This A.S. degree will prepare students to transfer to interior design programs at four year institutions. Students receive a strong background in design process, design elements and principles, visual communication, computer software for interior design, 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
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 14	Fundamentals of Design for Interiors	3
ID 15	Architectural Drafting for Interior Designers	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 27	Computer Drafting and Design for Interiors	3
ID 30	Interior Design Studio	3.5
ID 45	Codes and Building Systems	3
<b>Total units for the major</b>		<b>36</b>

## INTERIOR DESIGN CERTIFICATE PROGRAMS

### Interior Design (Certificate)

The Interior Design Certificate Program builds upon the Interior Design Visual Communication Certificate providing the student with advanced skills that will enhance their Interior Design careers. The Interior Design Certificate focuses on historic reference, material selection and estimating, studio design, and business practices. A professional portfolio is completed to prepare students for job interviews. This certificate provides students with skills needed for intermediate level employment opportunities in careers such as assistant to a professional designer, resource representative or commercial design specialization for design firms. The certificate also provides the required units for students to pursue California Interior Design Certification (CID).

### 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 of Achievement:

[T270/20726/1302.00*/50.0408]		Units
Same as the major requirements for the A.S. Degree, <b>plus:</b>		
ID 426	Professional Practice for Interior Designers	3
ID 482ABCD	Internships in Interior Design	1 - 4
<b>Total units for the certificate</b>		<b>43</b>

**Interior Design Visual Communication (Certificate)**

The certificate in Interior Design Visual Communication emphasizes proficiency in industry specific software including AutoCAD, Revit, and Sketchup, as well as basic design skills and various techniques for visual presentation. Study of building systems and current codes are also included. This certificate prepares students for entry level employment as interior design support personnel who are skilled in manual and computer drafting, rendering, model making and production of presentations for Interior Design, Architecture and Engineering fields.

**Program Learning Outcomes:**

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

1. Communicate an interior design effectively through visual means by applying elements and principles of design with the use of manual and computer presentation techniques to express design ideas, and concepts in relation to interior design projects.
2. Solve interior design problems by evaluating designs pertaining to space planning and lighting of interior design projects and providing plausible solutions.
3. Identify and apply social, ethical and cultural responsibility to the health, safety, and welfare of society and community through the study and application of current codes and building systems as they relate to interior design projects.
4. Achieve a level of technical and design knowledge appropriate for career advancement as a support personnel in various design industries and set career goals for future advancement in the interior design industry.

**Requirements for the Interior Design Visual Communication Certificate of Achievement:**

[L195/37647/1302.00*/50.0408]	Units
ID 14 Fundamentals of Design for Interiors	3
ID 15 Architectural Drafting for Interior Designers	3
ID 16 Quick Sketching for Interior Designers	2.5
ID 17 Introduction to Lighting	3
ID 21 Space Planning	3
ID 27 Computer Drafting & Design for Interiors	3
ID 45 Codes and Building Systems	3
<b>Total units for the certificate</b>	<b>20.5</b>

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC): UC OR CSU (Certificate)

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, 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 2019 must follow the 2019-2020 or later IGETC requirements.)

### Program Learning Outcomes:

- Upon the successful completion of this certificate, 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 of Achievement:

[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

Computer Science 4

Mathematics 25<sup>FA03\*</sup>, 60\*, 61\*, 65A\*, 65B, 75, 81, 85

Social Science 10<sup>FA03\*</sup>

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 3, 5, 7, 9, 11, 19

Cinema 25, 26

Dance 1, 12<sup>FA19</sup>

Music 2A, 2B, 4, 5, 6, 21<sup>SP07</sup>, 22<sup>SP06</sup>, 26<sup>SP07</sup>

Photography 1<sup>FA19</sup>, 10<sup>FA19</sup>

Theatre Arts 1, 4, 5

##### B. Humanities:

American Sign Language 3, 4

Arabic 3, 4

Chinese 3, 4, 18<sup>FA16</sup>

English 1C, 32, 33, 68, 70A, 70B, 73<sup>FA19</sup>, 74<sup>FA03</sup>, 75A, 75B, 76, 77, 79, 80A, 80B, 81

History 1, 2, 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16<sup>FA03</sup>, 20, 21<sup>FA19</sup>, 25, 40<sup>SP06</sup>, 50, 51, 70, 71

Humanities 5, 6, 20

Philosophy 70, 71<sup>FA19</sup>, 72, 73, 77, 78, 79<sup>FA19</sup>, 80, 81, 82

Photography 1<sup>FA19</sup>

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<sup>FA16</sup>

Child Development and Education 2\*, 4

Communication Studies 12, 74

Economics 1\*, 2, 4, 7, 8

Geography 1<sup>SP07</sup>, 3, 11<sup>SP06</sup>

Gerontology 18\*

History 4<sup>FA03</sup>, 5, 6, 7, 9, 10, 12, 16<sup>FA03</sup>, 17, 18, 19, 20, 21<sup>FA19</sup>, 37, 40<sup>SP06</sup>, 50, 51, 70, 71

Political Science 1, 2, 4, 7, 10, 21<sup>FA12</sup>, 25, 32<sup>FA12</sup>

Psychology 1, 20\*, 25\*, 65, 80<sup>FA15</sup>

Sociology 10, 14, 15<sup>SP05</sup>, 16<sup>SP07</sup>, 18\*, 25, 26, 30<sup>FA19</sup>, 32, 33<sup>FA19</sup>, 70, 80<sup>FA15</sup>

#### 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\*, 27<sup>FA19</sup>, 35

Chemistry 7<sup>FA16\*</sup>, 8<sup>SP07\*</sup>, 9\*, 10\*, 12<sup>SP07</sup>, 24A\*, 24B\*, 70, 76A, 76B

Earth Science 1, 1 & 1L, 5<sup>SP07</sup>, 5 & 5L<sup>SP07</sup>

Geography 2, 4, 4 & 5, 6<sup>SP05</sup>

Geology 1, 2

Physical Science 10

Physics 5\*, 5 & 6\*, 20A\*, 20B\*, 30A\*, 30B\*, 44<sup>SP07\*</sup>, 45\*, 46\*, 47\*

##### B. Biological Sciences:

Anthropology 1, 1 & 1L

Biology 1\*, 2, 10\*, 12, 20, 22, 23, 23 & 23L, 40, 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 II	4
ARABIC 2	Elementary Modern Standard Arabic II	4
CHIN 2	Elementary Mandarin Chinese	4
FR 2	Elementary French II	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 a UC requirement. 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**



## 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 (AA-T) 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	3
	(or ECON 4, Principles of Microeconomics)	
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	4
	(or SCSCI 10, Statistics for Social Science)	

**Total units for the major** **18-20**

	<b>IGETC</b>	<b>CSU GE</b>
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>9</b>
<b>Elective (CSU transferable) units</b>	<b>12-14</b>	<b>10-12</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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 of Achievement:

[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	3
	(or JOUR 31, Student Media Practicum II)	
JOUR 30	Student Media Practicum I	3
PHOTO 10	Beginning Photography	4
	(or PHOTO 7, Introduction to Digital Photography)	

### Plus a minimum of three units from the following:

ART 63	Introduction to Graphic Design	4
BRDCAST 3	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**



## ASSOCIATE IN ARTS IN KINESIOLOGY FOR TRANSFER

The Associate in Arts in Kinesiology for Transfer at Chaffey College prepares students to seamlessly transfer into a CSU 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 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 Associate in Arts in Kinesiology 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 Kinesiology for Transfer major 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 (AA-T) Degree:**  
[A346/33231/1270.00/31.0505] Units

<b>Required (11 units):</b>		
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4
KINLEC 18	Introduction to Kinesiology	3

**Movement-Based Courses**  
Select three courses (maximum of one from each category): Units

<b>Aquatics:</b>		
KINACT 9	Swimming	1

<b>Combatives:</b>		
KINACT 31	Introduction to Self-Defense and Personal Safety	1
KINACT 32	Beginning Jiu-Jitsu	1

<b>Fitness:</b>		
KINACT 24	Cross Training Boot Camp	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

<b>Individual Sports:</b>		
KINACT 1	Beginning Tennis	1
KINACT 2	Advanced Tennis	1
KINACT 16	Volleyball	1
KINACT 20	Basketball	1
KINACT 22	Soccer	1

<b>List A: Select two (6 units)</b>		
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

<b>Total units for the major</b>	<b>21-24</b>	
	<b>IGETC</b>	<b>CSU GE</b>
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>10</b>	<b>10</b>
<b>Elective (CSU transferable) units</b>	<b>9-12</b>	<b>7-10</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## KINESIOLOGY CERTIFICATE PROGRAMS

### Athletic Trainer Aide (Certificate)

The Athletic Trainer Aide Certificate prepares students for entry-level employment assisting an Athletic Trainer or as a Physical Therapy Aide in college/high school, 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 multiple fields such as an 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 Trainer Aide Certificate of Achievement:

	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
<b>Total units for the certificate</b>	<b>17.5</b>

## 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. 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. 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. Identify risk factors of communicable and hypokinetic diseases and design appropriate nutritional plans for various degrees of activity and weight control.
6. Recognize various career opportunities in the field of human movement.
7. Implement appropriate aerobic and anaerobic exercises and the metabolic needs for that particular activity.

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
[S345/36629/0835.00/31.0501]	
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:

BIOL 22 Human Physiology	4
CHEM 10 Introductory Chemistry	4
KINLEC 2 Introduction to Athletic Training	3
KINLEC 11 Theory and Analysis of Football	2
KINLEC 14 Lifeguard Training	3
KINLEC 16 First Aid	3
KINLEC 17 First Aid & Emergency Response to Community Disasters	3
KINLEC 24 Biomechanics	3
KINLEC 32 Outdoor Adventures	2
NF 5 Nutrition for Life	3

#### Plus three units from the following:

KINACT 1, 2, 3A, 5A, 9, 16, 17, 20, 22, 23, 24, 25, 26, 28A, 28B, 29A, 29B, 29C, 31, 32, 35	3
KINTM 1, 1A, 2, 2A, 3, 3A, 4, 5, 6, 6A, 7, 8, 9, 11, 14, 15, 16, 17, 18, 19, 26, 27, 41I, 42I, 44I, 45I, 47I, 48I, 49I, 51I, 54I, 55I, 56AI, 56BI, 57AI, 57BI, 59I, 60, 60A, 61A, 62, 62A, 64, 64A, 65, 65A, 66, 66A, 67A, 69	3

**Total units for the major** **19**



## ASSOCIATE IN SCIENCE IN MATHEMATICS FOR TRANSFER

The Associate in Science in Mathematics 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 in 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 for 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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted Elective (CSU transferable) units</b>	<b>7</b>	<b>7</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## MECHATRONICS

Mechatronics in modern industry relies on highly complex production systems to produce high-quality, economical products for an ever demanding world. This degree trains students to effectively troubleshoot, maintain, and repair mechanical, electrical, pneumatic, hydraulic, digital, programmable logical controllers (PLC), and motion controls systems. Students who complete this program of study will be prepared to work in a wide range of industries that utilize modern equipment including industrial robotics, PLCs and other electrical/mechanical systems. Students also develop skills needed to enable processes to work together by integrating technologies similar to those found in manufacturing, logistics, distribution centers, and industrial applications.

### Program Learning Outcomes:

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

1. Identify control system component types.
2. Measure I/O signals at a digital I/O interface module
3. Design a PLC program that provide manual/auto/reset functions.
4. Describe a sequence of operation.

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:

[S156/37216/0935.00*/15.0499]	Units	
IET 401A	Introduction to Electricity	2.5
IET 401B	Industrial Basic Controls	2.5
IET 407	Electrical Blueprints	3
IET 411	Programmable Logic Controllers	3
IET 422	OSHA Safety Training	2
IETELMT 430	Hydraulic Fundamentals	2
IETELMT 432	Electrical Control of Hydraulic Systems	2
IETELMT 436	Pneumatics Fundamentals	2
IETELMT 438	Electrical Control of Pneumatic Systems	2
IETMECH 400	Introduction to Mechatronics	4
IETMECH 401	Robotics and Sequencing	4
IETMECH 402	Mechatronics Troubleshooting	4

**Total units for the major 33**

## MECHATRONICS CERTIFICATE PROGRAMS

### Mechatronics Level I (Certificate)

Mechatronics in modern industry relies on highly complex production systems to produce high-quality, economical products for an ever demanding world. This degree trains students to effectively troubleshoot, maintain, and repair mechanical, electrical, pneumatic, hydraulic, digital, programmable logic controllers (PLC) and motion controls systems. Students who complete this program of study will be prepared to work in a wide range of industries that utilize modern equipment including industrial robotics, PLCs and other electrical/mechanical systems. Students also develop skills needed to enable processes to work together by integrating technologies similar to those found in manufacturing, logistics, distribution centers, and industrial applications. The Level I certificate prepares students with the entry level knowledge needed to pursue a career using electrical/mechanical systems.

#### Program Learning Outcomes:

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

1. Demonstrate the knowledge required to communicate professionally within the field of mechatronics as expected of an entry-level mechatronics and industrial automation technician.
2. Demonstrate critical thinking skills required of basic machine malfunction diagnosis.
3. Demonstrate career development skills required of a student who successfully completed the Mechatronics and Industrial Automation Technician Level I Certificate of Achievement.

#### Requirements for the Mechatronics Level I Certificate of Achievement:

[L156/37201/0935.00*/15.0499]		Units
IET 401A	Introduction to Electricity	2.5
IET 401B	Industrial Basic Controls	2.5
IET 407	Electrical Blueprints	3
IET 422	OSHA Safety Training	2
IETELMT 430	Hydraulic Fundamentals	2
IETELMT 432	Electrical Control of Hydraulic Systems	2
IETMECH 400	Introduction to Mechatronics	4
<b>Total units for the certificate</b>		<b>18</b>

### Mechatronics Level II (Certificate)

Mechatronics in modern industry relies on highly complex production systems to produce high-quality, economical products for an ever demanding world. This degree trains students to effectively troubleshoot, maintain, and repair mechanical, electrical, pneumatic, hydraulic, digital, programmable logic controllers (PLC) and motion controls systems. Students who complete this program of study will be prepared to work in a wide range of industries that utilize modern equipment including industrial robotics, PLCs and other electrical/mechanical systems. Students also develop skills needed to enable processes to work together by integrating technologies similar to those found in manufacturing, logistics, distribution centers, and industrial applications. The Level II certificate will prepare students for careers in a wide range of modern industries that utilize electrical/mechanical systems.

#### Program Learning Outcomes:

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

1. Demonstrate the knowledge required to communicate professionally within the field of mechatronics as expected of mechatronics and industrial automation technicians.
2. Demonstrate critical thinking skills required of basic pneumatic functions.
3. Demonstrate career development skills required of a student who successfully completed the Mechatronics and Industrial Automation Technician Level II Certificate of Achievement.

#### Requirements for the Mechatronics Level II Certificate of Achievement:

[B156/37203/0935.00*/15.0499]		Units
IET 411	Programmable Logic Controllers	3
IETELMT 436	Pneumatics Fundamentals	2
IETELMT 438	Electrical Control of Pneumatic Systems	2
IETMECH 401	Robotics and Sequencing	4
IETMECH 402	Mechatronics Troubleshooting	4
<b>Total units for the certificate</b>		<b>15</b>



## 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 (AA-T) 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
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### 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

	22-24	
	IGETC	CSU GE
<b>Total units for the major</b>		
<b>General Education</b>	37	39
<b>Total units that may be double-counted</b>	6	6
<b>Elective (CSU transferable) units</b>	5-7	3-5
<b>Total units required for the degree</b>	60	60

## COMMERCIAL MUSIC

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.

### 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 7	Music Theory and Musicianship III	4
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
<b>Total units for the major</b>		<b>27</b>

## MUSIC CERTIFICATE PROGRAMS

### Recording Arts Technician (Certificate)

The Recording Arts Technician Certificate is a one-year program that is designed to give students relevant information to enter the field of Recording Arts as an engineer or technician in sound-related recording environments. Students will create and analyze recordings, furthering their own creative process as an engineer and producer of music in the field of recorded sound. Students completing this certificate have made significant progress towards the Commercial Music A.S. degree at Chaffey College.

### Program Learning Outcomes:

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

1. Apply skills and concepts to create recorded sound.
2. Apply critical thinking in the creation, analysis, and interpretation of musical recordings.
3. Engage creativity and develop thinking about in the study of musical recordings.
4. Have greater confidence in their own potential to express themselves creatively through music.

### Requirements for the Recording Arts Technician Certificate of Achievement:

[B315/37436/1005.00*/10.0203]		Units
MUSIC 5	Music Theory and Musicianship I	4
MUSIC 16	Introduction to Recording Arts	3
MUSIC 17	Electronic Music	3
MUSIC 18	Computer Assisted Recording and Editing	3
COMSTD 8	Fundamentals of Speech Communication	3
<b>Total units for the certificate:</b>		<b>16</b>



## 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: ADN

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](http://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.m.ca.gov/applicants/lic-exam](http://www.m.ca.gov/applicants/lic-exam) and <https://www.m.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 (<https://www.chaffey.edu/acc/hwa/adn.php>), 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 <https://www.chaffey.edu/acc/hwa/adn.php> 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	3
	(or COMSTD 2, Fundamentals of Effective Speaking, or COMSTD 4, Fundamentals of Interpersonal Communication, or COMSTD 6, Fundamentals of Small Group Communication)	
ENGL 1A	Composition	3
MATH 401*	Mathematics for Health Science	1
PSYCH 25	Developmental Psychology: Lifespan Development	3
SOC 10	Introduction to Sociology	3
	(or COMSTD 74, Intercultural Communication, or ANTHRO 3, Introduction to Social and Cultural Anthropology)	
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.

## NURSING: ADN, Cont.

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
[S310/04788/1230.10*/51.3801]	
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
<b>Total units for the major:</b>	<b>41.5</b>

\* 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 a licensed vocation nurse. 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.rm.ca.gov/applicant/lic-exam](http://www.rm.ca.gov/applicant/lic-exam) and [www.rm.ca.gov/enforcement/convictions](http://www.rm.ca.gov/enforcement/convictions).

## Nursing Assistant (Certificate)

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 <https://www.chaffey.edu/acc/hwa/cna.php>.

### 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 certificate, 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 Nursing Assistant Certificate of Career Preparation:

	Units
[E234/99999/1230.30*/51.3902] ( <i>Non-transcripted</i> )	
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.

## NURSING: VOCATIONAL

The Licensed Vocational Nurse (LVN) 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 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. Evidence of satisfactory physical and emotional health as evidenced by health examination and proof of immunizations, and by passing both a criminal background check and a drug screening test.
5. Completion of Nursing: Vocational 414\* with a minimum grade of C. NURVN 414 may not be over 3 years old at the time of application.
6. 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.
7. Current cardiopulmonary resuscitation (CPR) certification as an American Heart Association Healthcare Provider.
8. 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. Attend an information session. Schedule is available on the VN website at: <https://www.chaffey.edu/acc/hwa/vn.php>.
2. Make an appointment with a counselor in the Counseling Center.
3. Verification of high school graduation or equivalent or higher as indicated above.
4. Provide official copies of all previous college transcripts (must be on file).
5. Complete the VN application and submit to the program office. Applications for the VN program beginning in the Spring semester will be available in the October prior and must be submitted by the last business day in October. Application for the VN program beginning in the Fall semester will be available in the March prior and must be completed and submitted by the last business day in March.
6. All selected applicants must attend a mandatory orientation session.

### 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:

NURVN 414	Acute Care Nursing Assistant: Vocational Nursing Foundations	6
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## Nursing: Vocational (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 Certificate of Achievement:

[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**

### 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 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."

### 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 Nursing VN to RN Associate in Science Degree:

	Units
[S312/07384/1230.10*/51.3801]	
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.

## NURSING 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 Nursing 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.

## Home Health Aide (Certificate)

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 Home Health Aide Certificate of Career Preparation:

[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.



## 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 CSU 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 (AS-T) Degree:

[S242/35762/1306.00*/19.0501]	Units
<b>Required core (16 units)</b>	
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 two (8 units)

BIOL 20 Human Anatomy	4
BIOL 22 Human Physiology	4
CHEM 76A Organic Chemistry I	4
SCSCI 10 Statistics for Social Science	4
STAT 10 Elementary Statistics	4

### List B (3 units)

CUL 17 Principles of Food Preparation	3
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**Total units for the major 27**

	IGETC	CSU GE
General Education	37	39
<b>Total units that may be double-counted</b>	<b>13</b>	<b>16</b>
<b>Elective (CSU transferable) units</b>	<b>12-13</b>	<b>13-14</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## NUTRITION AND DIETETICS CERTIFICATE PROGRAMS

### Dietetic Service Supervisor (DSS)/Certified Dietary Manager (CDM) (Certificate)

This program, currently 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. This program addition of the CDM qualification is under review and awaiting approval by the Association of Nutrition and Foodservice Professionals (ANFP) to be in conjunction with the DSS certificate program an approved training program and pathway to take the credentialing exam for the Certified Dietary Manager (CDM) certification.

#### 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.
4. Be qualified to sit for the Certified Dietary Manager (CDM) National exam.
5. Be prepared to manage menus, food purchasing, and food preparation as an entry-level Certified Dietary Manager.
6. Apply nutrition principles, document nutrition information, ensure food safety, and manage work teams as an entry-level Certified Dietary Manager.

#### Requirements for the Dietetic Service Supervisor Certificate of Achievement:

[N256/07389/1306.20*/19.0505]		Units
CUL 15	Sanitation, Safety, and Equipment Management	3
CUL 17	Principles of Food Preparation	3
HOTFS 14	Food and Beverage Management	3
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
<b>Total units for the certificate</b>		<b>24</b>

### 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/gyms, 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 "Choose my Plate" tool 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 of Achievement:

[L241/20732/1306.00*/19.0501]		Units
BIOL 14	Health Science	3
COMSTD 8	Fundamentals of Speech Communication	3
CUL 15	Sanitation, Safety, and Equipment Management	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
<b>Total units for the certificate</b>		<b>20</b>

## 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. Successful completion of MATH 520 or eligibility for MATH 410 as determined by the Chaffey College assessment.

### 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 externship (PHARMT 481L). Certificate may be the American Heart Association "Healthcare Provider with AED" or the American Red Cross "Professional Rescuer with AED".
- D. To continue in the Pharmacy Technician program, students must earn satisfactory grades (minimum of "C" in graded courses; "CR" in pass/fail courses) in all Pharmacy Technician and other required courses.
- E. Students with prior pharmacy technician education should contact the college Counseling Department to schedule a course evaluation.
- F. It is strongly recommended that the student have keyboarding proficiency of 35 wpm.

### 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:

	Units
[S322/15524/1221.00*/51.0805]	
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 481L Clinical Externship	4.5
<b>Total units for the major</b>	<b>27.5</b>

## PHARMACY TECHNICIAN CERTIFICATE PROGRAMS

### 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 of Achievement:

[T322/20719/1221.00\*/51.0805] Units  
Same as the major requirements for the A.S. Degree

**Total units for the certificate** **27.5**



## 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 (AA-T) Degree

[A336/32183/1509.00/38.0101]

#### Required – Select two (6 units):

	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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>12</b>	<b>15</b>
<b>Elective (CSU transferable) units</b>	<b>17</b>	<b>18</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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, 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:

	Units
[A340/04783/1012.00*/10.0201]	
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
<b>Total units for the major</b>	<b>33-34</b>

## PHOTOGRAPHY CERTIFICATE PROGRAMS

### 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 of Achievement:

	Units
[T340/20716/1012.00*/10.0201]	
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 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

Students who intend to transfer should complete the CSU GE or IGETC general education 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

A minimum of 18 units from at least three different disciplines and a minimum of three courses with laboratory are required. A minimum of Math 31 Plane Trigonometry (or placement info Math 61 Pre-Calculus or higher as determined by the Chaffey placement process) is required.

ASTRON 26	Stars and Galaxies	3
ASTRON 35	Planets and the Solar System with Lab	4
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
COMPSCI 1	Programming Concepts and Methodology I	3
ESC 1	Earth Science	3
ESC 1L	Earth Science Laboratory	1
ESC 5	Oceanography	3
ESC 5L	Oceanography Laboratory	1
GEOG 4	Physical Geography	3
GEOG 5	Physical Geography Laboratory	1
GEOL 1	Physical Geology	4
GEOL 2	Historical Geology	4
MATH 31	Plane Trigonometry	4
MATH 61	Pre-Calculus	4
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
PHYS 20A	Algebra/Trigonometry College Physics I (or PHYS 30A, Physics for the Medical and Life Sciences I)	4
PHYS 20B	Algebra/Trigonometry College Physics II (or PHYS 30B, Physics for the Medical and Life Sciences II)	4
PHYS 44	Introduction to Motion	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

#### C. Electives

3-19

Elective units may be necessary to total 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 major**

**60**



## ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER

The Associate in Science in Physics Transfer degree curriculum provides students a basis for understanding the physical concepts and skills required for attainment of upper division status in a four year college or university. It also provides many of the prerequisite courses for engineering majors.

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 Physics 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 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:

1. Complete all major requirements listed below with grades of C or better in each course.
2. Maintain a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.
3. 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 (AS-T) Degree [S356/32347/1902.00/40.0801] Units

Required (28 units):		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
<b>Total units for the major</b>		<b>28</b>
	<b>IGETC</b>	<b>CSU GE</b>
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>7</b>	<b>7</b>
<b>Elective (CSU transferable) units</b>	<b>2</b>	<b>0</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## UNIVERSITY OF CALIFORNIA TRANSFER PATHWAY: PHYSICS

The University of California (UC) Transfer Pathway for Physics degree curriculum provides students a basis for understanding the physical concepts and skills required for attainment of upper division status as a Physics major at a four-year college or university.

The student that earns this degree has completed lower division preparation for a Physics major at a UC and should be able to graduate with a Bachelor's degree within two years attending at full time status after transfer. After earning this degree and transferring to a UC, students will be expected to complete two more courses in IGETC Area 3 and two more courses in IGETC Area 4 to fulfill UC general education requirements. Successful completion of the UC Transfer Pathway Physics degree with a minimum GPA of 3.5 guarantees the student admission into the University of California system (but does not guarantee acceptance to a particular campus) to pursue a baccalaureate degree in Physics. Students will still be competitive at several UC campuses with a GPA below the 3.5 threshold, and all students who complete the degree are encouraged to apply to the UC.

To obtain the UC Transfer Pathway Physics degree, students must complete the following:

1. 46 units of major preparation requirements.
2. 16-20 units of IGETC general education requirements.

### 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 instruments, and use proper laboratory etiquette.
4. Prepare students for seamless transfer to a UC as a Physics (or related field) major.
5. Provide students with a core body of knowledge in the study of physics.
6. Prepare students for advanced studies within the field of physics.

### Major requirements for the University of California Transfer Pathway Associate in Science Degree [S357/39562/1902.00/40.0801] Units

Required (46 units)		Units
CHEM 24A	General Chemistry I	5
CHEM 24B	General Chemistry II	5
MATH 65A	Calculus I	4
MATH 65B	Calculus II	4
MATH 75	Calculus III	5
MATH 81	Linear Algebra	4
MATH 85	Differential Equations	4
PHYS 45	Physics for Scientists and Engineers I	5
PHYS 46	Physics for Scientists and Engineers II	5
PHYS 47	Physics for Scientists and Engineers III	5

### General Education IGETC Area 1: English Composition Requirements (6 units)

ENGL 1A	Composition	3
ENGL 1B	Advanced Composition and Critical Thinking	3

### Additional General Education Requirements (10-14 units)

IGETC Area 3: Arts and Humanities	3
IGETC Area 4: Social and Behavioral Sciences	3
IGETC Area 5B: Biological Sciences	4
IGETC Area 6: Language Other Than English	0-4

**Total units for the major 62-66**



## 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 (AA-T) Degree [A361/36531/2207.00/45.1001]

Units

**Required (3 units)**

PS 1	American Politics	3
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#### 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

#### 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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>12</b>	<b>12</b>
<b>Elective (CSU transferable) units</b>	<b>16-17</b>	<b>14-15</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>



## 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 (AA-T) Degree [A366/31115/2001.00/42.0101]

Units

<b>Required (14 units)</b>		
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	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>12</b>
<b>Elective (CSU transferable) units</b>	<b>12</b>	<b>13</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>



## ASSOCIATE IN SCIENCE IN PUBLIC HEALTH SCIENCE FOR TRANSFER

Public Health Science embraces a wide spectrum of occupations dealing with public health, public health education, and health awareness and prevention. Those involved in the public health field assist individuals and communities to adopt healthy behaviors, conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health. Public health workers may provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening, as well as collect data to help identify community health needs. Students completing this program will be prepared to work in a wide range of careers in the fields of health education, community health outreach, public health promotion and disease prevention, health advocacy, and collaborative health and human services.

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 CSU to complete their bachelor's degree in Public Health. Successful completion of the transfer degree in Public Health 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 a related discipline.

The goals and outcomes for the Public Health Science major include the following:

1. Prepare students for seamless transfer to a CSU to complete a Public Health (or related field) baccalaureate degree.
2. Provide students with a core body of knowledge in the study of Public Health.
3. Prepare students for advanced studies within the field of Public Health.

To obtain the Public Health Science AS-T degree, students must:

- Complete 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.
- Complete 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 allowed.

### Program Learning Outcomes:

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

1. Practice effective communication and comprehension skills and strategies appropriate for the field of Public Health Science.
2. Demonstrate critical thinking skills in problem solving in the field of Public Health Science.
3. Demonstrate knowledge of and strategies to consider significant social, cultural, environmental and esthetic perspectives as appropriate within the field of Public Health Science.
4. Assess their own knowledge, skills and abilities, set challenging and appropriate career goals appropriate for the Public Health Science field.

### Major requirements for the Associate in Science for Transfer (AS-T) Degree: [S293/38477/1201.00\*/51.0000]

Units

#### Required Core (28-29 units):

BIOL 1	General Biology	4
BIOL 20	Human Anatomy	4
BIOL 22	Human Physiology	4
CHEM 10	Introductory Chemistry (or CHEM 24A, General Chemistry I, 5)	4
PH 10	Personal Health and Wellness	3
PH 20	Introduction to Public Health	3
PSYCH 1	Introduction to Psychology	3
STAT 10	Elementary Statistics (or SCSCI 10, Statistics for Social Science)	4

#### List A – Select one (3 units):

ECON 2	Principles of Macroeconomics	3
ECON 4	Principles of Microeconomics	3
NF 15	Nutrition I: Introduction to Nutrition Science	3
PH 30	Health and Social Justice	3
PH 40	Drugs, Health, and Society	3
SOC 10	Introduction to Sociology	3

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

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>13-16</b>	<b>12-15</b>
<b>Elective (CSU transferable) units</b>	<b>3-6</b>	<b>1-3</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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](http://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.rrt.org](http://www.rrt.org)). There are application fees for certification with the State of California (CRT). The program articulates with the California State University Northridge Radiologic Technology and Loma Linda University program for the bachelor's degree.

The special application form for admission to the RT program is available online at <https://www.chaffey.edu/acc/hwa/rad-tech.php> and must be submitted during the month of February for classes beginning the following August. Program admission criteria program requirements can be found at <https://www.chaffey.edu/acc/hwa/rad-tech.php>. Go to this website and click on the application form checklist and Information Packet for the Prospective Radiologic Technology Student. This criteria is subject to change. The Radiologic Technology program is a high-unit program with more than 60 semester units.

### 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 67	Anatomy and Radiographic Positioning III	2.5
RADTEC 67L	Laboratory for Anatomy and Radiographic Positioning III	0.75
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 472	Venipuncture for Imaging Professionals	0.5
RADTEC 472L	Lab for Pharmacology and Venipuncture for Imaging Professionals	0.5
<b>Total units for the major</b>		<b>68</b>

## REAL ESTATE

The Real Estate A.S. degree is intended to prepare students to work in various sectors of the real estate industry. Real estate brokers perform a variety of functions, including aiding their clients in selling, purchasing, or renting a home or commercial property. They may also solicit borrowers or lenders, or negotiate real estate loans. Real Estate Salespersons work for licensed real estate brokers and perform many of the same acts as brokers, under the supervision of their employer. Other real estate occupations include property management, appraisal, and development.

Real estate brokers are licensed by the State of California Department of Real Estate. Brokers must take and pass an exam to qualify for a license. The Real Estate A.S. degree prepares students for the California Real Estate Broker License exam. Brokers must also satisfy an experience requirement before they can receive their license. Students should consult the California Department of Real Estate webpage for more information on California's licensing requirements (<http://www.dre.ca.gov/examinees/>).

To become a well-rounded person capable of fully participating in society and the modern economy, the student will need a strong foundation in the major areas of human study and endeavor. The Real Estate A.S. degree also includes coursework in General Education. Entry-level courses in General Education (arts and humanities, mathematics and natural sciences, and the social sciences) can help you gain a greater understanding of and appreciation for the world and its people. These general education courses will enhance communication skills, improve critical thinking skills and help with a professional career in the Real Estate industry. A degree is not, however, required for licensure. Students may pursue either a certificate or a degree to satisfy the Department of Real Estate course guidelines.

### Program Learning Outcomes:

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

1. Demonstrate a working knowledge of various areas of Real Estate.
2. Examine and consider the social and/or ethical responsibilities of Real Estate practitioners.
3. Demonstrate the ability to conduct real estate research, and to analyze, and interpret the findings.
4. Examine a variety of general education subjects that enable them to better understand the broader world in which the real estate system 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:

[S381/14400/0511.00*/52.1501]	Units
ACCTG 1A Financial Accounting	4
BUSL 50 Legal Aspects of Real Estate	3
RE 410 Real Estate Principles	3
RE 415 Real Estate Practice	3
RE 460 Real Estate Finance	3
RE 470 Real Estate Appraisal	3

### Plus three courses from the following:

BUSL 28A Business Law I	3
RE 472 Advanced Real Estate Appraisal	3
RE 475 Real Estate Escrow	3
RE 486 Real Estate Property Management	3
<b>Total units for the major</b>	<b>28</b>

## REAL ESTATE CERTIFICATE PROGRAMS

### Real Estate (Certificate)

The Real Estate certificate is intended to prepare students to work in various sectors of the real estate industry. Real estate brokers perform a variety of functions, including aiding their clients in selling, purchasing, or renting a home or commercial property. They may also solicit borrowers or lenders, or negotiate real estate loans. Real Estate Salespersons work for licensed real estate brokers and perform many of the same acts as brokers, under the supervision of their employer. Other real estate occupations include property management, appraisal, and development.

Real estate brokers are licensed by the State of California Department of Real Estate. Brokers must take and pass an exam to qualify for a license. The Real Estate A.S. degree prepares students for the California Real Estate Broker License exam. Brokers must also satisfy an experience requirement before they can receive their license. Students should consult the California Department of Real Estate webpage for more information on California's licensing requirements (<http://www.dre.ca.gov/examinees/>). A degree is not required for licensure. Students may pursue either a certificate or a degree to satisfy the Department of Real Estate course guidelines.

### Program Learning Outcomes:

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

1. Demonstrate a working knowledge of various areas of Real Estate.
2. Examine and consider the social and/or ethical responsibilities of Real Estate practitioners.
3. Demonstrate the ability to conduct real estate research, and to analyze, and interpret the findings.

### Requirements for the Real Estate Certificate of Achievement:

[L382/20684/0511.00\*/52.1501] Units  
Same as the major requirements for the A.S. Degree.

**Total units for the certificate** **28**

### Real Estate Salesperson (Certificate)

This program is intended for individuals desiring to become Real Estate Salespersons in California with a minimum of course requirements. Real Estate Salespersons work for licensed Real Estate Brokers and perform many of the same acts as brokers, under the supervision of a broker. Real Estate Salespersons are licensed by the State of California Department of Real Estate. A candidate for a Real Estate Salesperson's license must take and pass a state exam to qualify for a license. The Real Estate Salesperson's Certificate program prepares students for the California Real Estate Salesperson license.

### Program Learning Outcomes:

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

1. Demonstrate a working knowledge of various areas of Real Estate.
2. Examine and consider the social and/or ethical responsibilities of Real Estate practitioners.
3. Demonstrate the ability to conduct real estate research, and to analyze, and interpret the findings.

### Requirements for the Real Estate Salesperson Certificate of Achievement:

[M383/38434/0511.00*/52.1501]	Units
RE 410 Real Estate Principles	3
RE 415 Real Estate Practice	3

### Plus one course from the following:

ACCTG 1A Financial Accounting	4
BUSL 28A Business Law I	3
BUSL 50 Legal Aspects of Real Estate	3
RE 460 Real Estate Finance	3
RE 470 Real Estate Appraisal	3
RE 475 Real Estate Escrow	3
RE 486 Real Estate Property Management	3

**Total units for the certificate** **9-10**



## 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 II	4
ASL 3	Intermediate American Sign Language III	4
ASL 4	Intermediate American Sign Language IV	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.



## 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 CSU 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 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.
- 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:

- Recognize the connections between social structure and the individual in society.
- 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.
- Understand and demonstrate the impact of social action on the social structures of society.
- Recognize the categories of discrimination and their effects, including but not limited to racism, sexism, heterosexism, and classism.
- Identify societal granting of unearned privilege.

**Major requirements for the Associate in Arts for Transfer (AA-T) 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
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#### Area 3: Social Science

ARTH 3	Survey of Western Art from Prehistory through the Middle Ages	3
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#### 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 required core list not already used.

<b>Total units for the major</b>	<b>18-20</b>	
	<b>IGETC</b>	<b>CSU GE</b>
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>18</b>	<b>18</b>
<b>Elective (CSU transferable) units</b>	<b>21-23</b>	<b>19-21</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>



## 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 CSU pursuant to 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 CSU 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 CSU GE pattern, or 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 (AA-T) 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	CSU GE
<b>General Education</b>	37	39
<b>Total units that may be double-counted</b>	12	15
<b>Elective (CSU transferable) units</b>	14-16	15-17
<b>Total units required for the degree</b>	60	60



## 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. 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 CSU 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. Recognize and use grammatical structures in Spanish.
2. Identify specific music, art, literature, and/or cultural traditions of Spain and Latin America.
3. Successfully engage in basic conversations in Spanish.
4. Demonstrate familiarity with the geography of the countries and regions where the target Spanish is spoken.
5. Demonstrate awareness, appreciate Spanish culture and history.
6. Acquire real world communication skills necessary for employment where bilingual abilities are beneficial.
7. Communicate using appropriate reading, writing, and conversation skills.

### **Major requirements for the Associate in Arts for Transfer (AA-T) Degree** [A406/33227/1105.00/16.0905]

		Units
<b>Core (16 units):</b>		
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 9	Cultural Awareness through Conversation	3
SPAN 13	Survey of Mexican Literature	3
SPAN 14	Latin American Literature	3

**Total units for the major** **19**

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>9</b>	<b>9</b>
<b>Elective (CSU transferable) units</b>	<b>13</b>	<b>11</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>



## ASSOCIATE IN ARTS IN THEATRE ARTS FOR TRANSFER

The Associate in Arts in Theatre Arts for Transfer (AA-T) prepares students with both the theory and practical experience necessary for either employment in beginning levels of professional theatre or transfer to a theatre arts major at a CSU. 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 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 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, in preparation to pursue a career in the field of stage directing, acting, designing, K-12 education, and drama/theatre instruction.

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.

**Major requirements for the Associate in Arts for Transfer (AA-T) Degree:**  
[A410/31337/1007.00/50.0501] Units

### **Required (9-10 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 - Rehearsal and Performance (or THEATRE 52, Main Stage Production Workshop - Technical Theatre, 4)	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** **18-19**

	IGETC	CSU GE
<b>General Education</b>	<b>37</b>	<b>39</b>
<b>Total units that may be double-counted</b>	<b>3</b>	<b>6</b>
<b>Elective (CSU transferable) units</b>	<b>8</b>	<b>9</b>
<b>Total units required for the degree</b>	<b>60</b>	<b>60</b>

## 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	Acting for the Camera	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	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**

## THEATRE ARTS CERTIFICATE PROGRAMS

### Technical Theatre (Certificate)

The Technical Theatre Certificate of Achievement 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, video projection systems, projection design, 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 of Achievement

[L415/36903/1006.00*/50.0502]		Units
THEATRE 30	Stagecraft	3
THEATRE 32	Theatre Design – Lighting	3
THEATRE 36	Stage Management	3
THEATRE 40	Stage Costuming	3
	(or THEATRE 42, Theatrical Makeup)	
THEATRE 44	Audio/Visual Design in Theatre and Live Entertainment	3
THEATRE 52	Main Stage Production Workshop - Technical Theatre	4 - 8
<b>Total units for the certificate</b>		<b>19-23</b>

## 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](http://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**

## University Studies: Arts and Humanities (Emphasis)

[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 CSU GE 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, 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
Theatre	1, 4, 5, 10, 12

## University Studies: Social & Behavioral Sciences (Emphasis)

[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, 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, 25, 41, 65, 80
Social Science	10, 17
Sociology	10, 14, 15, 16, 18, 25, 26, 70, 80

**UNIVERSITY STUDIES, Cont.****University Studies: Mathematics & Science (Emphasis)**

[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 CSU GE or IGETC; students pursuing transfer majors in these areas will be required to take additional courses in Math and/or Science.

Anthropology	1 <u>or</u> 1+1L
Astronomy	26, 35
Biology	1, 2, 3, 10, 12, 14, 20, 22 23 <u>or</u> 23+23L, 40, 62, 63
Chemistry	7, 8, 9, 10, 12, 24A, 24B, 70, 75A, 75B
Computer Science	1, 2, 3, 4
Earth Science	1 <u>or</u> 1+1L, 5 <u>or</u> 5+5L
Engineering	26, 30, 50, 52, 60, 71
Geography	4 <u>or</u> 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 <u>or</u> 5+6, 20A, 20B, 30A, 30B, 44, 45, 46, 47
Social Science	10
Statistics	10

**University Studies: Business & Technology (Emphasis)**

[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 and Technology	61, 64A
Business: Legal Studies	28A, 28B
Business: Management	11, 40
Computer Information Systems	1, 4
CIS: Programming	1
Computer Science	1, 2, 3, 4
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, 21, 22
Interior Design	10, 21
Mathematics	60
Nutrition and Food	5, 15
Social Science	10
Statistics	10



# COURSE DESCRIPTIONS

## HOW TO READ THE COURSE ENTRIES

Courses listed in this catalog apply to the Fall 2020, Spring 2021, and Summer 2021 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 type of instructional delivery and the required range of hours for each delivery method per term.
- The next line identifies 1) 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, and 2) the applicability of the course to college credit. All courses listed in this catalog are degree-applicable, non-degree-applicable, or noncredit. A subset of degree-applicable courses are also transferable to the CSU and/or the UC systems and are designated as such.
- 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](http://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 placement 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.

## 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 BUSTEC-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 0502.00

### 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 0502.00

### 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.

0502.00

### 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, exploring both theoretical and practical aspects.

0502.00

### 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.

0502.00

### ACCTG-460 Commercial Accounting Software (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: ACCTG-1A Financial Accounting and 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.

0502.00

### 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.

0502.00

### 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.

0502.00

## ACCOUNTING AND FINANCIAL SERVICES (ACCTGFS)

### ACCTGFS-30 Personal Finance (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Fundamentals of personal finance including financial planning, money management, income and asset protection, and investments. Course material covered includes calculations and problem solving related to budgeting, managing income taxes, building and maintaining good credit, large personal assets purchases, managing property and liability risk, investment fundamentals, and retirement and estate planning.

0505.00

### 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.

0504.00

### 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.

0502.10

### 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.

0502.00

## AMERICAN SIGN LANGUAGE (ASL)

### ASL-1 Elementary American Sign Language I (4)

Lecture 64 - 72 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. This course may also require completion of supplemental assignments. This course corresponds to the first year of high school ASL.

0850.00

### ASL-2 Elementary American Sign Language II (4)

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ASL-1 Elementary American Sign Language I 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. This course may also require completion of supplemental assignments.

0850.00

### ASL-3 Intermediate American Sign Language III (4)

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ASL-2 Elementary American Sign Language II*

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. This course may also require completion of supplemental assignments.

0850.00

### ASL-4 Intermediate American Sign Language IV (4)

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ASL-3 Intermediate American Sign Language III*

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. This course may also require completion of supplemental assignments.

0850.00

### ASL-18 Introduction to Deaf Studies (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ASL-1 Elementary American Sign Language I*

Overview of Deaf history and the origins of American Sign Language. Introduction to the basic issues of Deaf culture and communication. Students will gain an overview of historical and contemporary issues and people in the Deaf community. This course introduces students to the wide variety of issues involved in Deaf Studies, including linguistics, education, sociology, psychology, and interpreting.

0850.00

## ANTHROPOLOGY (ANTHRO)

### 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 College placement 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 biocultural 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

2202.00

### 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

2202.00

### 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 College placement 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

2202.00

### 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 College placement 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

2202.00

## ARABIC (ARABIC)

### ARABIC-1 Elementary Modern Standard Arabic I (4)

Lecture 64 - 72 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. This course may also require completion of supplemental assignments. Corresponds to the first year of high school Arabic. 1112.00

### ARABIC-2 Elementary Modern Standard Arabic II (4)

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ARABIC-1 Elementary Modern Standard Arabic I 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. This course may also require completion of supplemental assignments. Corresponds to the second year of high school Arabic. 1112.00

### ARABIC-3 Intermediate Modern Standard Arabic (4)

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ARABIC-2 Elementary Modern Standard Arabic II or two years of high school Arabic*

Review of basic Arabic grammar. Introduction to more complex sentence structures and verb tenses. Students use Modern Standard Arabic at an intermediate level in speaking, listening, reading, and writing. Includes intermediate uses of Modern Standard Arabic alphabet, conversation strategies, and cultural interactions. Arabic cultural norms, values, and customs are explored and serve as a basis for additional skill-building practice. This course may also require completion of supplemental assignments. 1112.00

### ARABIC-4 Intermediate Modern Standard Arabic (4)

Lecture 64 - 72 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. This course may also require completion of supplemental assignments. 1112.00

## 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 1002.00

### 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 1002.00

### ART-14 Introduction to Drawing (3)

Lecture 24 - 27 hours. Laboratory 72 - 81 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 1002.10

### ART-15 Color Theory (3)

Lecture 24 - 27 hours. Laboratory 72 - 81 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 1002.10

### ART-16 Introduction to Painting (3)

Lecture 24 - 27 hours. Laboratory 72 - 81 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 1002.10

### 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. 1002.10

### 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. 1002.20

**ART-30 Figure Drawing (3)**

Lecture 24 - 27 hours. Laboratory 72 - 81 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 1002.10

**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 1002.10

**ART-34 Intermediate Painting (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: ART-16 Introduction to Painting*  
*Advisory: ART-10 Fundamentals of Design in Two Dimensions*  
 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.  
 1002.10

**ART-35 Intermediate Ceramics (3)**

Lecture 24 - 27 hours. Laboratory 72 - 81 hours.  
 Grading: Letter Grade (CSU; UC)  
*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.  
 1002.30

**ART-40 Advanced Ceramics (3)**

Lecture 24 - 27 hours. Laboratory 72 - 81 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: ART-20 Ceramic Sculpture*  
*Advisory: ART-35 Intermediate Ceramics*  
 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.  
 1002.30

**ART-44 Mixed-Media Studio and Theory (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*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.  
 1002.00

**ART-50 Introduction to Sculpture (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*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.  
 1002.20

**ART-62A Illustration I (3) [Cx]**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Prerequisite: ART-14 Introduction to Drawing*  
*Advisory: ART-16 Introduction to Painting or ART-10 Fundamentals of Design in Two Dimensions*  
 Introduction to the field of illustration. Emphasis on the development of basic skills in traditional media and understanding fundamental concepts of visual communication.  
 1013.00

**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. The course covers 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, and developing graphic design projects for traditional and emerging technologies.  
 C-ID ARTS 250 0614.60

**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*  
 An Introduction to typography for visual communications in the graphic design industries. The class emphasizes the use of typography in the design process, including aspects of analytical and creative design through typical media, for example: a brochure, poster, or magazine ad. Considering typographic graphic design projects for traditional and emerging technologies.

Students explore the evolution and classification of letterforms from ancient to contemporary, and feature the investigation of structure, format, legibility, and expression. Exercises include both hand and digital skills, with an emphasis on the application of typography.  
 1030.00

**ART-82 Introduction to Digital Media (4) [Cx]**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: ART-63 Introduction to Graphic Design and ART-10 Fundamentals of Design in Two Dimensions*  
 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.  
 0614.10

**ART-83 Web Design (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: ART-63 Introduction to Graphic Design**Advisory: ART-82 Introduction to Digital Media*

Introduction to design and production for the web/and or mobile devices using prototype production software such as Adobe XD and online web builders. Topics include the use of Photoshop and Illustrator in UI production, principles of UX/UI design, dynamic user interaction, online web builders, and portfolio production for the web and social media. 0614.30

**ART-89 Student Invitational Exhibition (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Student must pass faculty review of creative project proposal and portfolio in November for the following Spring term course and exhibition. Interested students should contact an art or photography faculty member no later than September 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. 1001.00

**ART-98ABC Independent Study: Art (1 - 3)**

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 1001.00

**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. 1030.00

**ART-460 Portfolio and Presentation (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Students are required to have a minimum of five artworks completed to present for critique prior to registering for this course. Interested students should contact the Art Department Coordinator.*

This course is intended for students planning to transfer to a four-year institution that requires a portfolio for admission. Students are required to have a minimum of five artworks completed prior to the start of the semester to present for critique. Appropriate selection of work and concept development are emphasized. 1001.00

**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. 1030.00

**ART-478 Illustration on the Computer (3)**

Lecture 32 - 36 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. 1030.00

**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 Digital Media Art. Course will cover the use of Adobe Premiere Pro in conjunction with digital SLRs and digital audio field recorders. Course will also cover interaction with Adobe After Effects. Topics include the history and theories of sound, video, motion, and art production for Digital Media Art. 0614.00

**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 to 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. 0614.60

## 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 1001.00

### 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 1001.00

### 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 1001.00

### 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 1001.00

### 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 1001.00

### 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.

1001.00

## ARTS MANAGEMENT (ARTMGT)

### ARTMGT-410 Introduction to Arts Management (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Provides a broad overview of the management principles and practices essential to careers that comprise the creative economy, defined as the for-profit and not-for-profit businesses, organizations, and individuals involved in producing cultural, artistic, and design goods and services. Arts Management combines the tools of business (such as management, marketing, financial planning, and law) with the tools of audience and community building (such as fundraising, education, cultural policy, and creative placemaking).

0501.00

### ARTMGT-420 Introduction to Project Funding (1.5)

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

An overview of the funding process for new creative ventures/projects including entrepreneurship, product and service development, arts education, event programming, performances, etc. with particular focus on researching, writing, and managing a range of funding types. The course covers a range of possible funding solutions relevant to for-profit and not-for-profit creative ventures/projects. Emphasis is given to the development of competitive proposals, accurate budgets, and appropriate project management.

0501.00

### ARTMGT-430 Introduction to Collection Management (1.5)

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

An introduction to the methods and administrative responsibilities associated with the development, storage, and preservation of collections. Topics covered are relevant to any field that undertakes the management and care of physical objects.

0501.00

### ARTMGT-440 Creative Careers - Discovering Self-Directed Pathways (1.5)

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

Investigates creative career opportunities in all visual, applied, and performing arts disciplines, with a focus on unique, self-directed, non-traditional, and entrepreneurial pathways and the academic and life choices necessary to realize such career opportunities.

0501.00

### ARTMGT-496AB Arts Business Management Cooperative Education Internship (1 - 2)

Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.

Grading: Pass/No-Pass (Degree-applicable)

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. 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. 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.

0501.00

## 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.

1911.00

### 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.

1911.00

### 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.

1911.00

## 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.

0948.00

### AUTOTEC-15 Auto Electricity and Electronics (2) [Cx]

Lecture 24 - 27 hours. Laboratory 24 - 27 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.

0948.00

### 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, or two 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.

0948.00

### AUTOTEC-416 Basic Automotive Air Conditioning Systems (2) [Cx]

Lecture 24 - 27 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade

(Degree-applicable)

*Advisory: AUTOTEC-10 Service and Repair and AUTOTEC-15 Auto Electricity and Electronics*

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.

0948.00

### 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.

0948.00

### 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.

0948.00

### 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, 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.

0948.00

### 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.

0948.00



**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. 0948.00

**AUTOTEC-429 Advanced Automotive Electrical Systems (4) [Cx]**

Lecture 40 - 45 hours. Laboratory 72 - 81 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. 0948.00

**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. 0948.00

**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. 0948.00

**AUTOTEC-432 Manual and Automatic Transmissions, Transaxles and Drive Trains (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-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. 0948.00

**AUTOTEC-435 High Performance Engine Rebuilding and Blueprinting (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**Advisory: AUTOTEC-430 Engine Rebuilding - Upper Engine and AUTOTEC-431 Engine Rebuilding - Lower Engine*

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. 0948.00

**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; 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. 0948.00

**AUTOTEC-450 General Automotive Technician A (12)**

Lecture 144 - 162 hours. Laboratory 144 - 162 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 Service and Repair; Brakes; and Steering and Suspension - with more emphasis placed on development of marketable skills. 0948.00

**AUTOTEC-455 General Automotive Technician B (12)**

Lecture 144 - 162 hours. Laboratory 144 - 162 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. 0948.00

**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. 0950.00

**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. 0950.00

**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.

0950.00

**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. 0950.20

**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. 0950.20

**AMT-27 Powerplant: Reciprocating Engine Fuel & Auxiliary 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 reciprocating engine fuel, propeller, and auxiliary systems overhaul, repair, installation, and operation. Lab emphasizes engine induction, cooling, and exhaust systems. 0950.20

**AMT-28A Powerplant: Reciprocating Engine Inspection (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant**Corequisite: AMT-25 Powerplant: Aircraft Reciprocating Engines (may be taken previously)*

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. 0950.20

**AMT-28B Powerplant: Electrical Systems (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant**Corequisite: AMT-26 Powerplant: Engine Instrumentation, Lubrication, Electrical*

Powerplant laboratory course to fulfill FAA practical applications relating to aircraft powerplant electrical systems. Projects include engine starters, generators and their controls. 0950.20

**AMT-28C Powerplant: Turbine Engine Auxiliary Systems (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: AMT-15 Introduction to Aviation Maintenance for Airframe and Powerplant**Corequisite: AMT-27 Powerplant: Reciprocating Engine Fuel & Auxiliary Systems*

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. 0950.20

**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. 0950.10

**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. 0950.10

**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. 0950.10

**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. 0950.50

**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. 0950.10

**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. 0950.10

**AMT-400 Aircraft Electronics (5)**

Lecture 64 - 72 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

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. 0950.40

**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. 0401.00

**BIOL-2 Environmental Science (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Introduction to environmental issues from a scientific perspective, focusing on physical, chemical, and biological processes within the Earth system, the interaction between humans and these processes, and the role of science in finding sustainable solutions. Topics include ecological principles, biodiversity, climate change, sustainability, renewable and non-renewable energy, water resources, air and water pollution, and solid waste management. 0301.00

**BIOL-3 California Environmental Issues (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Introduction to environmental issues from a scientific perspective, as they relate to California. Focus is on physical, chemical and biological processes within ecosystems, interaction between humans and these processes, and the role of science in finding sustainable solutions. Topics include ecological principles, California's biodiversity and threats, climate change in California, sustainability, renewable and non-renewable energy, California water resources and pollution, air pollution in California, and solid waste management. Course includes an overnight field trip. 0408.00

**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. 0401.00

**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. 0401.00

**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. 0837.00

**BIOL-20 Human Anatomy (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey placement 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. 0410.00

C-ID BIOL 110 B

**BIOL-22 Human Physiology (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: BIOL-20 Human Anatomy; CHEM-9 Health Science Chemistry, CHEM-10 Introductory Chemistry, or one 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. 0410.00

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-40 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. 0403.00

**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. 0403.00

**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. 0401.00

**BIOL-40 Introduction to Cell and Molecular Biology (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: Eligibility for MATH-25 College Algebra as determined by the Chaffey placement process, or MATH-450 Intermediate Algebra: A Critical Thinking Approach, or MATH-420 Essentials of Intermediate Algebra and MATH 420B; CHEM-10 Introductory Chemistry or completion of one year of high school chemistry**Advisory: ENGL-1A Composition*

An intensive course designed to prepare students for upper division courses in cell and molecular biology. This course covers the principles and applications of prokaryotic and eukaryotic cell structure and function, biological molecules, homeostasis, cell reproduction and its controls, molecular genetics, classical/Mendelian genetics, cell metabolism including photosynthesis and respiration, and cellular communication. The philosophy of science, methods of scientific inquiry and experimental design are foundational to the course. Laboratory includes experimental design, a variety of techniques (e.g. microscopy, spectrophotometry, electrophoresis), and data analysis.

C-ID BIOL 190 0401.00

**BIOL-62 Biology of Organisms (5)**

Lecture 48 - 54 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: BIOL-40 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, and 130 S when combined with BIOL-63 0401.00

**BIOL-63 Evolutionary Ecology (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: BIOL-40 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 0401.00

**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. 0401.00

**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. 0401.00

**BIOL-98ABC Independent Study: Biology (1 - 3)**

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Instructor signature is required for registration*  
*Advisory: Students should have completed a transfer level course in biology*

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. 0401.00

**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. 0410.00

**BIOL-424L Anatomy and Physiology Laboratory (1)**

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. 0410.00

## BROADCASTING (BRDCAST)

### BRDCAST-3 Introduction to Electronic Media (3)

Lecture 48 - 54 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. 0604.00

### 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 0604.00

### 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 0604.20

### 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 simulated and virtual multi-camera television studio and control room. Topics include studio signal flow, directing, theory and simulated operation of virtual camera and audio equipment, including switcher operation, fundamentals of lighting, graphics, video control and video recording and virtual video production.

Additional topics may include: simulated 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 virtual multi-camera studio productions.

C-ID FTVE 135 0604.20

### 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 0604.10

### 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.

0604.20

### 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.

0604.20

**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 in the U.S. and within a global society. Demonstrates how the following influences impact a business' ability to achieve its organizational goals: 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 0501.00

**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. 0501.00

**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 defensible. Benefits of implementing value-based business strategies to achieve competitive advantage and profits. Course focus is on systemic implementation of ethical and socially responsible tools, and the integration of ethics into workplace operations. 0506.00

**BUS-61 Introduction to Global Business (3) [Cx]**

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. 0508.00

**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 0607.00

**BUS-496ABCD Internships in Business (1 - 4)**

Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: 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. 0501.00

**BUSINESS: LEGAL STUDIES (BUSL)****BUSL-10 Introduction to Law and the Legal Process (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ESL-475 Fundamentals of College Reading and Writing for ESL Students or ENGL-495 College Reading and Writing**Placement Level: Eligibility for ENGL-1A as determined by the Chaffey College placement process.*

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.

C-ID LPPS 110 1401.00

**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, constitutional law, tort law, agency, business organizations, and criminal law as applied to business.

C-ID BUS 125 0505.00

**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. 0505.00

**BUSL-50 Legal Aspects of Real Estate (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: RE-410 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. 0511.00

**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. 1402.00

**BUSL-401 Legal Research and Writing (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSL-400 Introduction to Paralegal Studies and BUSTEC-455 Fundamentals of English for Business*

Fundamentals of legal research, writing, and analysis for the paralegal. Topics include: reading and analysis of statutes; research using primary authorities, secondary sources, and computer-assisted research tools; law office writings, including transmittal and client opinion letters, pleadings, law office memorandums, case briefs, and memorandums of law; and legal citation rules. 1402.00

**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. 1402.00

**BUSL-403 Evidence (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: BUSL-28A Business Law I*

*Advisory: BUSL-400 Introduction to Paralegal Studies*

Study of the California Evidence Code, the Federal Rules of Evidence, and a paralegal's role in the analysis and application of the rules of civil and criminal evidence. Topics include: evidence gathering and investigation, admissibility of relevant evidence, methods of proving character, modern competency rules, impeachment, testimony by lay and expert opinions, hearsay and hearsay exceptions, constitutional constraints on the admissibility of evidence, the impact of California's 1982 Proposition 8 ("Victim's Bill of Rights"), and privileges. 1402.00

**BUSL-405 Legal Document Preparation and Law Office Procedures (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-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 basic legal calendaring procedures, time keeping, legal filing systems, and how to edit, format, proof, save, and print legal documents. 1402.00

**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. 1402.00

**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. 1402.00

**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. 1402.00

**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. 1402.00

**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. 0508.00

**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. 1402.00

**BUSL-412 Immigration Law (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSL-28A Business Law I or 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. 1402.00

**BUSL-413 Workers' Compensation Law (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: BUSL-28A Business Law I or BUSL-400 Introduction to Paralegal Studies*

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. 1402.00

**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. 0509.00

**BUSL-496ABC Internships in Paralegal (1 - 3)**

Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.

Grading: Letter Grade (Degree-applicable)

Supervised internship in cooperation with private, public, and/or non-profit sector legal 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. 1402.00

**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. 0506.50

**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. 0510.00

**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. 0510.00

**BUSMGT-40 Introduction to Management (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

A survey of management concepts, basic functions, and skills as they apply at all levels within the contemporary work environment. Application of management theory to managerial practices to improve organizational effectiveness and efficiency, and enhance national and international competitiveness. 0506.00

**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. 0506.30

**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. 0506.30

**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. 0506.40

**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. 0506.00

**BUSMGT-430 Warehouse Management and Material Handling (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Essential skills for warehouse managers, with emphasis on the planning, protection, productivity, and quality control functions in warehouse and distribution operations. Topics include: warehouse design and layout, effective communications, industry terminology, technology, distribution systems, inventory management and protection, accountability, auditing, and safety rules and regulations. 0510.00

**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. 0510.00



**BUSMGT-441 Principles of Leadership (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
 Leadership principles in business. Topics include leadership skills for any business environment, leadership theory and practice, leadership styles, problem solving, business and leadership ethics, motivation, conflict resolution, and the effective use of power. 0506.00

**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. 0506.30

**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. 0506.30

**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. 0506.30

**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. 0509.40

**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. 0509.00

**BUSMKT-55 Advertising (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
 Historical, economic, social, and psychological appeal of advertising. Practical and psychological aspects of product packaging, trademarks, and color. Production techniques for the basic advertising media. Advertising management techniques, campaign scheduling, budgeting, and evaluation. Career opportunities and trends. 0509.10

**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. 0508.00

**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. 0508.00

**BUSMKT-410 Marketing Using Social Media (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
*Advisory: BUSMKT-40 Marketing Principles*  
 Fundamentals of marketing using social media. Topics include effective social media marketing platforms, marketing platform selection, blogging and video marketing, social media advertising and promotion for businesses. Evaluation of various elements of social media marketing strategy and campaigns. 0509.00

**BUSMKT-420 Customer Service (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
 Fundamentals of customer service in organizations. Topics include effective communication and transfer of tacit knowledge between an organization and its stakeholders, conflict management, creating a culture of service, increasing customer satisfaction, and building and expanding long-lasting relationships. 0506.00

**BUSINESS TECHNOLOGY (BUSTEC)****BUSTEC-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. 0514.00

**BUSTEC-40B Computer Keyboarding: Speed and Accuracy Development (3) [Cx]**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Advisory: BUSTEC-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, and the creation of appropriately formatted business documents. 0514.00

**BUSTEC-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. 0514.00

**BUSTEC-60A Microsoft Office Word - Specialist (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: BUSTEC-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.

0514.00

**BUSTEC-60B Microsoft Office Word - Expert (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: BUSTEC-60A Microsoft Office Word – Specialist, or equivalent full-year high school, or a full-semester college course, or Word Specialist MOS Certification*

*Advisory: BUSTEC-40A Beginning Computer Keyboarding*

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.

0514.00

**BUSTEC-61 Microsoft Office PowerPoint (1.5) [Cx]**

Lecture 24 - 27 hours.

Grading: Letter Grade (CSU)

*Advisory: BUSTEC-40A Beginning Computer Keyboarding and BUSTEC-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.

0514.00

**BUSTEC-62 Microsoft Office Outlook (1.5) [Cx]**

Lecture 24 - 27 hours.

Grading: Letter Grade (CSU)

*Advisory: BUSTEC-40A Beginning Computer Keyboarding; 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.

0514.00

**BUSTEC-63 Microsoft Office Excel - Comprehensive (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: BUSTEC-40A Beginning Computer Keyboarding and BUSTEC-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.

0514.00

**BUSTEC-64 Microsoft Office Access - Comprehensive (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: BUSTEC-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.

0514.00

**BUSTEC-400 Job Search and Interviewing Techniques (1.5)**

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-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.

0514.00

**BUSTEC-410 MS Publisher Comprehensive (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-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.

0614.50

**BUSTEC-452 Administrative Financial Bookkeeping (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Bookkeeping procedures to broaden the skills of the administrative 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.

0514.00

**BUSTEC-455 Fundamentals of English for Business (3) [Cx]**

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.

0514.00

**BUSTEC-460 Proofreading: Text-Editing Skills (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-60A Microsoft Office Word – Specialist; Concurrent enrollment in BUSTEC-455 Fundamentals of English for Business*

Development of the essential skills needed to perform proofreading and text-editing functions for the administrative office. Emphasis on formatting and accuracy of input using word processing software and reference manuals.

0514.00

**BUSTEC-470 Office Systems and Procedures (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-60A Microsoft Office Word - Specialist*

Coordination and refinement of the duties and responsibilities of the office professional, including the organization of those duties, the personal qualifications of the office professional, and business office ethics and etiquette in a diverse and global business environment. Emphasis on work procedures, technology in the office, stress- and time-management techniques, team work, customer service, event planning and business travel arrangements. 0514.00

**BUSTEC-471 Administrative Office Management (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-60A Microsoft Office Word – Specialist and BUSTEC-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. 0514.40

**BUSINESS TECHNOLOGY: MEDICAL CODING AND BILLING (BUSTECM)****BUSTECM-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. 0514.20

**BUSTECM-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. 0514.20

**BUSTECM-420 Basic ICD-10-CM Coding (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: BIOL-30 Beginning Medical Terminology**Corequisite: BUSOTMD-408 Coding of Body Systems for Medical Coding and Billing (may be taken previously).*

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 comorbidities. Coding software applications introduced. 0514.20

**BUSTECM-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. 0514.20

**BUSTECM-440 Medical Billing, Reimbursement, and Compliance (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: BUSTECM-430 Intermediate Level ICD-10-CM, ICD-10-PCS 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. 0514.20

**BUSTECM-475 Medical Office Procedures (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BIOL-30 Beginning Medical Terminology and BUSTEC-470 Office Systems and Procedures; BUSTEC-40A Beginning Computer Keyboarding or BUSTEC-40B Computer Keyboarding: Speed and Accuracy Development*

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. 0514.20

**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)

*Prerequisite: Eligibility for MATH-450 Intermediate Algebra: A Critical Thinking Approach, MATH-420 Essentials of Intermediate Algebra, or higher level math course as determined by the Chaffey College placement process*

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. 1905.00

**CHEM-8 Chemistry in Society (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Prerequisite: Eligibility for MATH-450 Intermediate Algebra: A Critical Thinking Approach, MATH-420 Essentials of Intermediate Algebra, or higher level math course as determined by the Chaffey College placement process*

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 1905.00

**CHEM-9 Health Science Chemistry (5)**

Lecture 64 - 72 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

Advisory: MATH-25 College Algebra

*Prerequisite: Eligibility for MATH-25 College Algebra as determined by the Chaffey College placement process, 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. 1905.00

**CHEM-10 Introductory Chemistry (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Prerequisite: Eligibility for MATH 450, MATH 420 or higher level math course as determined by the Chaffey College placement process*

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 101 1905.00

**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 pursuing 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. 1905.00

C-ID CHEM 102

1905.00

**CHEM-24A General Chemistry I (5)**

Lecture 48 - 54 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: Eligibility for MATH-25 College Algebra as determined by the Chaffey College placement process, 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; CHEM-10 Introductory Chemistry or completion of one year of high school chemistry*

*Advisory: Completion or concurrent enrollment of MATH-25 College Algebra Introductory Chemistry or completion of one year of high school chemistry*  
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 110, and 120 S when combined with CHEM-24B 1905.00

**CHEM-24B General Chemistry II (5)**

Lecture 48 - 54 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: CHEM-24A General Chemistry I*

*Advisory: Completion or concurrent enrollment of MATH-25 College Algebra*  
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.

C-ID CHEM 120 S, when combined with CHEM-24A 1905.00

**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. 1905.00

**CHEM-76A Organic Chemistry I (4)**

Lecture 48 - 54 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, and 160 S when combined with CHEM-76B 1905.00

**CHEM-76B Organic Chemistry II (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: CHEM-76A Organic Chemistry I*

This course is a continuation of Chem 76A 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.

C-ID CHEM 160 S, when combined with CHEM-76A 1905.00

## 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 and 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 1305.00

### 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 1305.00

### 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 1305.00

### 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 1305.00

### 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 1305.40

### CDE-6 Teaching in a Diverse Society (3) [Cx]

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*  
 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 1305.00

### CDE-7 Curriculum Development: The Creative Arts (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 the creative arts for young children. Storytelling, language, visual arts, drama, music, and dance are examined as an integral part of the child's world. Theories and techniques to develop children's creative abilities are explored. Emphasis on creative processes through appreciation of diversity in art and culture. Perspectives on values and problem solving that engage children's participation at all levels. 1305.00

### 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. 1305.00

### CDE-23 Introduction to Children with Special Needs (3)

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Prerequisite: CDE-2 Child Growth and Development*  
*Advisory: Proof of negative tuberculosis test within the past 12 months may be required for some site visits*  
 Presentation of different types of physical and behavioral difficulties that interfere with normal cognitive, social, and emotional growth. Recognition of these difficulties, where to seek appropriate professional help, and how to work with children with special needs in the home and in the school. 1305.20

### CDE-24 Introduction to Curriculum Theory (2)

Lecture 32 - 36 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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, CDE-2 Child Growth and Development, CDE-3 Observation and Assessment, and CDE-4 Child, Family, and Community*  
*Corequisite: CDE-24W Practicum I: Supervised Occupational Work Experience*  
 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-24 W 1305.80

**CDE-24W Practicum I: Supervised Occupational Work Experience (1)**  
Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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*  
*Corequisite: CDE-24 Introduction to Curriculum Theory*

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. Sixty hours unpaid supervised practicum in various community child development programs, or 75 hours of paid supervised practicum in various community child development programs per Title 5 section 55253.

C-ID ECE 130, when combined with CDE-24 1305.80

**CDE-25 Advanced Curriculum Theory (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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, CDE-2 Child Growth and Development, CDE-4 Child, Family, and Community, CDE-24 Introduction to Curriculum Theory, and CDE-24W Practicum I: Supervised Occupational Work Experience*  
*Corequisite: CDE-25W Practicum II: Supervised Occupational Work Experience*

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-25 W 1305.80

**CDE-25W Practicum II: Supervised Occupational Work Experience (1)**

Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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, CDE-2 Child Growth and Development, CDE-4 Child, Family, and Community, CDE-24 Introduction to Curriculum Theory, and CDE-24W Practicum I: Supervised Occupational Work Experience*  
*Corequisite: CDE-25 Advanced Curriculum Theory*

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. Sixty hours unpaid supervised practicum in various community child development programs, or 75 hours of paid supervised practicum in various community child development programs per Title 5 section 55253.

C-ID ECE 210, when combined with CDE-25 1305.80

**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. 1305.00

**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. 1305.00**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. 1305.90

**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. This course may also require completion of lab assignments. This course corresponds to the first year of high school Chinese. 1107.00

**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. This course may also require completion of lab assignments. This course corresponds to the second year of high school Chinese. 1107.00

**CHIN-3 Intermediate Mandarin Chinese I (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: CHIN-2 Elementary Mandarin Chinese II*

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. This course may also require completion of supplemental assignments. 1107.00

**CHIN-4 Intermediate Mandarin Chinese II (4)**

Lecture 64 - 72 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. This course may also require completion of supplemental assignments. 1107.00

**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. 1107.00

**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. 0612.20

**CINEMA-22 Introduction to Media Writing (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: Basic keyboarding skills are recommended*

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. 0604.00

**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. 0612.10

**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. 0612.10

**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 0612.20

**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. 0604.20

**CINEMA-96 Internships in Cinema, Television or Radio (3)**

Work Experience 180.00 - 225.00

Grading: Pass/No-Pass (CSU)

*Prerequisite: CINEMA-30 Beginning Motion Picture Production, CINEMA-80 Producing for Broadcast and Cinema, BRDCAST-55 Beginning Audio Production, BRDCAST-60 Beginning Single Camera Production, BRDCAST-62 Beginning TV Studio Production, BRDCAST-67 Beginning Radio Production, 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. 0604.00

## COMMUNICATION STUDIES (COMSTD)

### COMSTD-2 Fundamentals of Effective Speaking (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 1506.00

### 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 1506.00

### COMSTD-6 Fundamentals of Small Group Communication (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 1506.00

### 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 and COMM 180 1506.00

### 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 0610.00

### 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 1506.00

### 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 1506.00

### COMSTD-74 Intercultural Communication (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 1506.00

### COMSTD-76 Gender and Communication (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: COMSTD-8 Fundamentals of Speech Communication*

Examination of communication patterns existing between males and females. Designed to integrate theory and practice, and to heighten students' awareness of the importance of gender as a communication variable. Emphasis on perception, verbal and nonverbal communication in interpersonal, small group and public settings. Communication problems relating to gender are addressed along with listening, assertiveness, negotiation and other conflict management strategies.

1506.00

### COMSTD-78 Family Communication (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

Introduction to communication in the family setting. Analysis of how communication-related behavior affects the development, maintenance, enhancement, and deterioration of family relationships. Through group and class discussion, students develop insights about speech variables and communication processes which affect familial interaction.

1506.00

## 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 ITIS 120 and BUS 140 0702.00

### 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.

0702.00



**CIS-15 Introduction to Database & Database Management Systems (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CIS-1 Introduction to Computer Information Systems*

This course provides the students with an introduction to the core concepts in data and information management with a focus on modern database technologies and techniques. It is centered around the core skills of identifying organizational information requirements, modeling them using conceptual data modeling techniques, converting the conceptual data models into relational data models and verifying its structural characteristics with normalization techniques, and implementing and utilizing a relational database using an industrial-strength database management system and language. The course will also include coverage of basic database administration tasks and key concepts of data quality and data security. In addition to developing database applications, the course helps the students understand how large-scale packaged systems are highly dependent on the use of Database Management Systems (DBMSs). Building on the transactional database understanding, the course provides an introduction to data and information management technologies that provide decision support capabilities under the broad business intelligence umbrella. 0707.20

**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 0708.10

**CIS-65 Digital Forensics Fundamentals (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CIS-1 Introduction to Computer Information Systems and CIS-4 Fundamentals of Microsoft Windows**Advisory: CISNTWK-12 Introduction to Network Security Administration; concurrent enrollment in CJ-5 Legal Aspects of Evidence or CJ-9 Crime Scene Management and Forensic Evidence*

This course is an introduction to the methods used to properly conduct a digital forensics investigation beginning with a discussion of ethics, while mapping to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification. Topics covered include an overview of computer forensics as a profession; the computer investigation process; understanding operating systems boot processes and disk structures; data acquisition and analysis; technical writing; and a review of familiar digital forensics tools. 0707.30

**CIS-68 Internet Technologies (1.5) [Cx]**

Lecture 24 - 27 hours.

Grading: Letter Grade (CSU)

Introduction to and use of Internet technologies. Topics include access, hardware, software, protocols, security, communication, search tools, Electronic Commerce, cloud services, Internet of Things (IoT), and other current and emerging Internet and Web technologies. 0709.00

**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. 0701.00

**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. 0702.00

**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. 0702.10

**CIS-435 Fundamentals of Microsoft Visio (1.5)**

Lecture 24 - 27 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. 0702.10

**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. 0702.00

**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: 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. 0702.00

## COMPUTER INFORMATION SYSTEMS: CISCO INTERNETWORKING (CISCO)

### CISCO-1 Cisco Internetworking I (4)

Lecture 64 - 72 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. 0708.00

### CISCO-2 Cisco Internetworking II (4)

Lecture 64 - 72 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. 0708.00

### CISCO-3 Cisco Internetworking III (4)

Lecture 64 - 72 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. 0708.00

### CISCO-4 Cisco Internetworking IV (4)

Lecture 64 - 72 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. 0708.00

### CISCO-415 Cisco Internetworking V (4)

Lecture 64 - 72 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. 0708.00

### 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. 0708.00

### CISCO-417 Cisco Internetworking VII (4)

Lecture 64 - 72 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). 0708.00

### CISCO-418 Cisco Internetworking VIII (4)

Lecture 64 - 72 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 architectures. Administrator/end user interfaces, telephony/mobility features, and Cisco UC solutions maintenance. 0708.00

### CISCO-419 Cisco Internetworking IX (4)

Lecture 64 - 72 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. 0708.10

### 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. 0708.00

## COMPUTER INFORMATION SYSTEMS: GAME DEVELOPMENT (CISGAME)

### CISGAME-1 Fundamentals of Game Development (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Introduction to the principles of interactive 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. 0707.00

### CISGAME-2 Fundamentals of Game Development II (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*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. 0614.20

### CISGAME-403 Fundamentals of Game Programming (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

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. 0707.10

### CISGAME-420 Mobile/Web Game Development (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

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. 0707.10

## 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. 0708.20

## 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. 0707.10

### CISIWEB-74 Creating Dynamic Applications using Javascript (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*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. 0707.10

### 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. 0709.00

## 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. 0708.10

### 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. 0708.10

**CISNTWK-20 Introduction to Cybersecurity: Ethical Hacking (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CIS-50 Introduction to Computer Networks**Advisory: 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. 0708.10

**CISNTWK-25 Cyber Security Operations & Analysis (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CISNTWK-70 Virtualization, Cloud Essentials and Amazon Web Services (AWS) and CISNTWK-12 Introduction to Network Security Administration*

An Introduction to Cyber Security operations including setting up enterprise systems, perimeter defense, firewalls, intrusion detection systems, proxies, virtual private networks, detecting security breaches, and responding to security incidents. This class is meant to provide hands on skills for students desiring entry to the cyber security field within security operation centers. 0708.10

**CISNTWK-70 Virtualization, Cloud Essentials and Amazon Web Services (AWS) (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CIS-50 Introduction to Computer Networks and CIS-4 Fundamentals of Microsoft Windows*

Using lecture and hands-on labs, this course introduces students to the various cloud models and technologies used in public, private and hybrid clouds. Topics include cloud deployment methods, service models, cloud infrastructure, and key considerations in migrating to cloud computing. Amazon AWS will be the focus for the public cloud model as AWS has revolutionized IT infrastructure and students will be able to spin up actual AWS resources. For the private cloud and hybrid cloud portions of the course, students will setup hardware, networking, hypervisors and virtual machines. This course will cover various cloud technologies and essential domains including compute, storage, networking, security, applications, databases, Infrastructure as a Service, Platform as a Service, and Software as a Service. This course prepares students for multiple certifications including the AWS Academy Cloud Foundations and the CompTIA Cloud+ exams. 0708.10

**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. 0708.10

**CISNTWK-435 Introduction to the Linux Operating System (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: CIS-50 Introduction to Computer Networks*

This lecture/lab course introduces functions and features of the UNIX/Linux operating system, including origin and evolution, hardware and software, both command-line and graphical user interface, files and file system structure, system services, processes, background processing, scheduling, file security, the vi editor, file sharing, and redirection and piping. Students are also introduced to shell programming and a variety of UNIX/Linux command-line and graphical tools. 0708.00

**CISNTWK-471 AWS Academy Cloud Computing Architecture (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: CISNTWK-70 Virtualization, Cloud Essentials and Amazon Web Services (AWS)*

This course is an Amazon Web Services (AWS) Academy curriculum designed to help further develop technical expertise in cloud computing. Building from the Cloud Computing Foundations level, CISNTWK-70, this course will focus on the knowledge needed to deliver optimized services using best practices and value. Students will gain the skills necessary to use and deploy cloud infrastructure, services, and compute resources. This course prepares students to sit for the AWS Solutions Architect - Associate Certification Exam. 0708.00

**COMPUTER INFORMATION SYSTEMS: PROGRAMING (CISPROG)****CISPROG-1 Introduction to Computer Programming (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: 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. 0707.10

C-ID COMP 112

**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. 0707.10

**CISPROG-6 Python Data Analytics (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CISPROG-5 Programming with Python*

This course provides students with experience in using Python as a tool to import, explore, condition, and analyze data. Students will develop ways to find meaning in data using Python tools and modules such as NumPy, Matplotlib, and Pandas. Topics include: production of plots and models for decision making, import and manipulation of databases, data visualization, selection and application of statistical analyses, machine learning, and predictive modeling. 0707.10

**CISPROG-600 iOS App Development with SWIFT (0)**

Lecture 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

The Intro to App Development with Swift course introduces students to the world of app development and the basics of Swift and Xcode. Students will learn the basics of programming and app creation for Apple and Mac including strings, functions, constants, variables, types, parameters, decision making, actions, loops, and user interfaces. 0702.10

## COMPUTER SCIENCE (COMPSCI)

### COMPSCI-1 Programming Concepts and Methodology I (3) [Cx]

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: CISPLOG-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). This course qualifies for the Computer Science & Cyber Security Pathways.

C-ID COMP 122 0706.00

### 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 0706.00

### 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 0706.00

### 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.

C-ID COMP 152 and MATH 160 0706.00

### COMPSCI-401 Introduction to Virtual and Augmented Reality (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

This course introduces students Virtual Reality (VR) and Augmented Reality (AR). Included is a basic introduction to this technology through an overview and introduction of all types of extended reality (XR), history and development, uses and applications in business, education, healthcare, and other industries, the challenges of the medium, and the basic application development tools and hardware components necessary to build virtual environments. This course is designed for people who are new to VR as a medium.

0799.00

## 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)

*Limitation on Enrollment: 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.

4932.00

## 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 2105.00

### 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.

C-ID AJ 120 2105.00

### 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.

C-ID AJ 122 2105.00

**CJ-4 Community and the Justice System (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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.

C-ID AJ 160 2105.00

**CJ-5 Legal Aspects of Evidence (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*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.

C-ID AJ 124 2105.00

**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 2105.00

**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 2105.00

**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 2105.00

**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 2105.40

**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.

**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.

C-ID AJ 200 2105.10

**CJ-52 Control and Supervision of Inmates (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: CJ-51 Introduction to Corrections*

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. 2105.10

**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. 2105.10

**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. 2105.20

**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. 2105.10

**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. 2105.00

**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. 2105.00

**CJ-412 Writing for Criminal Justice Professionals (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BUSTEC-455 Fundamentals of English for Business*

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. 2105.00

**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. 2105.00

**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. 2105.10

**CULINARY ARTS (CUL)****CUL-15 Sanitation, Safety, and Equipment Management (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

Safety, sanitation, and proper equipment management issues in the food service industry. In-depth coverage of industry-based sanitation and safety standards that prevent contamination and food-borne illness, 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 1307.10

**CUL-17 Principles of Food Preparation (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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 demonstrations of hands-on professional food preparation techniques and how they apply to a culinary team. 1306.30

**CUL-22 Restaurant and Catering Operations (3)**

Lecture 16 - 18 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 1307.10

**CUL-440 Introduction to Baking (4)**

Lecture 16 - 18 hours. Laboratory 144 - 162 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1306.30

**CUL-441 Advanced Professional Baking (4)**

Lecture 16 - 18 hours. Laboratory 144 - 162 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1306.30

**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 d'oeuvres, pates, terrines, and charcuterie. Kitchen safety and sanitation rules are revisited and practiced. 1306.30

**CUL-443 Artisan Breads (4)**

Lecture 16 - 18 hours. Laboratory 144 - 162 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: 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. 1306.30

**CUL-444 World Cuisine (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: 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. 1306.30

**CUL-445 Cake Decorating, Pastry Art, and Chocolates (3)**

Lecture 32 - 36 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. 1306.30

**DANCE (DANCE)****DANCE-1 Survey of Dance (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: Eligibility for ENGL-1A as determined by the Chaffey College placement 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. 1008.00

**DANCE-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. 1008.00

**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. 1008.00



**DANCE-7B Ballet IB (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Skill improvement in fundamental classical ballet barre and center technique at the advanced beginning level. Continued study of ballet theory, history, and vocabulary. 1008.00

**DANCE-8A Ballet IIA (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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. 1008.00

**DANCE-10A Jazz Dance IA (1)**

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. 1008.00

**DANCE-10B Jazz Dance IB (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Level placement pending instructor approval or DANCE-10A Jazz Dance IA*

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. 1008.00

**DANCE-12 Introduction to Dance (3)**

Lecture 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. 1008.00

**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. 1008.00

**DANCE-20B Modern Dance IB (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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. 1008.00

**DANCE-25 Dance Conditioning and Somatic Techniques (2)**

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

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. 1008.00

**DANCE-30A Tap Dance IA (1)**

Studio 48 - 54 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. 1008.00

**DANCE-30B Tap Dance IB (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Level placement pending instructor approval**Advisory: DANCE-30A Tap Dance IA*

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. 1008.00

**DANCE-40A Modern Dance IIA (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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. 1008.00

**DANCE-42 Dance Production I (3)**

Laboratory 144 - 162 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: 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. 1008.00

**DANCE-44 Dance Production II (3)**

Laboratory 144 - 162 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Audition to determine technical proficiency in various dance styles**Advisory: DANCE-42 Dance Production I*

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. 1008.00

**DANCE-50A Jazz Dance IIA (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: level placement pending instructor approval.**Advisory: DANCE-10B Jazz Dance IB*

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. 1008.00

**DANCE-50B Jazz Dance IIB (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Level placement pending instructor approval**Advisory: DANCE-50A Jazz Dance IIA*

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. 1008.00

**DANCE-60A Tap Dance IIA (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Level placement pending instructor approval**Advisory: DANCE-30B Tap Dance IB*

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. 1008.00

**DANCE-400 Hip Hop Dance (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Basic techniques and styles of Hip Hop dance both historical and current emphasizing musicality, rhythms, basic and complex movements required to develop performance and choreographic skills, critical viewing and analysis of Hip Hop dance choreography, and audition preparation and skills needed for the commercial dance industry. 1008.00

**DANCE-420 Social Dance (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

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. 1008.00

**DANCE-450 Student Choreography for Performance (0.75)**

Studio 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1008.00

**DANCE-452 Student Choreography for Performance II (0.75)**

Studio 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: DANCE-450 Student Choreography for Performance*

Course provides continued dance performance and choreographic experience for public performance in an in-studio setting. Intermediate/advanced level choreographic and/or performance skills emphasizing deep artistic range, expression, and technical mastery. Students will perform more complex advanced student choreography and multiple roles including that of principal, solo, small group, and/or ensemble. Choreographers 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. 1008.00

**DENTAL (DENTAL)****DENTAL-405 Basic Dental Sciences (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L**Limitation on Enrollment: Enrollment in the Dental Assisting program*

Introduction to basic dental sciences and terminology to include the oral cavity, landmarks of the face, tooth morphology, general and oral anatomy, body structures and physiology, fundamentals of preventive dentistry and plaque control, nutrition, history of dentistry, the dental health team, and the state dental practice act. 1240.10

**DENTAL-415 Dental Chairside Skills I (2.5) [Cx]**

Lecture 40 - 45 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*

This lecture course provides instruction in four-handed dentistry techniques and prepares the student to assist a dentist at chairside. Content includes: identification and management of medical emergencies, principles and procedures of four-handed dentistry, oral evacuation, charting, preparation of anesthetic syringe, rotary and hand instruments, tray setups, placement of dental dam, tofflemire matrix, health history and vital signs. 1240.10

**DENTAL-415L Dental Chairside Skills I Lab (2)**

Laboratory 96 - 108 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*

This lab course provides instruction in four-handed dentistry techniques and prepares the student to assist a dentist at chairside. Content includes: identification and management of medical emergencies, principles and procedures of four-handed dentistry, oral evacuation, charting, preparation of anesthetic syringe, rotary and hand instruments, tray setups, placement of dental dam, tofflemire matrix, health history and vital signs. 1240.10

**DENTAL-425 Dental Materials (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*

Basic physical and technical aspects of dental materials utilized in restorative and laboratory dental procedures. It is designed to develop the knowledge of the properties necessary for the application of these materials to include but not limited to: dental lab safety and asepsis, infection control, gypsum, restorative materials, dental cements, impression materials, acrylics and thermoplastics, waxes, fabrication of cast, temporary restoration, study casts, occlusal registrations and face bow. 1240.10

**DENTAL-425L Dental Materials Lab (1) [Cx]**

Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*

Basic physical and technical aspects of dental materials utilized in restorative and laboratory dental procedures. It is designed to develop the skills necessary for the application of these materials to include but not limited to: dental lab safety and asepsis, infection control, gypsum, restorative materials, dental cements, impression materials, acrylics and thermoplastics, waxes, fabrication of cast, temporary restoration, study casts, occlusal registrations and face bow. 1240.10

**DENTAL-435 Infection Control in Dentistry (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-445, and DENTAL-445L*

This course is designed to provide theory and laboratory instruction that will prepare the dental assistant in all aspects of preventing disease transmission in the work environment. Emphasis is placed on knowledge of the infectious disease process, microbiology, disease transmission, disinfection, sterilization techniques, OSHA standards & requirements, ergonomics, waterline maintenance and waste management. 1240.10

**DENTAL-435L Infection Control in Dentistry Lab (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-445, and DENTAL-445L*

This course is designed to provide theory and laboratory instruction that will prepare the dental assistant in all aspects of preventing disease transmission in the work environment. Emphasis is placed on knowledge of the infectious disease process, microbiology, disease transmission, disinfection, sterilization techniques, OSHA standards & requirements, ergonomics, waterline maintenance and waste management. 1240.10

**DENTAL-445 Oral Radiology (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, and DENTAL-435L*

Theory and basic principles of intraoral and extra oral radiographs; characteristics and methods of controlling radiation, hazards of radiation and biological effects and radiography anatomical landmarks and pathologies. Practical application in oral radiology preclinical, clinical and laboratory setting; radiographic exposures, process and evaluations on DXTRR and patients; infection control, health and safety rules and regulations, and the use of selected radiographic equipment and image software. This course is approved by the Dental Board of California for meeting the Radiation Safety requirements. 1240.10

**DENTAL-445L Oral Radiology Lab (1.5) [Cx]**

Laboratory 72 - 81 hours.

Grading: Letter Grade (Degree-applicable)

*Corequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, and DENTAL-435L*

Practical application in oral radiology preclinical, clinical and laboratory setting; radiographic exposures, process and evaluations on DXTRR and patients; infection control, health and safety rules and regulations, and the use of selected radiographic equipment and image software. This course is approved by the Dental Board of California for meeting the Radiation Safety requirements. 1240.10

**DENTAL-455 Dental Office Procedures (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L**Corequisite: DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L*

Instruction in the application of skills and responsibilities of a business assistant in a dental office practice. Fundamentals in basic computer and dental software, oral and written communication skills, business ethics and jurisprudence, inventory systems and supply ordering, management of patient information, recall system and appointment scheduling, dental insurance billing, employment protocols and preparation and basic bookkeeping skills. Instruction includes integration of materials through lecture and the use of computers. 1240.10

**DENTAL-455L Dental Office Procedures Lab (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L**Corequisite: DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L*

Instruction in the application of skills and responsibilities of a business assistant in a dental office practice. Fundamentals in basic computer and dental software, oral and written communication skills, business ethics and jurisprudence, inventory systems and supply ordering, management of patient information, recall system and appointment scheduling, dental insurance billing, employment protocols and preparation and basic bookkeeping skills. Instruction includes integration of materials through practical experience and the use of computers. 1240.10

**DENTAL-460 Clinical Experience I (2) [Cx]**

Laboratory 96 - 108 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L**Corequisite: DENTAL-455, DENTAL-455L, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L*

Apply dental assisting basic skills and knowledge, communication and technical skills in the dental office or clinical environment. Students will regularly attend clinical seminars to discuss related work experiences. 1240.10

**DENTAL-465 Clinical Experience II (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L**Corequisite: DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-475, DENTAL-475L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L*

Application of academic knowledge, communication and technical skills to the dental office workplace environment. Weekly clinical seminar, evaluations and related work experiences include but not limited to using basic and advanced chairside assisting skills and procedures, radiology techniques, and manipulation of dental materials. The students will be assigned to general and specialty dental offices and clinics and meet regularly to discuss experiences, work ethics and other topics related to employment. 1240.10

**DENTAL-465L Clinical Experience II Lab (4) [Cx]**

Laboratory 192 - 216 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-475, DENTAL-475L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L

Application of academic knowledge, communication and technical skills to the dental office workplace environment. Weekly clinical seminar, evaluations and related work experiences include but not limited to using basic and advanced chairside assisting skills and procedures, radiology techniques, and manipulation of dental materials. The students will be assigned to general and specialty dental offices and clinics and meet regularly to discuss experiences, work ethics and other topics related to employment. 1240.10

**DENTAL-475 Dental Specialty Skills (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L

Instruction in the fundamental principles, instrumentation and procedures of various dental specialties. Theory in a variety of the functions delegated to the Dental Assistant and Registered Dental in the specialty practices of dentistry, including endodontics, periodontics, pediatrics, prosthodontics, orthodontics and oral/maxillofacial surgery. 1240.10

**DENTAL-475L Dental Specialty Skills Lab (0.5) [Cx]**

Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-480, DENTAL-480L, DENTAL-490, and DENTAL-490L

Instruction in the fundamental principles, instrumentation and procedures of various dental specialties. Laboratory instruction in a variety of the functions delegated to the Dental Assistant and Registered Dental in the specialty practices of dentistry, including endodontics, periodontics, pediatrics, prosthodontics, orthodontics and oral/maxillofacial surgery. 1240.10

**DENTAL-480 Dental Chairside Skills II (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-490, and DENTAL-490L

Theory in a variety of the functions delegated to the Dental Assistant and Registered Dental Assistant under the jurisdiction of the California Dental Practice Act as specified by the rules and regulations of the Dental Board of California. Emphasis is placed on competency of performance and self-evaluation. Course also includes content in oral pathology and pharmacology. 1240.10

**DENTAL-480L Dental Chairside Skills II Lab (1) [Cx]**

Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-490, and DENTAL-490L

Laboratory, pre-clinical and where appropriate, clinical practice in a variety of the functions delegated to the Dental Assistant and Registered Dental Assistant under the jurisdiction of the California Dental Practice Act as specified by the rules and regulations of the Dental Board of California. Emphasis is placed on competency of performance and self-evaluation. 1240.10

**DENTAL-490 Advanced Clinical Procedures (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-480, and DENTAL-480L

This course provides instruction in the state administered certifications for Coronal Polishing and Pit and Fissure Sealants. Students must pass in order to successfully complete the course. 1240.10

**DENTAL-490L Advanced Clinical Procedures Lab (0.5) [Cx]**

Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite:* DENTAL-405, DENTAL-415, DENTAL-415L, DENTAL-425, DENTAL-425L, DENTAL-435, DENTAL-435L, DENTAL-445, and DENTAL-445L*Corequisite:* DENTAL-455, DENTAL-455L, DENTAL-460, DENTAL-465, DENTAL-465L, DENTAL-475, DENTAL-475L, DENTAL-480, and DENTAL-480L

Pre-clinical and clinical instruction in coronal polishing, mouth mirror inspection, and dental sealants. Emphasis is placed on competency of performance, self-evaluation and correction and concern for patient safety. 1240.10

**DENTAL-600 Dental Basic Skills I (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Must be currently enrolled in a Dental Assisting course**Corequisite:* DENTAL-405, DENTAL-415, DENTAL-425, DENTAL-435, or DENTAL-445

Development of dental assisting skills, techniques and concepts in a laboratory or clinical setting. 1240.10

**DENTAL-605 Dental Assisting Advanced Skills (0)**

Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Corequisite:* DENTAL-455, DENTAL-460, DENTAL-465, DENTAL-475, DENTAL-480, or DENTAL-490*Limitation on Enrollment: Instructor approval*

Refine and develop advanced dental assisting skills, techniques and concepts in a laboratory, preclinical or clinical setting. Recommend for students who need to use laboratory or clinical practice and remedial assistance. May be repeated. 1240.10

## DISABILITY PROGRAMS AND SERVICES (DPS)

For all DPS courses: Students with specific disabilities and educational limitations should have a physician's recommendation/release for class activities. This provides the instructor with information necessary to tailor a program to the needs and capabilities of the individual student.

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 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation & Instructor's signature required*

*Corequisite: DPS-576 Beginning Job Skills Practicum Lab*

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. 4930.30

### DPS-524 Intermediate Job Readiness Skills (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Corequisite: DPS-577 Intermediate Job Skills Practicum Lab*

*Limitation on Enrollment: 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. 4930.30

### DPS-525 Advanced Job Readiness Skills (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation & Instructor's signature required*

*Corequisite: DPS-578 Advanced Job Skills Practicum Lab*

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. 4930.30

### DPS-526 Mastery of Job Readiness Skills (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation and Instructor signature required*

*Corequisite: DPS-579 Mastery of Job Skills Practicum Lab*

Open-entry/open-exit self-paced course for students with disabilities focused on job placement skills for obtaining competitive employment. 4930.30

### DPS-530 Basic Computer Skills for Students with Disabilities (1)

Lecture 8 - 9 hours. Laboratory 24 - 27 hours.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: 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. 4930.30

### DPS-576 Beginning Job Skills Practicum Lab (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Corequisite: DPS-523 Beginning Job Readiness Skills*

*Limitation on Enrollment: 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. 4930.30

### DPS-577 Intermediate Job Skills Practicum Lab (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation and Instructor signature required*

*Corequisite: DPS-524 Intermediate Job Readiness Skills*

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. 4930.30

### DPS-578 Advanced Job Skills Practicum Lab (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation and Instructor signature required*

*Corequisite: DPS-525 Advanced Job Readiness Skills*

Open-entry/open-exit self-paced course for students with disabilities focused on advanced hands-on job skills for competitive employment. 4930.30

### DPS-579 Mastery of Job Skills Practicum Lab (1.5)

Laboratory 72 - 81 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: Orientation and Instructor signature required*

*Corequisite: DPS-526 Mastery of Job Readiness Skills*

Open-entry/open-exit self-paced course for students with disabilities focused on hands-on job skills for obtaining job placement in competitive employment. 4930.30

### DPS-651 Job Placement Practicum for Students with Disabilities (0)

Laboratory 24 - 27 hours open-entry.

Grading: Pass/No-Pass (Noncredit)

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. 4930.30

### DPS-657 Vocational Skills for Students with Disabilities (0)

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No-Pass (Noncredit)

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 ensure 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. 4930.31

## 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. 0953.00

### DRAFT-21 Mechanical Design I (3) [Cx]

Lecture 16 - 18 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or one year SolidWorks experience or similar feature-based modeling software*

*Advisory: DRAFT-20 Computer-Aided Drafting and Design*

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. 0953.40

### DRAFT-41 Mechanical Design and Drafting II (4)

Lecture 32 - 36 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or one year experience using SolidWorks*

*Advisory: DRAFT-21 Mechanical Design I*

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. 0953.40

### DRAFT-43 Advanced CAD Modeling and Applications (3)

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or one year SolidWorks experience*

Advanced concepts and development of three-dimensional solid models. Emphasis on using 'best practices' principles and techniques for part and assembly modeling using feature-based, parametric CAD solid modeling. Students are prepared for and take the CSWA (Certified SolidWorks Associate) Exam. Coursework is done using the SolidWorks CAD software. 0953.00

### DRAFT-50 Architectural Design I (3) [Cx]

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: 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. 0953.10

### 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. 0953.10

### DRAFT-53 Architectural Applications of CAD (4) [Cx]

Lecture 32 - 36 hours. Laboratory 96 - 108 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 modify 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. 0953.10

### DRAFT-78 Advanced Mechanical Design Applications (4) [Cx]

Lecture 32 - 36 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics or two years' experience using SolidWorks or similar feature-based modeling software*

*Advisory: DRAFT-43 Advanced CAD Modeling and Applications*

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 and take the CSWP (Certified SolidWorks Professional) Exam.

Coursework will be completed using the SolidWorks software. 0953.00

## 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 1930.00

### 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 1930.00

### 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.

1919.00

### 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.

1919.00

## 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.

2204.00

### ECON-2 Principles of Macroeconomics (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: Eligibility for MATH-450 Intermediate Algebra, MATH-420 Essentials of Intermediate Algebra, or higher level math course as determined by the Chaffey College placement process*

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.

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).

C-ID ECON 202 2204.00

### ECON-4 Principles of Microeconomics (3) [Cx]

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: Eligibility for MATH-450 Intermediate Algebra, MATH-420 Essentials of Intermediate Algebra, or higher level math course as determined by the Chaffey College placement process*

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 2204.00

### 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.

2204.00

### ECON-8 History of Economic Ideas (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: ENGL-1A Composition*

Historical development of the institutions and ideas related to our present economic system, emphasizing the writings of the "great economists", including Smith, Ricardo, Marx, Marshall, Hayek, Robinson, Keynes, and Schumpeter. Students will critically examine a variety of schools of thought, with the objective of improving their ability to think clearly and logically.

2204.00

## EDUCATION (ED)

### ED-10 Elementary Classroom Fieldwork (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: 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*

*Placement Level: ENGL-1A Composition*

*Prerequisite: ED-400 Introduction to Education and Teaching; ENGL-495 College Reading and Writing or ESL-475 Fundamentals of College Reading and Writing for ESL Students*

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 0802.00

**ED-400 Introduction to Education and Teaching (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Introduction to careers in education, exploring professional responsibilities, career pathways, and job search strategies for tutors, paraeducators, activity supervisors, and credentialed teachers. Entry-level training in classroom student diversity, child guidance and discipline, teaching and learning strategies, and effective communication skills. 0802.00

**EMERGENCY MEDICAL TECHNICIAN (EMT)****EMT-11 Emergency Medical Technician (7) [Cx]**

Lecture 80 - 90 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Students must be 18 years of age at the start of the course and must possess a current American Heart Association Health Care Provider CPR card.*

*Prerequisite: EMT-405 Emergency Medical Responder*

*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)*

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 consists 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 11 may pursue the Emergency Medical Provider Certificate of Achievement. This Certificate prepares students for future entrance into a Paramedic Program. 1250.00

**EMT-405 Emergency Medical Technician Preparation (3) [Cx]**

Lecture 40 - 45 hours. Laboratory 24 - 27 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)*

This prerequisite course will provide students with the needed foundations in CPR, medical terminology, anatomy, physiology, legal issues, pharmacology, and patient assessment. This foundation is needed upon entering into the EMT 11 - Emergency Medical Technician which fulfills California Code of Regulations Title 22 requirements. Emergency care knowledge and skills required for Emergency Medical Technicians, Professional and Volunteer Firefighters, and Peace Officers. Course meets the American Heart Association CPR prerequisite and recommended preparation for admission to the EMT program, and is approved by the Inland County Emergency Medical Agency (ICEMA). 1250.00

**EMPLOYABILITY SKILLS (EMP)****EMP-600 Adaptability on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course features content dealing with adaptability and managing job stress (e.g. stress related to new job responsibilities, learning new technologies, etc.). This course also covers how to professionally respond to employer feedback. Successful completion of EMP 600 prepares students to earn the New World of Work 21st Century Skills Adaptability Academic Badge. 1301.10

**EMP-601 Self-Awareness on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on self-awareness features content related to understanding one's own transferable skills and strengths and how to apply them in seemingly disparate work situations. Successful completion of EMP 601 prepares students to earn the New World of Work 21st Century Skills Self-Awareness Academic Badge. 1301.10

**EMP-602 Digital Fluency on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on digital fluency features content dealing with a basic understanding of online presence, E-Resumes, and tools to collaborate with other people. This course also covers the legal and moral use of documents, pictures programs and access to personal or private information. Successful completion of EMP 602 prepares students to earn the New World of Work 21st Century Skills Digital Fluency Academic Badge. 1301.10

**EMP-603 Communication on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on communication features content dealing with speaking in a professional manner, using appropriate content, how to be an attentive listener, as well as the appropriate use of communication technology, such as email, PowerPoint, video conferencing, texting, blogging, and social media (e.g., LinkedIn). Successful completion of EMP 603 prepares students to earn the New World of Work 21st Century Skills Communication Academic Badge. 1301.10

**EMP-604 Collaboration on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on collaboration features content on bringing value to a collaborative partnership through one's own core skills, working effectively with a diverse team in person or remotely, respecting people's differences while acknowledging commonness, sharing leadership by gathering ideas, and dealing with conflict in a positive way. This course also covers navigating stakeholder needs through collaboration and how to best utilize cloud-sharing tools in collaborative work. Successful completion of EMP 604 prepares students to earn the New World of Work 21st Century Skills Collaboration Academic Badge. 1301.10

**EMP-605 Empathy on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on empathy features content dealing with the differences between empathy and sympathy, good listening, asking questions, mirroring positive nonverbal communication and building trust. Successful completion of EMP 605 prepares students to earn the New World of Work 21st Century Skills Empathy Academic Badge. 1301.10



**EMP-606 Analysis/Solution Mindset on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on analysis/solution mindset features content dealing with considering different viewpoints, looking at the bigger picture of a work situation, and examining information and data using critical thinking skills. Successful completion of EMP 606 prepares students to earn the New World of Work 21st Century Skills Analysis/Solution Mindset Academic Badge.

1301.10

**EMP-607 Resilience on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on resilience features content dealing with setting priorities and goals, anticipating possible consequences including failure, and bouncing back with back-up plans. Successful completion of EMP 607 prepares students to earn the New World of Work 21st Century Skills Resilience Academic Badge.

1301.10

**EMP-608 Entrepreneurial Mindset on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on entrepreneurial mindset features content dealing with the individual's role in an established organization (entrepreneur), or in an organization individually created (entrepreneur/social entrepreneur). Content will also cover elements of being an entrepreneur - seeking new knowledge and skills, drawing connections and comparisons and taking risks. Successful completion of EMP 608 prepares students to earn the New World of Work 21st Century Skills Entrepreneurial Mindset Academic Badge.

1301.10

**EMP-609 Social/Diversity Awareness on the Job (0)**

Lecture 3 - 5 hours.

Grading: Pass/No-Pass (Noncredit)

This course on social/diversity awareness features content dealing with valuing diversity in the workplace, including gender, sexual orientation, ethnicity and age. Successful completion of EMP 609 prepares students to earn the New World of Work 21st Century Skills Social Diversity Awareness Academic Badge.

1301.10

**ENGINEERING (ENGIN)****ENGIN-11 Introduction to Engineering (2)**

Lecture 32 - 36 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.

0901.00

**ENGIN-26 Engineering Graphics and CAD (3)**

Lecture 32 - 36 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.

0953.00

**ENGIN-30 Engineering Application of Digital Computation (3)**

Lecture 32 - 36 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.

0901.00

**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.

0901.00

**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.

0901.00

**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.

0901.00

**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; Thevenin and Norton equivalents; superposition; simple RL, RC, and RLC circuits; phasors. Use of voltmeters, ammeters, ohmmeters and oscilloscopes.

0901.00

## 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 engineering graphics and the design process as applied to engineering and related fields. Emphasis is on use of 3-D Feature-Based, Parametric Solid modeling as the foundation of that process. Coursework is done using SolidWorks software. Additional topics include: interpreting ANSI standard engineering drawings, visualization, sketching, geometric relations, assembly modeling, and creating ANSI standard part and assembly drawings.

Special emphasis is placed on understanding and developing sound Modeling Strategies/Plans based on 'best practices.' Students also are introduced to 3D-Printing technology and produce physical models from their own CAD models. 0924.00

### EGTECH-12 Principles of Engineering (4) [Cx]

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Placement Level: MATH-25 College Algebra

Prerequisite: 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. 0924.00

### EGTECH-14 Electronics for Engineering Technologists I (3)

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach, or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra

Advisory: EGTECH-12 Principles of Engineering

Introduction to the application of electronics in engineering technology. Course covers DC circuit theory, including system of units, resistive circuits, inductors, capacitors, impedance, and Ohm's Law. Emphasis is on the application of Kirchhoff's Laws and Thevenin's and Norton's Theorems to DC circuits, Mesh and Nodal analysis, RL and RC transients, and Maximum Power Transfer. 0924.00

### 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, DRAFT-43 Advanced CAD Modeling and Applications, one year in high school CAD/Engineering course using feature based modeling software such as AutoDesk Inventor or SolidWorks, or 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. 0924.00

### EGTECH-30 Introduction to Additive Manufacturing - 3D Printing (4)

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

Prerequisite: EGTECH-10 Introduction to Engineering Design/Graphics, or one year SolidWorks or other similar 3D feature-based Solid Molders experience, such as Autodesk Inventor, Fusion360, Siemens NX, or Catia. Introduction to Additive Manufacturing (AM) with an emphasis on 3D-Printing. Students learn about the evolution of Rapid Prototyping to Desktop 3D-Printing to Additive Manufacturing and beyond. Current AM technologies, capabilities, materials and applications are investigated by completing a number of hands-on projects by applying Design for Additive Manufacturing (DFAM) principles, creating CAD models, selecting materials, determining optimum build parameters, running parts on 3D printers, and measuring and performing other necessary operations. 0924.00

## ENGLISH (ENGL)

### ENGL-1A Composition (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement process

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 1501.00

### 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 1501.00

### 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 1501.00

**ENGL-7A Creative Writing: Short Fiction (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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.

1507.00

**ENGL-7B Creative Writing: Fiction (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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.

1507.00

**ENGL-7D Creative Writing: Poetry (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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.

1507.00

**ENGL-7E Creative Writing: Nonfiction (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: or Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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.

1507.00

**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.

1503.00

**ENGL-33 Introduction to Poetry (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: ENGL-1A Composition**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.

1503.00

**ENGL-35 Literary Magazine Production (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement process, or ENGL-495 College Reading and Writing, or ESL-475 Fundamentals of College Reading and Writing for ESL Students**Advisory: Strong word processing skills*

Concepts and practices of magazine production, including the design and maintenance of a web version. Acting as editors and assistants for The Chaffey Review, students master the fundamentals of editorial evaluation and selection, copyediting, proofreading, layout and design, production, promotion, and distribution.

1507.00

**ENGL-68 Mythology (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Other: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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.

1503.00

**ENGL-70A World Literature I (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Other: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement process as of March 2019*

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

1503.00

**ENGL-70B World Literature II (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Other: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement process as of March 2019*

Chronological survey of significant authors and texts of the 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

1503.00

**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.

1503.00

**ENGL-74 Asian-American Literature (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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. 1503.00

**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 1503.00

**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 1503.00

**ENGL-76 African-American Literature (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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. 1503.00

**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. 1503.00

**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 Native American of yesteryear and today. 1503.00

**ENGL-80A Survey of British Literature I (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 1503.00

**ENGL-80B Survey of British Literature II (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 1503.00

**ENGL-81 Shakespeare (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: ENGL-1A Composition and ENGL-80A Survey of British Literature I*  
 Intensive reading, along with oral and written discussion, of a selected group of Shakespearean plays. 1503.00

**ENGL-495 College Reading and Writing (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (Non-degree-applicable)  
*Placement Level: Students must place into ENGL-495 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. 1501.00

## 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)

*Placement Level: Eligibility for ESL-475 Fundamentals of College Reading and Writing for ESL Students as determined by the Chaffey College ESL placement process and/or guided self placement*

*Advisory: ESL-652 English as a Second Language V, or self placement after completing the placement tool (visit [www.chaffeycollegeesl.wordpress.com](http://www.chaffeycollegeesl.wordpress.com))*

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 with sources. Prepares the student for English 1A and a variety of academic disciplines.

4930.87

### ESL-608 Pronunciation of American English (0)

Lecture 48 - 54 hours.

Grading: Pass/No-Pass

(Noncredit)

*Placement Level: Eligibility for ESL-608 Pronunciation of American English as determined by the Chaffey College ESL placement process and/or guided self placement into ESL-632 English as a Second Language III or higher*

*Advisory: ESL-622 English as a Second Language II*

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.

4930.86

### ESL-612 English as a Second Language I (0)

Lecture 64 - 72 hours.

Grading: Pass/No Pass

(Noncredit)

*Placement Level: Eligibility for ESL-612 English as a Second Language I as determined by the Chaffey College ESL placement process and/or guided self placement*

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.

4930.87

### ESL-622 English as a Second Language II (0)

Lecture 64 - 72 hours.

Grading: Pass/No Pass

(Noncredit)

*Placement Level: Eligibility for ESL-622 English as a Second Language II as determined by the Chaffey College ESL placement process and/or guided self placement*

*Advisory: ESL-612 English as a Second Language I or self placement after completing the placement tool (visit [www.chaffeycollegeesl.wordpress.com](http://www.chaffeycollegeesl.wordpress.com))*

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.

4930.87

### ESL-632 English as a Second Language III (0)

Lecture 64 - 72 hours.

Grading: Pass/No Pass

(Noncredit)

*Placement Level: Eligibility for ESL-632 English as a Second Language III as determined by the Chaffey College ESL placement process and/or guided self placement*

*Advisory: ESL-622 English as a Second Language II or self placement after completing the placement tool (visit [www.chaffeycollegeesl.wordpress.com](http://www.chaffeycollegeesl.wordpress.com))*

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.

4930.87

### ESL-642 English as a Second Language IV (0)

Lecture 64 - 72 hours.

Grading: Letter Grade

(Noncredit)

*Placement Level: Eligibility for ESL-642 English as a Second Language IV as determined by the Chaffey College ESL placement process and/or guided self placement*

*Advisory: ESL-632 English as a Second Language III or self placement after completing the placement tool (visit [www.chaffeycollegeesl.wordpress.com](http://www.chaffeycollegeesl.wordpress.com))*

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 632: grammar and sentence structure, paragraph organization and development, reading, and speaking skills.

4930.87

### ESL-650 English and Citizenship (0)

Lecture 48 - 54 hours.

Grading: Pass/No-Pass

(Noncredit)

*Placement Level: Eligibility for ESL-632 English as a Second Language III or higher as determined by the Chaffey College placement process and/or guided self-placement*

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.

4930.90

### ESL-652 English as a Second Language V (0)

Lecture 64 - 72 hours.

Grading: Letter Grade

(Noncredit)

*Placement Level: Eligibility for ESL-652 English as a Second Language V as determined by the Chaffey College ESL placement process and/or guided self placement*

*Advisory: ESL-642 English as a Second Language IV or self placement after completing the placement tool (visit [www.chaffeycollegeesl.wordpress.com](http://www.chaffeycollegeesl.wordpress.com))*

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 642: grammar and sentence structure, essay organization and development, reading, and speaking skills.

4930.87

## 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. 1303.00

### FASHD-40 Beginning Clothing Construction (2) [Cx]

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.  
Grading: Letter Grade (CSU)  
Principles and techniques for developing fundamental skills in clothing construction using woven fabrics. 1303.10

### FASHD-42 Advanced Clothing Construction (2)

Lecture 16 - 18 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. 1303.10

### 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. 1303.10

### 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. 1303.10

### FASHD-65 Fashion Illustration (2) [Cx]

Lecture 16 - 18 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. 1303.00

### FASHD-72 Fashion Draping (2)

Lecture 16 - 18 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. 1303.10

### FASHD-428 Computer-Aided Design (2)

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.  
Grading: Letter Grade (Degree-applicable)  
*Advisory:* FASHD-45 Design Fundamentals for Fashion and Interiors, and basic computer skills are recommended  
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. 1303.10

### FASHD-442 Industrial Sewing (2)

Lecture 16 - 18 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. 1303.30

### FASHD-445 Fitting and Alterations of Patterns and Apparel (2)

Lecture 16 - 18 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. 1303.30

### 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. 1303.30

### FASHD-471 Advanced Patternmaking (3)

Lecture 32 - 36 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. 1303.00

### FASHD-472 Computer-Aided Patternmaking (2)

Lecture 16 - 18 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. 1303.30

### FASHD-480 Design Collection (2)

Lecture 16 - 18 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. 1303.30

### FASHD-482 Industry Internship: Fashion Design (1)

Work Experience 60.00 - 75.00 hours.  
Grading: Letter Grade (Degree-applicable)  
*Limitation on Enrollment:* Consent of instructor is required prior to registration  
*Prerequisite:* FASHD-61 Pattern Drafting I and FASHM-10 Introduction to the Fashion Industry  
*Corequisite:* FASHD-42 Advanced Clothing Construction (may be taken previously) and FASHM-60 Textiles (may be taken previously)  
Industry internship in cooperation with area private and public sector employers providing new or expanded learning opportunities directly related to fashion design and production and readying the student for employment. 1303.00

## 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. 1303.20

### 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. 1303.20

### 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. 1303.20

### 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. 1303.20

### 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. 1303.20

### FASHM-482 Industry Internships: Fashion Merchandising (1)

Work Experience 60.00 - 75.00 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Consent of instructor is required prior to registration*

*Prerequisite:* FASHM-10 Introduction to the Fashion Industry, 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. 1303.20

## 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. The course units are transferable into the CSULA Bachelors Program.

C-ID FIRE 100 X 2133.00

### 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 140 X 2133.00

### 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 120 X 2133.00

**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 130 X 2133.00

**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 110 X 2133.00

**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.

2133.00

**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.

2133.00

**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). 2133.00

**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. 2133.10

**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. 2133.00

**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. 2133.00

**FIRETEC-420 Fire Inspector 1A - Duties and Administration (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: FIRETEC-1 Principles of Emergency Services and FIRETEC-5 Fire Prevention; Individuals who are currently working in the Fire Service or Emergency Services may enroll in this course; 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. 2133.50



**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. 2133.50

**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. 2133.50

**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. 2133.50

**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. This course may also require completion of supplemental assignments. This course corresponds to the first year of high school French. 1102.00

**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. This course may also require completion of supplemental assignments. 1102.00

**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 relation to landforms and climate. Current world events discussed in an international framework.

C-ID GEOG 125 2206.00

**GEOG-2 Global Climate Change: An Introduction to Weather and Climate (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 2206.00

**GEOG-3 Geography of California (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

A thematic approach to the state's issues/climate change, 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 2206.00

**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 relationships, 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 2206.00

**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 designed 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.

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.

C-ID GEOG 111 2206.00

**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.

2206.00

**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, ethnicities, and economic systems and development.

C-ID GEOG 120 2206.00

**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 an 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 1914.00

**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 1914.00

**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. 1309.00

**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. 1309.00

**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. 1309.00

**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. 1309.00

**GERO-98ABC Independent Study: Gerontology (1 - 3)**

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Instructor signature is required for registration*

This course is designed for the capable gerontology student who wishes to explore and develop an independent project in gerontology. 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. 1309.00

**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. 1309.00

**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. 1309.00

**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. 1309.00

**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. 1309.00

**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. 1309.00

**GERO-497ABCD Gerontology Career Experience Internship (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)

*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 helps student with placement, and maintains contact with student throughout semester via online tools and resources. 1309.00

**GERO-600 Principles of Caregiving: Older Adults and Their Care (0)**

Lecture 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

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. 1309.00

**GERO-655 Resources and Services for Older Adults (0)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

Provides students with skills needed to access community resources and services for older adults. An introduction to resources, services, eligibility requirements, and funding. An overview of strategies to locate resources through direct contact as well as Internet research. Students acquire a basic understanding of applications pertinent to gerontological service settings, and learn to locate resources, programs, and services for older adults. 1309.00

**GERO-662 Activity Coordinator Training (0)**

Lecture 64 - 72 hours.

Grading: Pass/No Pass (Noncredit)

State-certified training for individuals working as activity directors in a skilled nursing facility. Practice in documentation and familiarization with Title 22 requirements, OBRA regulations, job description, basic medical terminology, and skills necessary for an activity director. Organizing, implementing and evaluating activities programs. Geriatric drugs, psycho-social needs, and other aging issues. Producing activity calendars, maximizing patient interests and participation. Therapeutic and bedside activities. Styles of leadership, and an overview of the functions of the interdisciplinary team. 1309.00

**GERO-663 Social Work Designee/Assistant Training (0)**

Lecture 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

Functions and responsibilities of the social work designee charged with meeting the medically-related social and emotional needs of residents in long-term care facilities. Topics include assessment, care plans, patient advocacy, interventions, problem solving, behavioral modifications, family dynamics, elder care and abuse, bioethics, spiritual needs, and community resource development. 1309.00

**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. 4930.10

**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. 4930.10

**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. 4930.10

**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. 4930.14

**GUID-650 Supervised Tutoring (0)**

Hours: Variable and arranged; based on student need as determined by placement, diagnostic instruments, and/or instructor recommendation.

Grading: Not Graded (Noncredit)

*Limitation on Enrollment: Referral by course instructor or academic counselor is required; 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. 4930.09

## 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: Pass/No Pass (Noncredit)

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. 0946.00

**HVACR-601 HVAC Piping Practices (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0946.00

**HVACR-602 HVAC Electrical Systems (0)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0946.00

**HVACR-603 Environmental Protection Agency Certification (0)**

Lecture 32 - 36 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0946.00

**HVACR-604 HVAC Compressors and Refrigerants (0)**

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0946.00

**HVACR-605 HVAC Metering Devices, Heat Pumps and Basic Maintenance (0)**

Lecture 8 - 9 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0946.00

**HVACR-606 HVAC Flues and Ducts (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Pass/No Pass (Noncredit)

*Advisory: HVACR-605 HVAC Metering Devices, Heat Pumps and Basic Maintenance*

This course introduces students to flues and ducts systems commonly used in the HVAC trade. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

**HVACR-607 HVAC Commercial Applications (0)**

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Advisory: HVACR-606 HVAC Flues and Ducts*

This course introduces students to commercial applications in the HVAC trade. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

**HVACR-608 HVAC Troubleshooting (0) [Cx]**

Lecture 24 - 27 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Prerequisite: HVACR-607 HVAC Commercial Applications*

This course introduces students to troubleshooting cooling, heat pumps, gas heating, oil heating, accessories, and variable refrigerant flow HVAC systems. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

**HVACR-609 Advanced Commercial HVAC Systems (0) [Cx]**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Prerequisite: HVACR-608 HVAC Troubleshooting*

This course introduces students to commercial hydronic, steam, refrigeration, specialized heating and cooling, and industrial refrigeration systems. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

**HVACR-610 Building Automation Control Systems (0) [Cx]**  
 Lecture 32 - 36 hours. Laboratory 72 - 81 hours.  
 Grading: Pass/No Pass (Noncredit)  
*Prerequisite: HVACR-609 Advanced Commercial HVAC Systems*  
 This course introduces students to Building Automation Controls commonly used in HVAC systems. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

**HVACR-611 HVAC Management Topics (0) [Cx]**  
 Lecture 32 - 36 hours.  
 Grading: Pass/No Pass (Noncredit)  
*Prerequisite: HVACR-610 Building Automation Control Systems*  
 This course provides students with the management skills required in HVAC business operations. This curriculum aligns with NCCER HVACR Curriculum. 0946.00

## HISTORY (HIST)

**HIST-1 World History: Pre-Civilization to 1500 (3)**  
 Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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 2205.00

**HIST-2 World History: 1500 to Present (3)**  
 Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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 2205.00

**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. 2205.00

**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 2205.00

**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 2205.00

**HIST-7 History of the Middle East (3)**  
 Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 Survey of the history of the Middle East from earliest times to the present, focusing on the period from the birth of the Prophet Mohammad in 570 and the Treaty of Versailles in 1920. 2205.00

**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. 2205.00

**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. 2205.00

**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. 2205.00

**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. 2205.00

**HIST-17 United States History through 1877 (3)**  
 Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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 2205.00

**HIST-18 United States History from 1865 (3)**  
 Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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 2205.00

**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 2205.00

**HIST-20 History of the United States from 1945-Present (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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.  
 2205.00

**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.  
 2205.00

**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.  
 2205.00

**HIST-37 California History (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 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.  
 2205.00

**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.  
 2205.00

**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.  
 2203.00

**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.  
 2203.00

**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 1970s, NAFTA, and present border conflicts.  
 2203.00

**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.  
 2203.00

**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.  
 2105.30

**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.  
 2105.30

**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.  
 2105.30

**HOSPITALITY MANAGEMENT (HOTFS)****HOTFS-10 Introduction to Hospitality Management (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
 Overview of structure, accounting, and financial performances of hospitality industry; food and lodging, resorts, tourism enterprises, attractions and related operations. Focus on orientation to customer service, cultural/economic trends and career opportunities.  
 C-ID HOSP 100 1307.00

**HOTFS-14 Food and Beverage 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, nutritional concerns, marketing, menu development, effective cost controls in purchasing, labor and service techniques.  
 C-ID HOSP 130 1307.10

**HOTFS-21 Purchasing, Cost Controls, and Menu Planning (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

Analyzing and managing: food, beverage, labor and other costs within a hospitality operation. Emphasis on problem solving, applying cost control techniques to maximize profits while managing expenses. Topics include: establishing standards, cost-volume-profit-analysis, forecasting, purchasing and storage controls, menu costing and pricing, theft prevention and labor control. 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.

C-ID HOSP 120 1307.10

**HOTFS-32 Hospitality Law (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

Explore the Legal Relationship and Considerations of Hotel, Restaurant, Travel and Tourism Operations. 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.

1307.00

**HOTFS-42 Hotel Operations (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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.

C-ID HOSP 140 1307.20

**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.

1307.00

**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.

1307.00

**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.

1307.00

**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, Quinceañeras, 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.

1307.00

**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.

1307.00

**HOTFS-482 Industry Internship: Hospitality Management (1)**

Work Experience 60.00 - 75.00 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Consent of instructor is required prior to registration*

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.

1307.00

**HUMANITIES (HUMAN)****HUMAN-5 Arts and Ideas: Antiquity to Renaissance (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

An interdisciplinary study of the movements in art, music, literature, and philosophy of Ancient Western Civilization, within a cultural and historical perspective.

1504.00

**HUMAN-6 Arts and Ideas: Renaissance to Modern (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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.

1504.00

**HUMAN-20 The Holocaust: History and Philosophy (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement process**Prerequisite: 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.

2205.00

## INDUSTRIAL ELECTRICAL TECHNOLOGY (IET)

### IET-401A Introduction to Electricity (2.5) [Cx]

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

Principles of basic electricity. Ohm's Law, series and parallel circuits, conventional current theory, current flow, conductors and insulators, combination circuits, and power ratings. 0934.40

### IET-401B Industrial Basic Controls (2.5) [Cx]

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-401A Introduction to Electricity or one year or more of professional experience in the related field*

Study of batteries and other sources of electricity, magnetism, magnetic induction, direct current generators, measuring instruments, resistive and capacitive circuits. 0934.40

### IET-403A Electrical Motors and Controls I (2.5) [Cx]

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-401A Introduction to Electricity or one to two years or more of professional experience in the related field*

Principles of motor controls. Topics include: direct current motors, basic trigonometry, alternating current, inductance in alternating current circuits, resistive-inductive series circuits, capacitors, and resistive-inductive-capacitive parallel circuits. 0934.40

### IET-403B Electrical Motors and Controls II (2.5)

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-403A Electrical Motors and Controls I or one year or more of work experience in the related field*

Applications of motor controls. Topics include: resistive-inductive parallel circuits, resistive-inductive-capacitive parallel circuits, three-phase circuits, single- and three-phase transformers, single- and three-phase motors, and three-phase alternators. 0934.40

### IET-405 National Electric Code (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-403A Electrical Motors and Controls I or two years or more of field related work experience*

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. 0934.40

### IET-407 Electrical Blueprints (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-403A Electrical Motors and Controls I or one year or more of field related work experience*

Interpretation of basic ladder diagrams, one line diagrams, electrical symbols, schematics, hydraulic symbols and diagrams including pictorials. 0934.40

### IET-411 Programmable Logic Controllers (3) [Cx]

Lecture 40 - 45 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-407 Electrical Blueprints or two or more years of field related work experience and basic computer skills*

Ladder diagrams, common computer terms, and operation of the programmer. Verifying and programming of timers and counters. 0934.40

### IET-413 Intermediate Programmable Logic Controllers (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: IET-411 Programmable Logic Controllers*

*Advisory: Two or more years of field related work experience including basic knowledge in PLCs*

PLC advanced ladder diagrams; operations of the programmer; verifying, editing, and programming of timers, counters, master control relays and jump instructions using a computer. 0934.40

### 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. 0934.40

### IET-415 Advanced Electricity Laboratory (2)

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: IET-405 National Electric Code and IET-407 Electrical Blueprints*

*Corequisite: IET-411 Programmable Logic Controllers*

*Advisory: Two or more years of field related experience including PLCs and blueprint*

Application and integration of concepts and skills within the industrial automation and electrical field. Topics include: designing motor control systems, applying NEC code, translating information from blueprint to ladder diagrams and employing it into the PLC program, and applying assignments into a hardwire system. 0934.40

### IET-417 Electrical Troubleshooting (3)

Lecture 40 - 45 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-403A Electrical Motors and Controls I, IET-407 Electrical Blueprints, and IET-411 Programmable Logic Controllers, or two or more years of field related work experience including static devices*

Application of knowledge on industrial controls, motor controls, and blueprint reading to the development of troubleshooting skills. Analysis of circuits and investigation of problems associated with electrical controls. 0934.40

### IET-419 DC Variable Speed Drive (1.5)

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-403A Electrical Motors and Controls I and IET-403B Electrical Motors and Controls II, or 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. 0934.40



**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 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. 0934.40

**IET-421 AC Variable Frequency Speed Drive (1.5)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IET-419 DC Variable Speed Drive or two or more years of field elated work experience*

Function and controls of an AC variable frequency drive and its application on the field, including parameter, setting, tuning, and configuration. 0934.40

**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. 0956.70

**IET-460 Introduction to Photovoltaic Installation (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Introduction to solar, energy, and power. . Topics include electricity fundamentals, equipment measurements, installation, and controls system, components, electrical and mechanical design considerations, performance standards, troubleshooting basics, system checks and inspections, and industry safety requirements. 0946.10

**IET-484ABCD Industrial Electricity Internship (1 - 4)**

Hours: 60 hours/term (unpaid) or 75 hours/term (paid) on-site work experience for each unit of credit.

Grading: Letter Grade and Pass/No-Pass (Degree-applicable)

*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. 0934.20

**INDUSTRIAL ELECTRICAL TECHNOLOGY: ELECTROMECHANICAL TECHNOLOGY (IETELMT)****IETELMT-430 Hydraulic Fundamentals (2) [Cx]**

Lecture 24 - 27 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

Introduction to hydraulic fundamentals, demonstration of hydraulic power, basic circuits, functional circuits, and troubleshooting. 0935.00

**IETELMT-432 Electrical Control of Hydraulic Systems (2)**

Lecture 24 - 27 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: 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. 0935.00

**IETELMT-436 Pneumatics Fundamentals (2) [Cx]**

Lecture 24 - 27 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

Introduction to pneumatics and familiarization with basic concepts of pressure, volume, force, directional speed control, pilot valves, and pneumatic motor circuits and performance. 0935.00

**IETELMT-438 Electrical Control of Pneumatic Systems (2) [Cx]**

Lecture 24 - 27 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: IETELMT-436 Pneumatics Fundamentals or one year or more of field work experience*

Electrical control of pneumatics, concepts, functional systems, industrial-type electropneumatic circuits, and troubleshooting in electrical control and electropneumatic circuits. 0935.00

**INDUSTRIAL 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 of hand and power tools, construction drawings, and basic rigging. 0945.00

**INDMM-401 Basic Communication and Employability Skills, and Core Testing (2.5) [Cx]**

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

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. 0945.00

**INDMM-402 Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills (3.5) [Cx]**

Lecture 48 - 54 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

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. 0945.00

**INDMM-403 Trade Math and Drawings, Material Handling, and Mobile Equipment (2.5) [Cx]**

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: 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. 0945.00

**INDMM-600 Intro to Construction Safety, Trade Math, Rigging, and Tools (0) [Cx]**

Lecture 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

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. 0945.00

**INDMM-601 Basic Communication and Employability Skills, and Core Testing (0) [Cx]**

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Pass/No Pass (Noncredit)

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. Course content also includes introduction to construction drawings, using gridlines, use of levels, squares and measuring devices, and material handling. Students also have the opportunity to demonstrate the skills learned in the classroom. 0945.00

**INDMM-602 Fundamentals of Industrial Maintenance, Oxyfuel, and Craft Skills (0) [Cx]**

Lecture 48 - 54 hours. Laboratory 24 - 27 hours.

Grading: Pass/No Pass (Noncredit)

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 in working with 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. 0945.00

**INDMM-603 Trade Math and Drawings, Material Handling, and Mobile Equipment (0) [Cx]**

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.

Grading: Pass/No Pass (Noncredit)

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. 0945.00

**INDMM-604 Industrial Mechanical Math and Precision Tools (0)**

Lecture 48 - 54 hours.

Grading: Pass/No-Pass (Noncredit)

*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. 0945.00

**INDMM-605 Introduction to Industrial Piping (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Pass/No-Pass (Noncredit)

*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. 0945.00

**INDMM-606 Introduction to Valves, Bearings and Testing (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.

Grading: Pass/No-Pass (Noncredit)

*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. 0945.00

**INDMM-607 Installation of Bearings, Couplings, Seals, and Drives (0)**

Lecture 16 - 18 hours. Laboratory 48 - 54 hours.

Grading: Pass/No-Pass (Noncredit)

*Prerequisite: INDMM-606 Introduction to Valves, Bearings and Testing*  
This course covers the installation of bearings, couplings, belt and chain drives and mechanical seals. 0945.00

**INDMM-608 Setting Baseplates and Alignment (0)**

Lecture 8 - 9 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*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. 0945.00

**INDMM-609 Advanced Alignment (0)**

Lecture 8 - 9 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Prerequisite: INDMM-608 Setting Baseplates and Alignment*  
This course further develops skills students need to understand alignment in the industrial field. Misalignment can cause damage to equipment, such as bearings and couplings. Specific topics include shaft runout using a dial indicator jig, complex reverse dial indicators, and indicator sag. 0945.00

**INDMM-610 Fundamentals of Pressure, Heating & Cooling Systems (0)**

Lecture 24 - 27 hours. Laboratory 48 - 54 hours.  
 Grading: Pass/No Pass (Noncredit)  
 This course provides students with the fundamentals of, pressure, heating, and cooling systems used in the industrial mechanical craft. 0945.00

**INDMM-611 Troubleshooting Pumps and Gearboxes (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.  
 Grading: Pass/No Pass (Noncredit)  
*Prerequisite: INDMM-610 Fundamentals of Pressure, Heating & Cooling Systems*  
 This course covers troubleshooting pumps and gearboxes used in the industrial mechanical craft. 0945.00

**INDMM-612 Advanced Blueprint Reading and Introduction to Supervisory Skills (0)**

Lecture 32 - 36 hours. Laboratory 24 - 27 hours.  
 Grading: Pass/No Pass (Noncredit)  
*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. 0945.00

**INDMM-613 Advanced Mechanical Topics I (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.  
 Grading: Pass/No Pass (Noncredit)  
*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. 0945.00

**INDMM-614 Advanced Mechanical Topics II (0)**

Lecture 16 - 18 hours. Laboratory 24 - 27 hours.  
 Grading: Pass/No Pass (Noncredit)  
*Prerequisite: INDMM-613 Advanced Mechanical Topics I*  
 This course addresses vibration and balancing analysis and covers compressors and pneumatic systems including troubleshooting procedures. 0945.00

**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. 1302.00

**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. 1302.00

**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. 1302.00

**ID-14 Fundamentals of Design for Interiors (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
 Exploration of the fundamental design elements and principles as they relate to interior spaces. Topics are presented in a systematic approach to the creative process of solving interior design problems. Formal visual properties of line, shape, form, pattern, texture and color are studied in their relationship to the organizational systems and unifying principles that create balanced designs. Emphasis will be focused on the use of color and modern day color theories as they relate to historic, cultural and aesthetic use in successful interior design solutions. Students will complete beginning level studio design projects consisting of 2D drawings and 3D model building. 1302.00

**ID-15 Architectural Drafting for Interior Designers (3) [Cx]**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
 A beginning course focusing on 2D drafting methods used in architecture and interior design including manual drafting and 2D AutoCAD. Emphasis is placed on line quality, lettering, proper drafting techniques and methods. Students will learn to identify building systems in drawings and learn basic requirements for creating floor plans, furniture plans, elevations, sections, detailing, dimensions, schedules, lighting plans, electrical layouts, and reflected ceiling plans. Students will complete a set of interior working drawings manually and in AutoCAD. 1302.00

**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. 1302.00

**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. 1302.00

**ID-21 Space Planning (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Prerequisite: ID-15 Architectural Drafting for Interior Designers*  
 Course focuses on the design process, human factors in design, ADA compliance, spatial relationships, and aesthetic considerations. Includes the design of rooms, and whole buildings in terms of adjacency studies, circulation, light, air, and meeting client needs. Emphasis is placed on programming, diagrams and block plans that lead to furniture layouts and space plans for various projects in residential and non-residential interiors. 1302.00

**ID-22 Interior Design Materials (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: ID-10 Introduction to Interior Design*

Materials and treatments used in interior design for commercial and residential installations, including "green" resources. This course is a study of the technical specification of finishes, furnishings, and equipment needed to complete a variety of interior environments. Emphasis is placed on sustainability. Product knowledge, available resources, industry procedures, and terminology are incorporated. Liabilities and regulations as they pertain to the professional interior designer are covered. Finishes, furnishings, and equipment are estimated and specified, and are graphically designated on drafted plans and elevations. This course is designed for students majoring interior design. 1302.00

**ID-27 Computer Drafting & Design for Interiors (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: ID-15 Architectural Drafting for Interior Designers*

Computer-aided drafting & design using professional software, such as AutoCAD, Revit, Sketchup, 2020 Design 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 rendering software, scanners, printers and plotters will be covered. Students with previous education or industry experience with 2D manual drafting and construction drawings may petition to challenge the prerequisite with proof of knowledge and experience. 1302.00

**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, ID-17 Introduction to Lighting, ID-21 Space Planning, and 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. 1302.00

**ID-45 Codes and Building Systems (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

This course examines building codes and building systems relative to interior design and architecture. Special emphasis is placed on international, California, and local code requirements in relation to interior design projects. This course also explores sustainability and universal design aspects of building systems and materials in relation to codes by providing an overview of CalGreen code, ADA law, and California Title 24. This course is designed for students who are majoring in interior design, professional designers who seek to update their knowledge and those who plan to become Certified Interior Designers. This course may also be offered online. 1302.00

**ID-426 Professional Practice for Interior Designers (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Practical course in the special problems encountered in the interior design profession including preparation of business documents, forms of business ownership and corporate organizations, marketing and advertising, purchasing and ordering products, client relationships, ethics, methods of compensation, employee/employer relationships, benefits, business insurance, starting a new business and branding. Students will also prepare a professional resume, and portfolio for career advancement. 1302.00

**ID-482 ABCD Internships in Interior Design (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: Consent of instructor is required prior to registration*

Work Experience in cooperation with private sector interior design or architectural professionals, which can include industry specific residential, non-residential and product design, distribution, retail or resource firms. Provides hands-on learning opportunities to apply knowledge and learn new skills outside of the classroom. Placement is initiated by student and approved by the instructor. One course unit will equal 60 hours of volunteer/unpaid work OR one unit will equal 75 hours of paid work. Students may earn up to a total of 16 semester credit hours. Student repetition is allowed per Title 5 section 55253. 1302.00

**JOURNALISM (JOUR)****JOUR-10 Newswriting (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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 0602.00

**JOUR-11 Multimedia Reporting (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: ENGL-1A Composition**Advisory: JOUR-10 Newswriting*

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 0602.00

**JOUR-30 Student Media Practicum I (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Placement Level: Eligibility for ENGL-1A Composition as determined by the Chaffey College placement 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 0602.00

### 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, podcast 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 0602.00

## 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. 0835.10

### 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. 0835.10

### KINACT-3A Beginning Baseball (1)

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

Provides opportunities for students to receive beginning-level instruction and training in skills, techniques, and strategies of baseball. 0835.10

### KINACT-5A Beginning Flag Football (1)

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

The activities in this course provide for instruction in the skills, techniques, strategy, and rules of flag football. The class emphasizes skill improvement, team unity, and safety procedures. 0835.10

### 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. 0835.10

### 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. 0835.10

### 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. 0835.10

### 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. 0835.10

### 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. 0835.10

### KINACT-23 Intermediate Soccer (1)

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. 0835.10

### KINACT-24 Cross Training Boot Camp (1)

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

This course provides a total body workout using a variety of exercises, equipment, weights and workout stations, targeting the entire body including the development of a strong core. Students can expect to see improvements in functional everyday movements, sport performance, balance, endurance, coordination, flexibility, strength, body composition and confidence. 0835.10

### 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. 0835.10

### 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. 0835.10

### KINACT-28A Beginning Yoga (1)

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

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. 0835.10

**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. 0835.10

**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. 0835.10

**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. 0835.10

**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. 0835.10

**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. 0835.10

**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. 0835.10

**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. 0835.10

**KINESIOLOGY: LECTURE (KINLEC)****KINLEC-2 Introduction to Athletic Training (3)**

Lecture 40 - 45 hours. Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU; UC)

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. 0835.00

**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. 0835.00

**KINLEC-14 Lifeguard Training (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Placement 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. 0835.00

**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. 0835.00

**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 0835.00

**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 blood-borne 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. 0835.00

**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 0835.00

**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. 1228.00

**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. 1228.00

**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. 1228.00

**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. 0835.20

**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. 0835.10

**KINESIOLOGY: TEAM (KINTM)**

In-season (competition) intercollegiate Kinesiology: Team courses (KINTM-411 through 591) are open-entry activity.

Off-season (conditioning) intercollegiate Kinesiology: Team courses (KINTM-1 through 15, 26, 27, and KINTM-61A through 69) are structured/scheduled activity.

Students may take all KINTM courses (excluding KINTM-16 through 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: 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. 0835.50

**KINTM-1A Football Team Activity (0.5)**

Laboratory 24 - 27 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment is based on a successful tryout*  
*Advisory: Competitive football background*  
 Information and practice in the development of football basic skills and techniques. 0835.50

**KINTM-2 Volleyball Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on a successful tryout*  
 Designed for women interested in learning competitive volleyball and joining the women's intercollegiate team. 0835.50

**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. 0835.50

**KINTM-3 Basketball Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on a successful tryout*  
 Focus on history, conditioning, rules, and fundamental and advanced skills needed for competitive women's basketball. 0835.50

**KINTM-3A Basketball Team Activity, Women (0.5)**

Laboratory 24 - 27 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment is based on a successful tryout*  
*Advisory: Competitive basketball background*  
 Focus on history, conditioning, rules, and fundamental skills needed for competitive women's basketball. 0835.50

**KINTM-4 Softball Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on a successful tryout*  
 Overall development of basic skills and knowledge needed for competitive women's softball play. 0835.50

**KINTM-5 Water Polo Team Activity, Men (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-6 Basketball Team Activity, Men (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on a successful tryout*  
 Designed for men interested in playing competitive men's basketball. 0835.50

**KINTM-6A Basketball Team Activity, Men (0.5)**

Laboratory 24 - 27 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment is based on a successful tryout*  
*Advisory: Competitive basketball background*  
 Designed for men interested in playing competitive men's basketball. 0835.50

**KINTM-7 Cross Country Team Activity, Men (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-8 Cross Country Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-9 Water Polo Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-11 Swimming Team Activity, Men and Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on successful tryout*  
 Rules and fundamental skills involved in competitive swimming strokes. Designed for students interested in competitive swimming. 0835.50

**KINTM-14 Soccer Team Activity, Men (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-15 Soccer Team Activity, Women (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-16 Beginning Dance/Spirit Team (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: Previous dance training is recommended*  
*Limitation on Enrollment: Admission is by audition*  
 Development of beginning performance skills focusing on Hip Hop and Jazz style techniques. This course is for students who will represent the college at basketball games and community events. 0835.10

**KINTM-17 Intermediate Dance/Spirit Team (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Admission is by audition*  
*Advisory: Previous dance training is recommended*  
 Development of intermediate performance skills focusing on Hip Hop and Jazz style techniques. Emphasis is on intermediate competition-level performance skills as well as dance team protocol and etiquette. Course is for students who will represent the college at basketball games, national dance competitions, and community events. 0835.10

**KINTM-18 Beginning Dance/Cheer Team (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Admission is by audition*  
*Advisory: Previous dance training is recommended*  
 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. 0835.10

**KINTM-19 Intermediate Dance/Cheer Team (1)**

Laboratory 48 - 54 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Admission is by audition*  
*Advisory: Previous dance training is recommended*  
 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. 0835.10

**KINTM-26 Softball Team Class, Women (2)**

Laboratory 96 - 108 hours.  
 Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Enrollment based on successful tryout*  
 Overall development of knowledge and skills needed for competitive women's softball play. 0835.50

**KINTM-27 Baseball Team Class, Men (2)**

Laboratory 96 - 108 hours.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment based on successful tryout*  
 Designed for men interested in playing competitive intercollegiate baseball. 0835.10



**KINTM-41I Intercollegiate Football (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-42I Intercollegiate Volleyball Team, Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment is restricted to student athletes who meet both skill and eligibility requirements*  
 Opportunity for women to compete at the intercollegiate level in volleyball. 0835.50

**KINTM-44I Intercollegiate Softball Team, Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment is restricted to student athletes who meet both skill and eligibility requirements*  
 Opportunity for women to compete at the intercollegiate level in softball. 0835.50

**KINTM-45I Intercollegiate Water Polo Team, Men (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-47I Intercollegiate Baseball Team, Men (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment is restricted to student athletes who meet both skill and eligibility requirements*  
 Opportunity for men to compete at the intercollegiate level in baseball. 0835.50

**KINTM-48I Intercollegiate Cross Country, Men (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-49I Intercollegiate Cross Country, Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-51I Intercollegiate Swimming Team, Men/Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-54I Intercollegiate Soccer Team, Men (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment is restricted to student athletes who meet both skill and eligibility requirements*  
 Opportunity for men to compete at the intercollegiate level in soccer. 0835.50

**KINTM-55I Intercollegiate Soccer Team, Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: Enrollment is restricted to student athletes who meet both skill and eligibility requirements*  
 Opportunity for women to compete at the intercollegiate level in soccer. 0835.50

**KINTM-56AI Intercollegiate Basketball Team, Women Fall (1.75)**

Laboratory 87.50 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-56BI Intercollegiate Basketball Team, Women Spring (1.75)**

Laboratory 87.50 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-57AI Intercollegiate Basketball Team, Men Fall (1.75)**

Laboratory 87.50 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-57BI Intercollegiate Basketball Team, Men Spring (1.75)**

Laboratory 87.50 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-59I Intercollegiate Water Polo Team, Women (3.5)**

Laboratory 175 hours open-entry.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Limitation on Enrollment: 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. 0835.50

**KINTM-60 Volleyball Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-60A Volleyball Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-61A Basketball Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-62 Football Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Concurrent or previous enrollment in any Football PETEAM course*

Advanced sport-specific drills and exercises designed for pre-season 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. 0835.50

**KINTM-62A Football Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-64 Softball Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-64A Softball Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-65 Water Polo Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-65A Water Polo Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-66 Baseball Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-66A Baseball Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-67A Swimming Strength and Conditioning for Athletes (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**KINTM-69 Cross Country Strength and Conditioning for Athletes (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 0835.50

**LIFE MANAGEMENT (LIFE)****LIFE-670 Transition Skills and Well-Being (0)**

Lecture 24 hours.

Grading: Pass/No Pass (Noncredit)

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. 1301.00

**MATHEMATICS (MATH)****MATH-4 Mathematical Concepts for Elementary School Teachers (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Other: Eligibility for MATH-4 Mathematical Concepts for Elementary School Teachers as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in MATH-4 Mathematical Concepts for Elementary School Teachers*

*Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra*

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

1701.00

**MATH-25 College Algebra (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Other: Eligibility for MATH-25 College Algebra as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in MATH-25 College Algebra*

*Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach, or MATH-420 Essentials of Intermediate Algebra and MATH-420B Bridge to STEM+ from Intermediate Algebra*

*Advisory: Concurrent Enrollment in MATH-652 Skill Building for Math 25*  
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. The Math Department strongly recommends that any student wanting or needing extra support for this course to consider enrolling in MATH-652 concurrently with MATH-25. There is a 4 hour supplemental learning requirement that can be satisfied through the success centers, Supplemental Instruction, or by directed instructional assignments determined by the instructor. 1701.00

**MATH-31 Plane Trigonometry (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU)

*Prerequisite: MATH-25 College Algebra**Advisory: One year of high school geometry*

Trigonometric functions including definitions of the circular functions. Radian measure, graphs, inverse trigonometric functions, trigonometric equations and identities, solution of right and oblique triangles, applications, vectors, complex numbers, polar coordinates and graphs, equation of conics, and rotation of axes. Students may be required to obtain a graphing utility for the course. 1701.00

**MATH-60 Calculus for Business (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Other: Eligibility for MATH-60 Calculus for Business as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in MATH-60 Calculus for Business*

*Prerequisite: MATH-25 College Algebra*

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 1701.00

**MATH-61 Pre-Calculus (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Other: Eligibility for MATH-61 Pre-Calculus as determined by the Chaffey College placement process*

*Prerequisite: MATH-25 College Algebra and MATH-31 Plane Trigonometry*  
*Advisory: Prior experience with a graphic calculator is needed*

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. 1701.00

**MATH-65A Calculus I (4) [Cx]**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC credit limitations)  
*Prerequisite: MATH-61 Pre-Calculus*  
 This course includes 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 1701.00

**MATH-65B Calculus II (4) [Cx]**

Lecture 64 - 72 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 1701.00

**MATH-75 Calculus III (5) [Cx]**

Lecture 80 - 90 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: MATH-65B Calculus II*  
*Advisory: Prior experience with a graphing calculator is needed*  
 Topics include: vectors; lines planes and surfaces in space, cylindrical and spherical coordinates, vector-valued functions, functions of several variables, differential calculus, including partial derivatives, chain rule, directional derivatives, gradients, implicit differential and extreme values, multiple integration, line integrals, surface integrals, Jacobians, vector theory, and theorems of Gauss, Green, and Stokes. Students may be required to obtain a graphing utility for the course.  
 C-ID MATH 230 1701.00

**MATH-81 Linear Algebra (4) [Cx]**

Lecture 64 - 72 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 1701.00

**MATH-85 Differential Equations (4) [Cx]**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: MATH-75 Calculus III*  
*Advisory: Prior experience with a graphing utility is needed.*  
 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 1701.00

**MATH-401 Mathematics for Health Science (1)**

Lecture 16 - 18 hours.  
 Grading: Letter Grade (Degree-applicable)  
 Course is targeted to students applying for the Nursing A.D.N. program. Topics include: metric, apothecary, and household systems of measurement; system conversions; adult and child dosages; and calculations involving oral, intravenous, and intramuscular medication administrations.  
 1701.00

**MATH-420 Essentials of Intermediate Algebra (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (Non-degree-applicable)  
*Other: Eligibility for MATH-420 Essentials of Intermediate Algebra as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in MATH-420 Essentials of Intermediate Algebra*  
 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. There is a 4 hour supplemental learning requirement that will need to be met in the Success Centers or through Supplemental Instruction (SI).  
 1701.00

**MATH-420B Bridge to STEM+ from Intermediate Algebra (1)**

Lecture 16 - 18 hours.  
 Grading: Letter Grade (Non-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.  
 1701.00

**MATH-450 Intermediate Algebra: A Critical Thinking Approach (5)**

Lecture 80 - 90 hours.  
 Grading: Letter Grade (Non-degree-applicable)  
*Other: Eligibility for MATH-450 Intermediate Algebra: A Critical Thinking Approach as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in MATH-450 Intermediate Algebra: A Critical Thinking Approach*  
 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 or through Supplemental Instruction.  
 1701.00

**MATH-650 Mathematical Foundations (0)**

Lecture 32 - 36 hours.  
 Grading: Pass/No-Pass (Noncredit)  
*Other: This course is designed for students to prepare for any level of mathematics up to Calculus*  
 Mathematics Review for students whose previous mathematical knowledge indicates placement below Introduction to Algebra, and who wish to re-acquire the skills needed to be successful in 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.  
 1702.00

**MATH-652 Skill Building for Math 25 (0)**

Lecture 32 - 36 hours.  
 Grading: Pass/No-Pass (Noncredit)  
*Advisory: Concurrent Enrollment in MATH-25 College Algebra*  
 This course is designed to be taken concurrently with Math 25. The focus of the course is mathematical review of intermediate algebra topics for students who wish to re-acquire the skills needed to increase the likelihood of success in Math 25. Course focuses on mastery of algebra competencies, including: linear equations, inequalities and systems; absolute value equations and inequalities; factoring; rational expressions; radical expressions; quadratic equations and inequalities; graphing of functions; composition and inverse of functions; complex numbers; and logarithmic and exponential expressions and equations. 1702.00

**MECHATRONICS (IETMECH)**

**IETMECH-400 Introduction to Mechatronics (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
*Limitation on Enrollment: General knowledge of electro-mechanical equipment such as hydraulic or pneumatic*  
*Advisory: IETELMT-430 Hydraulic Fundamentals*  
 Introduction to Mechatronics, control system concepts, and safety. Students will develop an understanding of machine functions, of electrical and pneumatic functions and applications for pick and place operations. 0935.00

**IETMECH-401 Robotics and Sequencing (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
*Limitation on Enrollment: General knowledge of electro-mechanical equipment such as hydraulic or pneumatic*  
*Advisory: IETMECH-400 Introduction to Mechatronics, IETELMT-430 Hydraulic Fundamentals, or IETELMT-436 Pneumatics Fundamentals*  
 Robotics and sequencing, station operation through adjusting sensors, PLC programming of motor controllers/sequences, and servo-robotic assembly systems. 0943.00

**IETMECH-402 Mechatronics Troubleshooting (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.  
 Grading: Letter Grade (Degree-applicable)  
*Limitation on Enrollment: General knowledge of electro-mechanical equipment such as hydraulic or pneumatic*  
*Advisory: IETMECH-400 Introduction to Mechatronics, IETMECH-401 Robotics and Sequencing, IETELMT-430 Hydraulic Fundamentals, or IETELMT-436 Pneumatics Fundamentals*  
 Mechatronics troubleshooting covers operation and adjustments of electro-hydraulic systems, and the function of discrete I/O handshaking. Troubleshoot methods using a CompactLogix PLC, and how to troubleshoot multi-station faults. 0935.00

**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 through the era of Johann Sebastian Bach and George Frideric Handel. 1004.00

**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. 1004.00

**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 elements of music, basic musical forms, music periods, styles, and the role of music and musicians in the western world.  
 C-ID MUS 100 1004.00

**MUSIC-5 Music Theory and Musicianship I (4) [Cx]**

Lecture 64 - 72 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.

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.  
 C-ID MUS 120 and MUS 125 1004.00

**MUSIC-6 Music Theory and Musicianship II (4) [Cx]**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: MUSIC-5 Music Theory and Musicianship I*  
*Advisory: MUSIC-36 Piano for Music Majors II*  
 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 choral 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 130 and MUS 135 1004.00

**MUSIC-7 Music Theory and Musicianship III (4) [Cx]**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: MUSIC-6 Music Theory and Musicianship II*  
*Advisory: MUSIC-37 Intermediate Piano*  
 This course expands upon 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; analysis and composition of music in the popular style. Applies and develops the rhythmic, melodic, and harmonic concepts through ear training, sight singing, analysis, and dictation.  
 C-ID MUS 140 and MUS 145 1004.00

**MUSIC-8 Music Theory and Musicianship IV (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: MUSIC-7 Music Theory and Musicianship III**Advisory: MUSIC-38 Studio Piano*

This course expands upon 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 and MUS 155 1004.00

**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.

1005.00

**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.

1005.00

**MUSIC-17 Electronic Music (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: Some keyboard skill and/or experience with computer music production*

Electronic sound synthesis and sound design. Topics include: history of electronic music, theory of sound, electronic sound manipulation using virtual instruments, sampling, and working with MIDI (Musical Instrument Digital Interface).

1005.00

**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 using computers. Topics include understanding of hardware and software, music editing, and sound effects and dialog for film.

1005.00

**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.

1004.00

**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.

1004.00

**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.

1004.00

**MUSIC-35 Piano for Music Majors I (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Development of the ability to read simple piano scores in the classical style. Development of keyboard performance technique from the standpoint of touch and sound. Major and minor scales, the use of triads and their inversions in harmonizing melodies. Some transposition.

1004.00

**MUSIC-36 Piano for Music Majors II (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: MUSIC-35 Piano for Music Majors I*

Further development of the ability to read simple piano scores in the classical style. Development of keyboard performance technique from the standpoint of touch and sound. Major and minor scales, the use of seventh chords in harmonizing melodies. Some transposition.

1004.00

**MUSIC-37 Intermediate Piano (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: MUSIC-36 Piano for Music Majors II*

Piano literature of second and third levels focusing on different historical styles. Extensive sight reading, performance of all major and minor scales, chords, and arpeggios. Some analysis and melodic harmonization.

1004.00

**MUSIC-38 Studio Piano (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Audition with instructor's signature**Advisory: MUSIC-36 Piano for Music Majors II*

Basic contemporary harmony and chording techniques. Performance of popular music in a variety of styles. Reading from lead sheets and construction of song arrangements. Basic improvisation.

1004.00

**MUSIC-40 Beginning Guitar (1) [Cx]**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Basic fundamentals which prepare the student to further explore many styles of guitar playing. Emphasis on foundations of left-hand technique, right-hand technique, melodic playing, and music reading. Student must provide own guitar for use in class.

1004.00

**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.

1004.00

**MUSIC-58 Applied Music (0.5)**

Laboratory 24 - 27 hours open-entry.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Audition required**Corequisite: MUSIC-75 Concert Choir, MUSIC-76 Chamber Choir, MUSIC-77 Community Concert Band, or MUSIC-78 Jazz Band*

This course consists of individualized study of the appropriate techniques and repertoire for the specific instrument/voice being studied. Emphasis is on the progressive development of skills needed for solo performance. Progress is evaluated through a juried performance.

C-ID MUS 160 1004.00

**MUSIC-75 Concert Choir (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: 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**Advisory: Previous choral experience is desirable*

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. Participation in public performances is required.

C-ID MUS 180 1004.00

**MUSIC-76 Chamber Choir (1.5)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: 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**Advisory: Previous significant choral singing experience is desirable*

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. Participation at public performances is required.

C-ID MUS 180 1004.00

**MUSIC-77 Community Concert Band (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Students may pre-register but instructor will assess students ability to play a musical instrument on first day of class*

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 1004.00

**MUSIC-78 Jazz Band (1)**

Studio 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: Intermediate to advanced proficiency on one's musical instrument, together with the ability to read music is required.**Audition on the first day of class on the following instruments: trumpet, trombone, saxophone, bass and bass guitar, keyboards, drums, guitar, and auxiliary percussion.**Placement Level: Students may pre-register in class, but instructor will assess students ability to play musical instrument on first day of class.*

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 1004.00

**MUSIC-98ABC Independent Study: Music (1 - 3)**

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Instructor signature is required for registration*

Special project course designed for the capable, well-motivated student. Each student explores and develops a project or a paper on an area of personal interest in music. Nature and extent of the project must be decided by student and instructor before the student may sign up for the course. Type and extent of the project determines the number of units allowed. Regardless of the unit combination; may be taken three times.

1004.00

**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 - 63 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Admission to the Nursing Assistant Program**Corequisite: NURAST-400L Nursing Assistant Laboratory*

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). 1230.30

**NURAST-400L Nursing Assistant Laboratory (2)**

Laboratory 96 - 108 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Admission into the Nursing Assistant Program**Corequisite: NURAST-400 Nursing Assistant*

Clinical application of the basic nursing care required to provide for the hygiene, comfort, and safety needs of clients in long-term health care settings. Focus on roles and responsibilities, knowledge of and adherence to federal and state regulations, demonstration of nursing skills, and practice in effective communications. 1230.30

**NURAST-405 Nursing Assistant Skills Laboratory (0.5)**

Laboratory 24 - 27 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Admission into the Nursing Assistant Program**Corequisite: NURAST-400 Nursing Assistant and NURAST-400L Nursing Assistant Laboratory*

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. 1230.30

**NURAST-420 Home Health Aide (1.5)**

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Admission into the Nursing Assistant program, and possession of an active California Certified Nursing Assistant (CNA) certificate**Corequisite: NURAST-420L Home Health Aide Laboratory*

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. 1230.80

**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. 1230.80

**NURAST-450 Professional Development for the Nursing Assistant (1)**

Lecture 16 - 18 hours.  
Grading: Letter Grade (Degree-applicable)  
*Limitation on Enrollment: Admission into the Nursing Assistant program*  
*Advisory: Basic computer skills are recommended*  
Development of the interpersonal and professional skills needed by entry-level healthcare providers joining the workforce. Topics include: overview of the healthcare workforce and career ladder, the role of the CNA in the nursing process, critical thinking skills, employment opportunities, resume preparation, and job interview techniques. 1230.30

**NURSING: ASSOCIATE DEGREE (NURADN)**

Students must apply for admission into the Nursing (A.D.N.) program. See the Programs of Study for information on entrance requirements.

Students enrolled in two corequisite-linked courses (i.e. Nursing: A.D.N. 3 and 3L) will have the lower of the two grades earned assigned to both courses when either course grade is less than satisfactory. A minimum grade of "C" in the lecture course and "CR" in the lab course is required to advance in the Nursing A.D.N. program.

**NURADN-3 Transition in Nursing (1.5) [Cx]**

Lecture 24 - 27 hours.  
Grading: Letter Grade (CSU)  
*Limitation on Enrollment: 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*  
*Corequisite: NURADN-3L Transition in Nursing Laboratory*  
Core curriculum of the Associate Degree in Nursing program, including theories of Maslow and Erickson. Development of critical thinking skills. Utilization of the nursing process, therapeutic communications and skills in client care. 1230.10

**NURADN-3L Transition in Nursing Laboratory (0.5) [Cx]**

Laboratory 24 - 27 hours.  
Grading: Pass/No-Pass (CSU)  
*Limitation on Enrollment: 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*  
*Corequisite: NURADN-3 Transition in Nursing*  
Application of basic nursing skills in the nursing-skills lab. 1230.10

**NURADN-6 Clinical Nursing Skills (1.5) [Cx]**

Laboratory 72 - 81 hours.  
Grading: Letter Grade (CSU)  
*Limitation on Enrollment: Admission to the Nursing A.D.N. Program*  
Development of the essential components of client care, enabling the practice of safe and effective nursing. 1230.10

**NURADN-14 Nursing Process 1 (4) [Cx]**

Lecture 64 - 72 hours.  
Grading: Letter Grade (CSU)  
*Prerequisite: NURADN-6 Clinical Nursing Skills*  
*Corequisite: NURADN-14L Nursing Process 1 Laboratory*  
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. 1230.10

**NURADN-14L Nursing Process 1 Laboratory (3.5) [Cx]**

Laboratory 168 - 189 hours.  
Grading: Pass/No-Pass (CSU)  
*Corequisite: NURADN-14 Nursing Process 1*  
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. 1230.10

**NURADN-26 Maternal-Newborn Nursing (2) [Cx]**

Lecture 32 - 36 hours.  
Grading: Letter Grade (CSU)  
*Prerequisite: NURADN-27 Nursing Process 2*  
*Corequisite: NURADN-26L Maternal-Newborn Nursing Laboratory*  
Nursing care of the child-bearing family. Use of the nursing process and critical thinking skills in perinatology and ambulatory settings, and in selected community agencies. 1230.10

**NURADN-26L Maternal-Newborn Nursing Laboratory (1.5) [Cx]**

Laboratory 72 - 81 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. 1230.10

**NURADN-27 Nursing Process 2 (4) [Cx]**

Lecture 64 - 72 hours.  
Grading: Letter Grade (CSU)  
*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*  
*Corequisite: NURADN-27L Nursing Process 2 Laboratory*  
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical surgical units. 1230.10

**NURADN-27L Nursing Process 2 Laboratory (3) [Cx]**

Laboratory 144 - 162 hours.  
Grading: Pass/No-Pass (CSU)  
*Corequisite: NURADN-27 Nursing Process 2*  
Nursing care of adults in the hospital environment. Use of the nursing process and critical thinking skills in medical/surgical units. 1230.10

**NURADN-34 Nursing Process 3 (4) [Cx]**

Lecture 64 - 72 hours.  
Grading: Letter Grade (CSU)  
*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*  
*Corequisite: NURADN-34L Nursing Process 3 Laboratory*  
Utilization of the nursing process and management of care for the gerontological, acute and chronically ill individuals/family. 1230.10

**NURADN-34L Nursing Process 3 Laboratory (3) [Cx]**

Laboratory 144 - 162 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. 1230.10

**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. 1230.10

**NURADN-38L Family-Child Nursing Laboratory (1.5) [Cx]**

Laboratory 72 - 81 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. 1230.10



**NURADN-45 Nursing Process 4 (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU)

*Prerequisite: NURADN-34 Nursing Process 3 and NURADN-34L Nursing Process 3 Laboratory**Corequisite: NURADN-45L Nursing Process 4 Laboratory*

Nursing management of critically ill clients, family, and groups of client in high acuity medical surgical and community health settings. 1230.10

**NURADN-45L Nursing Process 4 Laboratory (3.5)**

Laboratory 168 - 189 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. 1230.10

**NURADN-48 Mental Health and Psychiatric Nursing (2) [Cx]**

Lecture 32 - 36 hours.

Grading: Letter Grade (CSU)

*Other: Students must apply for admission into the Nursing (A.D.N.) program**Corequisite: NURADN-48L Mental Health and Psychiatric Nursing Laboratory*

Mental health and psychiatric illness across the life span. Application of client-centered communication and critical thinking skills. 1230.10

**NURADN-48L Mental Health and Psychiatric Nursing Laboratory (1) [Cx]**

Laboratory 48 - 54 hours.

Grading: Pass/No-Pass (CSU)

*Other: Students must apply for admission into the Nursing (A.D.N.) program**Corequisite: NURADN-48 Mental Health and Psychiatric Nursing*

Clinical application of psychiatric nursing. Performance of client-centered communication and critical thinking skills at psychiatric and community health facilities. 1230.10

**NURADN-50 Professional Issues in Nursing (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission into the Nursing A.D.N. Program*

Historical contributions, ethics, current health care delivery systems, quality assurance, expanded role of the nurse, political action, continuing education, and health care reform. 1230.10

**NURADN-403 Pathophysiology for Nursing (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: BIOL-22 Human Physiology*

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. This course is recommended for students actively completing the pre-requisites for the Associate Degree Nursing (ADN) or a similar health science program. 1230.00

**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 dysrhythmias. Designed to assist health care workers or those interested in health care with recognition and treatment of basic cardiac dysrhythmias. 1230.00

**NURADN-428 Basic Pharmacology (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

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. This course is recommended for students actively completing the pre-requisites for the Associate Degree Nursing (ADN) or a similar health science program. 1230.00

**NURADN-482 Cooperative Education: Nursing A.D.N. (1)**

Work Experience 60.00 - 75.00 hours.

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. 1230.10

**NURADN-550 Health Science Skills Development I (1)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: 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. 1230.00

**NURADN-551 Health Science Skills Development II (1)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No-Pass (Non-degree-applicable)

*Limitation on Enrollment: 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. 1230.00

**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. NURVN-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)

*Limitation on Enrollment: Acceptance into the Vocational Nursing program**Corequisite: NURVN-403L Fundamentals of Nursing Laboratory*

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. 1230.20

**NURVN-403L Fundamentals of Nursing Laboratory (2)**

Laboratory 96 - 108 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the Vocational Nursing program**Corequisite: NURVN-403 Fundamentals of Nursing*

Discussion, demonstration, and application of nursing theory, principles, and effective communication techniques. Using the nursing process and developmental theories as a framework, students provide care for adult and geriatric patients in home, acute, and extended-care clinical settings. Focus on medication administration and patient status reporting. 1230.20

**NURVN-405 Beginning Medical Surgical Nursing (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: NURVN-403 Fundamentals of Nursing and NURVN-403L Fundamentals of Nursing Laboratory*

*Corequisite: 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 musculoskeletal, genitourinary, integumentary, and gastrointestinal disorders. Includes 12 hours of related pharmacology content. 1230.20

**NURVN-405L Beginning Medical Surgical Nursing Laboratory (3)**

Laboratory 144 - 162 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Prerequisite: NURVN-403 Fundamentals of Nursing NURVN-403L Fundamentals of Nursing Laboratory**Corequisite: NURVN-405 Beginning Medical Surgical Nursing*

Discussion, demonstration, and application of the nursing process and developmental theory to the care of adult patients with diseases and disorders of the musculoskeletal, integumentary, genitourinary, and gastrointestinal systems in the clinical setting. 1230.20

**NURVN-407A Beginning Nursing Skills/Clinical Simulation Laboratory (1)**

Laboratory 48 - 54 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the Vocational Nursing program*

Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity and moderate fidelity patient care simulators. Course focuses on the musculoskeletal, integumentary, gastrointestinal and genitourinary systems. 1230.20

**NURVN-407B Intermediate Nursing Skills/Clinical Simulation Laboratory (1)**

Laboratory 48 - 54 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the second semester of the Vocational Nursing program*

Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity patient care simulators. Course focuses on maternal/child health nursing and on the cardiac, respiratory and endocrine systems. 1230.20

**NURVN-407C Advanced Nursing Skills/Clinical Simulation Laboratory (1)**

Laboratory 48 - 54 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the third semester of the Vocational Nursing program*

Application of theoretical concepts to nursing skills performance in a skills laboratory setting. Participation in simulated clinical experiences using high-fidelity patient care simulators. Course focuses on emergency and trauma situations, and on diseases and disorders of the reproductive, hematologic and immune systems. 1230.20

**NURVN-409 Intermediate Medical Surgical Nursing (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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**Corequisite: NURVN-409L Intermediate 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. 1230.20

**NURVN-409L Intermediate Medical Surgical Nursing Laboratory (3)**

Laboratory 144 - 162 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: 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**Corequisite: NURVN-409 Intermediate Medical Surgical Nursing*

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. 1230.20

**NURVN-411 Advanced Medical Surgical Nursing (7) [Cx]**

Lecture 112 - 126 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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**Corequisite: NURVN-411L Advanced Medical Surgical Nursing Lab*

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 neurological systems. Emergency nursing, shock and bioterrorism, and care of the patient with cancer will also be emphasized. Includes 12 hours of related pharmacology content. 1230.20

**NURVN-411L Advanced Medical Surgical Nursing Lab (3)**

Laboratory 144 - 162 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: 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**Corequisite: NURVN-411 Advanced Medical Surgical Nursing*

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, neurologic and immunologic disorders. Care of the patient with cancer, and of patients with emergency and traumatic disorders will also be emphasized. 1230.20

**NURVN-413 Leadership for the Vocational Nurse (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Acceptance into the vocational nursing program. Successful completion of the second semester of the vocational nursing program or equivalent.*

*Corequisite: NURVN-413L Leadership for the Vocational Nurse Lab*

Leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care. Managerial traits, styles, roles, and models are explored. 1230.20

**NURVN-413L Leadership for the Vocational Nurse Lab (2)**

Laboratory 96 - 108 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the vocational nursing program. Successful completion of the second semester of the VN program or equivalent.*

*Corequisite: NURVN-413 Leadership for the Vocational Nurse*

Clinical application of leadership skills, capabilities, and knowledge essential to the vocational nurse including roles and responsibilities, application of the nursing process to problem solving methods, and supervision and evaluation of the effectiveness and quality of care. 1230.20

**NURVN-414 Acute Care Nursing Assistant: Vocational Nursing Foundations (6)**

Lecture 64 - 72 hours. Laboratory 96 - 108 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Evidence of current State of California CNA certification and instructor signature must be obtained prior to enrollment in this course.*

*Other: Students must provide proof of the following by the first 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 or BIOL-20 Human Anatomy and BIOL-22 Human Physiology*

*Advisory: 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*

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 first 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. 1230.20

**NURVN-415A Growth/Development: Psychology Adult - Geriatric (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Acceptance into the Vocational Nursing program*  
Stages of growth and development, behavior, and characteristics of the adult and elderly. Influences of and differences between the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Theories and perspectives of mental health nursing. 1230.20

**NURVN-415B Growth and Development of the Child (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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*

Stages of growth and development, behavior, and characteristics of the child. Influences of and differences between the theories of Freud, Erikson, Piaget, Kohlberg, and Maslow. Theories and perspectives of mental health nursing as it relates to the care of children and adolescents. 1230.20

**NURVN-417A Critical Thinking and the Nursing Process I (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Acceptance into the Vocational Nursing program*  
Increase effectiveness of everyday health care decision-making. Application of critical thinking skills in the health care setting. Introduction to care planning and utilization of the nursing process in clinical decision-making. 1230.20

**NURVN-417B Critical Thinking and the Nursing Process II (1) [Cx]**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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*

Application of advanced critical thinking skills in the health care setting. Advanced concepts in the development of a plan of care and in clinical decision-making. 1230.20

**NURVN-421 Maternal and Child Health Nursing (4) [Cx]**

Lecture 64 - 72 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.*

*Corequisite: NURVN-421L Maternal and Child Health Nursing Lab*

Nursing care of mothers, newborns, and children in both health and illness, using Maslow's theory of human needs to guide the plan of care. 1230.20

**NURVN-421L Maternal and Child Health Nursing Lab (2)**

Laboratory 96 - 108 hours.

Grading: Pass/No-Pass (Degree-applicable)

*Limitation on Enrollment: Acceptance into the vocational nursing program. Successful completion of the first semester of the vocational nursing program or equivalent.*

*Corequisite: NURVN-421 Maternal and Child Health Nursing*

Nursing care of mothers, newborns, and children in the clinical setting, in both health and illness, using Maslow's theory of human needs to guide the plan of care. 1230.20

**NURVN-600 NCLEX Review for VN Licensure Examination (0)**

Lecture 32 - 36 hours.

Grading: Pass/No Pass (Noncredit)

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. 1230.20

**NURVN-601 Vocational Nursing Skills Development I (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Students must be enrolled in the VN program*

Application of didactic concepts in a simulated clinical setting. Instruction corresponds with entry-level and beginning nursing concepts and skills and may include but is not limited to: Catheter insertion and removal, dressing changes, naso-gastric tube insertion, beginning physical assessment techniques, and administration of oral medications. 1230.20

**NURVN-602 Vocational Nursing Skills Development II (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Students must be enrolled in the VN program*

Application of didactic concepts in a simulated clinical setting. Instruction corresponds with intermediate nursing concepts and skills and may include but is not limited to: Parenteral medication administration, tracheostomy care, advanced physical assessment techniques, identification of patient problems and the development of a basic nursing plan of care. 1230.20

**NURVN-603 Vocational Nursing Skills Development III (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Students must be enrolled in the VN program*

Application of didactic concepts in a simulated clinical setting. Instruction corresponds with advanced nursing concepts and skills and may include but is not limited to: Comprehensive nursing assessment techniques, development of a complete nursing plan of care, administration of oral and parenteral medications to multiple patients, leadership and delegation concepts for the vocational nurse. 1230.20

**NURVN-604 Intravenous Therapy (0)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Eligible for state board examination or current licensure*

The program is designed to provide Licensed Vocational Nurses with requisite knowledge and skills to initiate and maintain intravenous therapy according to the standards of the Board of Vocational Nursing and Psychiatric Technicians. Course includes legal aspects of IV therapy, fluids and electrolytes, blood and blood components, anatomy of the venous system, calculation of flow rate, and venipuncture techniques. This course is intended to enhance the marketability of Vocational Nursing graduates. 1230.20

**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. 1301.00

**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. 1307.10

**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 1306.00

**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. 1306.00

**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. 1301.00

**NF-27 Healthy Cooking (2)**

Lecture 32 - 36 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. 1301.00

**NF-471 Dietetic Service Supervisor I (1)**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required**Corequisite: NF-471L Dietetic Service Supervisor: Supervised Clinical Laboratory I*

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. 1306.20

**NF-471L Dietetic Service Supervisor: Supervised Clinical Laboratory I (2)**

Laboratory 96 - 108 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required**Corequisite: NF-471 Dietetic Service Supervisor I*

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 State regulations, and essential management functions. Per the California State Department of Health, a minimum of 75 hours of field experience is included in the course, which consist of clinical rotations in health care facilities. 1306.20

**NF-472 Dietetic Service Supervisor II (1)**

Lecture 16 - 18 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required**Prerequisite: NF-471 Dietetic Service Supervisor I and NF-471L Dietetic Service Supervisor: Supervised Clinical Laboratory I**Corequisite: NF-472L Dietetic Service Supervisor II: Supervised Clinical Laboratory*

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. 1306.20

**NF-472L Dietetic Service Supervisor II: Supervised Clinical Laboratory (2)**

Laboratory 96 - 108 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Proof of a negative tuberculosis test within the past 12 months is required**Prerequisite: NF-471 Dietetic Service Supervisor I and NF-471L Dietetic Service Supervisor: Supervised Clinical Laboratory I**Corequisite: NF-472 Dietetic Service Supervisor II*

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 State regulations, and essential management functions. Per the California State Department of Health, a minimum of 75 hours of field experience is included in the course, which consist of clinical rotations in health care facilities. 1306.20

**PHARMACY TECHNICIAN (PHARMT)****PHARMT-401 Pharmacology of the Body Systems I (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1221.00

**PHARMT-402 Pharmacology of the Body Systems II (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1221.00

**PHARMT-403 Principles of Community Pharmacy Practice (1.5)**

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1221.00

**PHARMT-404 Principles of Institutional Pharmacy Practice (1.5)**

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1221.00

**PHARMT-405 Sterile Products (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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. 1221.00

**PHARMT-410 Over-The-Counter Products (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Restricted to students who have attended a mandatory orientation session and submitted a contact application to the program**Corequisite: PHARMT-421L Community Pharmacy Operations Laboratory*

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.

1221.00

**PHARMT-415 Pharmaceutical Calculations (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: 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.

1221.00

**PHARMT-421 Community Pharmacy Operations (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Students are required to attend a mandatory orientation session and submit a contact application to the program**Corequisite: PHARMT-421L Community Pharmacy Operations Laboratory*

Duties and responsibilities of the pharmacy technician working in an ambulatory setting. Emphasized topics include: inventory receipt and control; prescription and medication orders screening; computerized prescription processing; medical insurance payment procedures; patient information confidentiality and relevant regulatory, legal, and ethical issues; extemporaneous compounding principles; over-the-counter drug indications and contraindications, and effective customer relations.

1221.00

**PHARMT-421L Community Pharmacy Operations Laboratory (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Students are required to attend a mandatory orientation session and submit a contact application to the program**Corequisite: PHARMT-421 Community Pharmacy Operations*

Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an ambulatory setting.

1221.00

**PHARMT-431 Institutional Pharmacy Operations (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Students are required to attend a mandatory orientation session and submit a contact application to the program**Corequisite: PHARMT-431L Institutional Pharmacy Operations Laboratory*

Duties and responsibilities of the pharmacy technician working in an institutional setting. Emphasized topics include: aseptic technique; use and maintenance of laminar flow hoods; IV admixture and Total Parenteral Nutrition preparation; materials management; inpatient oral medication distribution systems; institutional organization and function; and relevant legal and ethical issues. Students develop the knowledge and skills required to work with pharmacists, other clinical staff, and patients.

1221.00

**PHARMT-431L Institutional Pharmacy Operations Laboratory (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Students are required to attend a mandatory orientation session and submit a contact application to the program**Corequisite: PHARMT-431 Institutional Pharmacy Operations*

Application and practice of the knowledge, concepts, and skills acquired in the corequisite course that are needed to operate effectively in an institutional setting.

1221.00

**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.

1221.00

**PHARMT-481L Clinical Externship (4.5)**

Hours: 240 hours unpaid on-site work experience.

Grading: Letter Grade (Degree-applicable)

*Other: 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.**Corequisite: PHARMT-481 Clinical Externship Seminar*

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.

1221.00

**PHILOSOPHY (PHIL)****PHIL-70 Introduction to Philosophy (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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

1509.00

**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*

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.

1509.00

**PHIL-72 Seminar in Ethics (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: PHIL-70 Introduction to Philosophy*  
 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 1509.00

**PHIL-73 Seminar in Contemporary American Philosophy (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: PHIL-70 Introduction to Philosophy*  
 Study of the leading American thinkers in the areas of aesthetics, political and social theory, scientific thought, religious philosophy, and ethics.  
 1509.00

**PHIL-75 Symbolic Logic (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: ENGL-1A Composition*  
*Advisory: PHIL-76 Critical Thinking*  
 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 1509.00

**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.  
 1509.00

**PHIL-77 History of Ancient Philosophy (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: PHIL-70 Introduction to Philosophy*  
 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 1509.00

**PHIL-78 History of Philosophy: Modern (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
*Advisory: PHIL-70 Introduction to Philosophy or PHIL-77 History of Ancient Philosophy*  
 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 1509.00

**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.  
 1509.00

**PHIL-80 Introduction to Religion (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 Exploration into the philosophies of religion and their intellectual, cultural, and personal expressions.  
 1510.00

**PHIL-81 Introduction to Eastern Philosophy (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 Survey of the philosophies and practices of Hinduism, Buddhism, Confucianism, and Taoism, and their influences in contemporary society.  
 1510.00

**PHIL-82 Introduction to Monotheistic Religions: Judaism/Christianity/ Islam (3)**

Lecture 48 - 54 hours.  
 Grading: Letter Grade (CSU; UC)  
 The origins and manifestations for the Jewish, Christian, and Muslim belief systems.  
 1510.00

**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.  
 1012.00

**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 portfolio. Students must furnish an adjustable digital camera.  
 1012.00

**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.  
 1012.00

**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 or equivalent experience. Students must furnish an adjustable non-digital camera.  
 1012.00

**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.  
 1012.00

**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. 1012.00

**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. 1012.00

**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. 1012.00

**PHOTO-50 Introduction to Color Photography (4)**

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: PHOTO-7 Introduction to Digital Photography**Advisory: PHOTO-9 Digital Imaging*

Basic background in the aesthetics, history, theory, techniques, and materials of color photography. Students must furnish an adjustable digital camera. 1012.00

**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 web portfolio of projects and student must furnish an adjustable digital camera. 1012.00

**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. 1012.00

**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. 1012.00

**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. 1012.00

**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 and 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. 1012.00

**PHOTO-475 Laboratory Practice in Photography (1)**

Laboratory 48 - 54 hours open-entry.

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. 1012.00

**PHOTO-677 Workforce Preparation in Photography (0)**

Laboratory 48 - 54 hours.

Grading: Letter Grade and Pass/No-Pass (Noncredit)

*Corequisite: PHOTO-7 Introduction to Digital Photography, PHOTO-10 Beginning Photography, PHOTO-11 Intermediate Photography, PHOTO-12 Studio Lighting, PHOTO-13 Fine Art Photography, PHOTO-20 Photography for Media, PHOTO-50 Introduction to Color Photography, PHOTO-429 Wedding, Quinceañera, and Event Photography, 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. 1012.00



## PHYSICAL SCIENCE (PHSCI)

### PHSCI-10 Survey of Chemistry and Physics (4)

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade

(CSU; UC)

*Prerequisite: Eligibility for MATH-450 Intermediate Algebra: A Critical Thinking Approach, MATH-420 Essentials of Intermediate Algebra, or higher level math course as determined by the Chaffey College placement process*

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.

C-ID CHEM 140 and PHYS 140

1901.00

## 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.

1902.00

### PHYS-6 The Ideas of Physics Laboratory (1)

Laboratory 48 - 54 hours.

Grading: Letter Grade

(CSU; UC credit limitations)

*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.

1902.00

### PHYS-20A Algebra/Trigonometry College Physics I (4)

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade

(CSU; UC credit limitations)

*Placement Level: Eligibility for MATH-61 Pre-Calculus or higher as determined by the Chaffey College placement process*

*Prerequisite: PHYS-5 The Ideas of Physics, and MATH-31 Plane Trigonometry or one year of high school physics*

Course is designed for students majoring in a life or medical science, or engineering technology, whose university major does not require calculus-based physics. Position, velocity, and acceleration of objects are described using vectors. The concepts of mass, force, Newton's Laws of Motion, momentum, impulse, work, energy, and power are used to describe straight-line motion, projectile motion, circular motion, collisions, explosions, and vibration. Rotational motion includes torque, moment of inertia, angular momentum, and static equilibrium.

C-ID PHYS 105

1902.00

### 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

1902.00

### 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: PHYS-5 The Ideas of Physics, PHYS-44 Introduction to Motion, MATH-61 Pre-Calculus, or one year of high school physics*

Course is designed for students majoring in a life or medical science, or engineering technology, whose university major 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

1902.00

### 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

1902.00

### PHYS-44 Introduction to Motion (4)

Lecture 48 - 54 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade

(CSU; UC credit limitations)

*Placement Level: Eligibility for MATH-65A Calculus I or higher as determined by the Chaffey College placement process*

*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.

1902.00

### PHYS-45 Physics for Scientists and Engineers I (5)

Lecture 64 - 72 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade

(CSU; UC credit limitations)

*Prerequisite: MATH-65A Calculus I, and PHYS-44 Introduction to Motion 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

1902.00

**PHYS-46 Physics for Scientists and Engineers II (5)**

Lecture 64 - 72 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 1902.00

**PHYS-47 Physics for Scientists and Engineers III (5)**

Lecture 64 - 72 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*

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 1902.00

**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 2207.00

**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 2207.00

**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.

2207.00

**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 2207.00

**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 2207.00

**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 2207.00

**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.

2207.00

**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, acculturation, citizenship, political efficacy, voting affiliations and tendencies, diversity within the Latino community, and contemporary political issues affecting Latinos. Special emphasis on the growing political and economic impact of Latinos on the local, state, national, and international levels.

2203.00

**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.

2207.00

## 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*

Psychology is the scientific study of behavior and mental processes. This introductory survey course explores major psychological theories and concepts, core empirical findings, and the methods used in psychological science. Topics include biological basis of behavior, perception, cognition and consciousness, learning, memory, emotion, motivation, developmental psychology, personality, social behavior, lifespan development, psychological disorders and their treatment, and applied psychology. May be offered as an honors course.

C-ID PSY 110 2001.00

### 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 2001.00

### 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.

2001.00

### 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 2001.00

### 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 2001.00

### 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 2001.00

### 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 2001.00

### 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 2001.00

## PUBLIC HEALTH (PH)

### PH-10 Personal Health and Wellness (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors through a biopsychosocial perspective. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety.

C-ID PHS 100 1201.00

### PH-20 Introduction to Public Health (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

This course provides an introduction to the discipline of Public Health. Students will gain an understanding of the basic concepts and terminologies of public health, and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines is covered. Topics of the discipline include the epidemiology of infectious and chronic disease; prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management.

C-ID PHS 101 1201.00

### PH-30 Health and Social Justice (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, racism and gender shape health epidemics and policy development. The basic skills necessary for advocating for health and social justice will be theoretically demonstrated.

C-ID PHS 102 1201.00

**PH-40 Drugs, Health, and Society (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

This course provides an overview of the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Students will be introduced to the concept of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Political, social and economic factors involved in the supply and demand for drugs will be discussed. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed.

C-ID PHS 103

1201.00

**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)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*  
*Corequisite: RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I*

This course provides a comprehensive study of radiographic positioning of the upper extremity, shoulder, lower extremity, pelvic girdle, bony thorax, respiratory system, and abdomen. There will be an emphasis on associated anatomy, radiographic image evaluation, communication, patient care, and safety. Consideration is given to radiation protection and safety practices, and the production of images of optimal diagnostic quality. Laboratory experience complements the didactic portion. This course provides the knowledge base and cognitive skills necessary to perform standard and special radiographic procedures, with both cultural and physical conditions addressed.

1225.00

**RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*  
*Corequisite: RADTEC-10 Anatomy and Radiographic Positioning I*

This course provides a comprehensive study of applications of radiographic positioning of the upper extremity, shoulder, lower extremity, pelvic girdle, bony thorax, respiratory system, and abdomen. Emphasis on associated anatomy, radiation protection, patient communication, and effective interactions with patients/families. Radiographic images are evaluated for appropriate anatomy, image quality, and radiation protection according to standard criteria. Cultural and physical conditions will also be addressed. This course includes simulated patient positioning.

1225.00

**RADTEC-16 Patient Care for Radiologic Technologists (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*  
*Corequisite: RADTEC-16L Laboratory for Patient Care for Radiologic Technologists*

This course provides a comprehensive study of the role of the Radiologic Technologist in the health care team and the health care delivery system including history, ethics, appropriate terminology, effective communication and interactions, scope of practice, patient evaluation, infection control, and radiation safety practices. Special considerations for the following populations will be addressed: neonatal, pediatric, geriatric, and trauma. Emphasis will be placed on ethics, communication and patient education, the Radiologic Technologist's role and scope, and use of contrast agents in radiology. This course will provide education and skills required for use of and care for various medical devices and supplies including venipuncture materials, various tubes, lines and catheters, isolation, vital signs, enema administration, and patient transfer. Safety, including both patient and radiographer safety, will be addressed throughout. Laboratory experience complements the didactic portion.

1225.00

**RADTEC-16L Laboratory for Patient Care for Radiologic Technologists (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*  
*Corequisite: RADTEC-16 Patient Care for Radiologic Technologists*

This course provides a comprehensive study of the applications of the Radiologic Technologist's role in the health care team and the health care delivery system. It will include discussion, application, role-play, and timed simulated evaluations of the medical procedures and techniques commonly used in radiology departments, including pediatric, geriatric, and trauma patients. Demonstration and application of drug administration, enema administration, acquisition of vital signs, patient transfer and movement, medical and surgical aseptic techniques, and infection control measures will be performed, with emphasis on safety, patient care, communication, and the importance of documentation. Medical and surgical aseptic technique will be studied in depth. Cultural and physical conditions will also be addressed.

1225.00

**RADTEC-20 Radiologic Science and Protection (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*  
*Corequisite: RADTEC-20L Laboratory for Radiologic Science and Protection*

This course establishes a basic knowledge of the fundamental properties of radiation, x-ray production, and interaction of photons with matter. The operation of radiographic equipment and digital imaging systems is covered. Appropriate radiographic exposure factors required to produce quality radiographic images is introduced, including their influence on the production and recording of images. Computed radiography and direct capture image receptors are compared for methods of image acquisition, processing, delivery, storage, display, archiving, and retrieval is introduced. An introduction to radiobiology and the effects of radiation on living systems including response is included. Emphasis is placed on basic radiation measurement, attenuation and absorption of radiation within the human body, and the associated health effects. Principles of radiation protection and safety for patients and staff are introduced and correlated to state and federal radiation control legislation. The use of radiographic equipment and accessories is explored; laboratory experiments complements didactic instruction.

1225.00

**RADTEC-20L Laboratory for Radiologic Science and Protection (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program**Corequisite: RADTEC-20 Radiologic Science and Protection*

This course establishes a basic knowledge of the applications of fundamental properties of radiation, x-ray production, and interaction of photons with matter. Theoretical and applied concepts are correlated with laboratory results in a series of experiments conducted in on-campus live radiography laboratory. Through a process of discussion, demonstration, return demonstration, group sharing, and demonstration evaluation, students correlate concepts with production of radiographic images. Experiments demonstrate applications of production of x-rays, facilitating student acquisition of competency and skill in the use of radiographic equipment and accessories. Calculation and implementation of appropriate exposure factors is employed for digital imaging systems, including both computed radiography and direct-capture radiography systems. Emphasis is placed on equipment manipulation (including mobile and stationary units), image receptors, ionization and exposure, beam intensity, and radiation protection. Radiographic image evaluation and critiques are performed to assist students in utilizing digital imaging systems. 1225.00

**RADTEC-25 Anatomy and Radiographic Positioning II (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program**Prerequisite: RADTEC-10 Anatomy and Radiographic Positioning I**Corequisite: RADTEC-25L Laboratory for Anatomy and Radiographic Positioning II*

This course provides a comprehensive study of radiographic positioning of the vertebral column, special studies, abdominal viscera, contrast studies, and upper airway. Procedural considerations for contrast studies, mobile and surgical radiography, and trauma will be addressed, as well as age-specific considerations, including pediatric and geriatric considerations. There will be an emphasis on associated anatomy, related introductory pathology, radiographic image analysis, communication, and patient care and safety. Radiation protection and evaluation of optimal diagnostic images are stressed. Laboratory experience complements the didactic portion. This course provides the knowledge base and cognitive skills necessary to perform standard and special radiographic procedures, with both cultural and physical conditions addressed. 1225.00

**RADTEC-25L Laboratory for Anatomy and Radiographic Positioning II (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology Program**Prerequisite: RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I**Corequisite: RADTEC-25 Anatomy and Radiographic Positioning II*

This course provides a comprehensive study of applications of radiographic positioning of the vertebral column, special studies, abdominal viscera, abdomen and GI studies, and upper airway. Procedural considerations for contrast studies, mobile and surgical radiography, and trauma will be demonstrated and performed, as well as age-specific considerations, including pediatric and geriatric considerations. There will be an emphasis on associated anatomy, related introductory pathology, radiographic image analysis, communication, and patient care and safety. This course provides the knowledge base and cognitive skills necessary to perform standard and special radiographic procedures, with both cultural and physical conditions addressed, through role-play on simulated patients. 1225.00

**RADTEC-31 Radiographic Clinical Education I (2)**

Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Admission to the Radiologic Technology Program*

This course provides an introduction to content and clinical practice experiences for sequential development, application, critical analysis, and integration of the concepts and theories in the performance of radiologic procedures, in conjunction with topics presented in the on-campus Radiologic Technology courses. Using competency-based assignments, the student first observes and then assists with (under direct supervision) patient care and radiographic procedures. Emphasis will be on familiarizing the student with the clinical education setting, patient-centered clinical practice, professional development and working relationships with other health care professionals. Competency and outcome measurement ensure the well-being of the patient prior to, during and following procedures. Students follow all policies and procedures outlined in the current Radiologic Technology Student Handbook. 1225.00

**RADTEC-34 Radiographic Imaging (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program**Prerequisite: RADTEC-20 Radiologic Science and Protection**Corequisite: RADTEC-34L Laboratory for Radiographic Imaging*

This course provides a comprehensive study of digital imaging systems, including purpose, design, image acquisition, processing, display, archival, and retrieval. A review of diagnostic radiology equipment components, function and operation is included, with emphasis on impact on image quality and patient exposure. X-ray tube circuitry and radiographic grids are studied in depth for purpose, design, function, and proper use. Students will explore the differences and similarities within various digital imaging detectors, including thin-film transistor arrays, charge-coupled devices, complementary metal oxide semiconductors, and photo-stimulable phosphor plates. An in-depth study of radiation protection, health physics, cell radiosensitivity, and radiobiologic effects in humans will be studied. Medical imaging quality management programs are explored, with analysis of HIS, RIS, DICOM and PACS as they relate to digital medical imaging. A brief introduction to fluoroscopy is included, in respect to fluoroscopic quality control. The use of radiographic equipment and accessories is explored; laboratory experiments complement didactic instruction. 1225.00

**RADTEC-34L Laboratory for Radiographic Imaging (1)**

Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Corequisite: RADTEC-34 Radiographic Imaging**Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program**Prerequisite: RADTEC-20L Laboratory for Radiologic Science and Protection*

This course provides a comprehensive study of the applications of digital imaging systems, including purpose, design, image acquisition, processing, display, archival, and retrieval. Through a process of discussion, demonstration, return demonstration, group sharing and evaluation, students apply radiation theories to the production of quality digital images. Exposure latitude is coupled with patient dose applications through the use of digital imaging equipment in the on-campus live radiography laboratory. The use and misuse of radiographic grids is evaluated, along with the performance and analysis of quality control tests. Beam restriction, centering sensitivity, acquisition errors, and post-processing capabilities of digital imaging are also explored. Image evaluation and critiques aid students in developing the required skills and critical thinking when utilizing digital imaging systems. 1225.00

**RADTEC-41 Radiographic Clinical Education II (7)**

Laboratory 336 - 378 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the first semester of the Radiologic Technology program**Prerequisite: RADTEC-31 Radiographic Clinical Education I*

This course provides content and 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, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Emphasis is on patient care and assessment, competent performance of radiologic imaging and total quality management. Students will focus on the well-being of the patient prior to, during and following radiologic procedures. Students perform under direct and indirect supervision as appropriate, adhering to all policies and procedures in the Radiologic Technology Student Handbook. 1225.00

**RADTEC-51 Radiographic Clinical Education III (4.75)**

Laboratory 228 - 256.50 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the 2nd semester of the Radiologic Technology program and in good standing**Prerequisite: RADTEC-41 Radiographic Clinical Education II*

This course provides continued content and 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, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Emphasis is on patient care and assessment, competent performance of radiologic imaging and total quality management. Students will focus on the well-being of the patient prior to, during and following radiologic procedures. Students perform under supervision as appropriate, adhering to all policies and procedures in the Radiologic Technology Student Handbook. 1225.00

**RADTEC-55 Fluoroscopy and Clinical Application (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Must be a 2nd year student in the Radiologic Technology program and in good standing**Prerequisite: RADTEC-34 Radiographic Imaging*

This course provides a comprehensive study of the concepts and applications of fluoroscopy in medical imaging. It establishes the knowledge base required of radiographers in fluoroscopic equipment, design and operation in both conventional and digital systems. There will be study of local, state and federal regulatory principles and documents as they relate to radiation. A review of radiobiology is included, as applied to fluoroscopic exams and implications therein, with emphasis on public and occupational dose monitoring and limits and the effects of radiation on the human body. ALARA is reinforced through the study of image quality versus dose. Class demonstrations and laboratory experiments complement the didactic portion of the course and provide opportunity for application and reinforcement of theories. 1225.00

**RADTEC-61 Radiographic Clinical Education IV (8)**

Laboratory 384 - 432 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing**Prerequisite: RADTEC-51 Radiographic Clinical Education III*

This course provides continued content and 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, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Emphasis is on patient care and assessment, competent performance of radiologic imaging and total quality management. Students will focus on the well-being of the patient prior to, during and following radiologic procedures. Students perform under direct and indirect supervision as appropriate, adhering to all policies and procedures in the Radiologic Technology Student Handbook. 1225.00

**RADTEC-67 Anatomy and Radiographic Positioning III (2.5)**

Lecture 40 - 45 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing**Prerequisite: RADTEC-25 Anatomy and Radiographic Positioning II**Corequisite: RADTEC-67L Laboratory for Anatomy and Radiographic Positioning III*

This course provides a comprehensive study of radiographic procedures and positioning of the skull, facial bones, nasal bones, orbits/optic foramina, zygomatic arches, mandible, temporomandibular articulations (TMJ), and paranasal sinuses to perform standard imaging procedures, including trauma and pediatric considerations. An introduction to interventional radiology and computed tomography (CT) is included, with a prominence on cross-sectional anatomy of the skull. There will be an emphasis on associated anatomy, radiation protection, patient communication, effective patient interaction, and radiographic image evaluation. Cultural and physical conditions will also be addressed. Laboratory experience complements the didactic portion. 1225.00

**RADTEC-67L Laboratory for Anatomy and Radiographic Positioning III (0.75)**

Laboratory 36 - 40.50 hours.

Grading: Letter Grade (CSU)

*Prerequisite: RADTEC-25L Laboratory for Anatomy and Radiographic Positioning II**Corequisite: RADTEC-67 Anatomy and Radiographic Positioning III*

This course provides a comprehensive study of applications of radiographic positioning of the skull, facial bones, nasal bones, orbits/optic foramina, zygomatic arches, mandible, temporomandibular articulations, and paranasal sinuses to perform standard imaging procedures, including trauma and pediatric considerations. Cultural and physical conditions will also be addressed. There will be an emphasis on associated anatomy, radiation protection, appropriate communication, effective patient interaction, and radiographic image evaluation. Positioning skills will include skull lines, skull landmarks, tube angle, entrance or exit, patient position, and patient care. Identification of radiographic quality will be assessed and evaluated. This course includes simulated patient positioning and exposure of radiographic phantoms. 1225.00

**RADTEC-71 Radiographic Clinical Education V (10)**

Laboratory 480 - 540 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the 4th semester of the Radiologic Technology program and in good standing**Prerequisite: RADTEC-61 Radiographic Clinical Education IV*

This course provides continued content and clinical practice designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Using structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Emphasis is on patient care and assessment, competent performance of radiologic imaging and total quality management. Students will focus on the well-being of the patient prior to, during and following radiologic procedures with increasingly independent performance. Students perform under direct and indirect supervision as appropriate, adhering to all policies and procedures in the Radiologic Technology Student Handbook. There is a secondary rotation for nine weeks to experience a new facility. 1225.00

**RADTEC-77 Radiographic Pathology (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the 4th semester and in good standing in the Radiologic Technology program*

This course provides an introduction to radiographic pathology, with theories of disease causation and the pathophysiologic disorders that compromise health systems. Concepts related to disease and etiological considerations are studied, with emphasis on radiographic appearance of disease and impact on technical factors. Definitions and terminology, causes of disease, radiologic pathology and implications for practice are explored. Radiologic pathology is studied in depth, covering definitions, etiology, examples, sites, complications, prognosis, radiographic appearance, procedural and technical considerations and appropriate imaging modality. 1225.00

**RADTEC-82 Radiographic Clinical Education VI (4)**

Laboratory 192 - 216 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Successful completion of the 5th semester of the Radiologic Technology program and in good standing**Prerequisite: RADTEC-71 Radiographic Clinical Education V*

This course provides terminal content and clinical practice experiences designed for sequential development, advanced application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Using structured, sequential, competency-based clinical assignments, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Emphasis is on patient care and assessment, competent performance of radiologic imaging and total quality management, with proficient skills assessment. Students will focus on the well-being of the patient prior to, during and following radiologic procedures with increasingly independent performance. Students perform under supervision as appropriate, adhering to all policies and procedures in the Radiologic Technology Student Handbook, for the purpose of assessing skills for employment. 1225.00

**RADTEC-85 Radiographic Review and ARRT Preparation (2)**

Lecture 32 - 36 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: Must be a 2nd year student in the Radiologic Technology program and in good standing*

This course provides a comprehensive review of the Radiologic Technology curriculum, following the American Registry of Radiologic Technologists (ARRT) radiography exam specifications. It is intended to prepare the student for the radiography certification exam through the ARRT and the California Department of Public Health- Radiologic Health Branch (CDPH-RHB) licensure exam, creating the path to licensure and qualification to work as a Radiologic Technologist. 1225.00

**RADTEC-472 Pharmacology and Venipuncture for Imaging Professionals (1.5)**

Lecture 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing**Prerequisite: RADTEC-16 Patient Care for Radiologic Technologists**Corequisite: RADTEC-472L Lab for Pharmacology and Venipuncture for Imaging Professionals*

The course provides a comprehensive study of pharmacology and venipuncture associated with medical imaging, with focus on radiographic contrast media. A review of infection control and professional ethics is included, with an emphasis on application to venipuncture and pharmacology. There will be an emphasis on appropriate delivery of patient care and documentation. Didactic introduction to appropriate and effective venipuncture technique is complemented by laboratory applications and practice. 1225.00

**RADTEC-472L Lab for Pharmacology and Venipuncture for Imaging Professionals (0.5)**

Laboratory 24 - 27 hours.

Grading: Letter Grade (Degree-applicable)

*Limitation on Enrollment: Must be a 2nd year Radiologic Technology student in good standing**Corequisite: RADTEC-472 Pharmacology and Venipuncture for Imaging Professionals*

The course provides a comprehensive study of the applications of pharmacology and venipuncture associated with medical imaging, with focus on venipuncture techniques. Application of skills, skills-building, and reinforcement of theory is included. There will be demonstration of the anatomy and physiology of venipuncture sites, instrumentation, saline intravenous solutions, and proper use of associated equipment. Students will first execute simulated demonstrations, then perform a minimum of ten successful venipuncture sticks on simulated patients (mannequin arms). Patient care aspects of venipuncture are emphasized, with extensive skills-building in effective communication and proper documentation. 1225.00

**RADTEC-600 Radiologic Technology Skills Development I (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Limitation on Enrollment: Must be currently enrolled in the Chaffey College Radiologic Technology Program**Corequisite: RADTEC-10L Laboratory for Anatomy and Radiographic Positioning I, RADTEC-16L Laboratory for Patient Care for Radiologic Technologists, RADTEC-25L Laboratory for Anatomy and Radiographic Positioning I, or RADTEC-20L Laboratory for Radiologic Science and Protection, RADTEC-34L Laboratory for Radiographic Imaging, RADTEC-31 Radiographic Clinical Education I, RADTEC-41 Radiographic Clinical Education II, RADTEC-51 Radiographic Clinical Education III*

Development of RadTec skills, techniques and concepts in a laboratory or clinical setting, including but not limited to, proper use of positioning aids, proper positioning of the patient, proper patient care with oxygen delivery systems, nasogastric tubes, chest tubes, tracheostomies, tissue drains, chest tubes, catheters, accurate radiographic positioning of the vertebral column, bony thorax, gastrointestinal and biliary systems, proper use of x-ray accessories, proper processing techniques of x-rays, proper techniques of x-ray protection and interpersonal professional skills to promote success for the hospital lab educational environments. 1225.00

**RADTEC-610 Radiologic Technology Skills Development II (0)**

Laboratory 48 - 54 hours open-entry.

Grading: Pass/No Pass (Noncredit)

*Corequisite: RADTEC-61 Radiographic Clinical Education IV, RADTEC-67L Laboratory for Anatomy and Radiographic Positioning III, RADTEC-71 Radiographic Clinical Education V, RADTEC-82 Radiographic Clinical Education VI, or RADTEC-472L Lab for Pharmacology and Venipuncture for Imaging Professionals*

Advanced development of RadTec skills, techniques and concepts in a laboratory or clinical setting, including but not limited to, correct identification and use of venipuncture sites in the upper extremity, critique of images for appropriate clinical evaluation, image quality and patient exposure, correct placement radiographic positions of the cranium, facial bones, nasal bones, zygomas, orbits, paranasal sinuses, mandible and TMJ, appropriate response to medical emergencies and competent assessment skills through effective management of the patient's mental and physical status, and interpersonal professional skills to promote success for the hospital lab educational environments. 1225.00

**REAL ESTATE (RE)****RE-410 Real Estate Principles (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Fundamentals of real estate, covering basic laws and principles of California real estate. Gives understanding, background, and terminology necessary for advanced study in the specialized courses. 0511.00

**RE-415 Real Estate Practice (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: RE-410 Real Estate Principles*

Office procedures and practices of the broker and salesperson in the real estate business, including listing, prospecting, advertising, financing, exchanges, and sales techniques. Course is applicable toward the educational requirements for broker's license and real estate salesperson's license. 0511.00

**RE-460 Real Estate Finance (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: RE-410 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. 0511.00

**RE-470 Real Estate Appraisal (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: RE-410 Real Estate Principles (current real estate license may substitute for RE-410 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 salesperson's license. 0511.00

**RE-472 Advanced Real Estate Appraisal (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Prerequisite: RE-470 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. 0511.00

**RE-475 Real Estate Escrow (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

*Advisory: RE-410 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. 0511.10

**RE-486 Real Estate Property Management (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (Degree-applicable)

Introduction to management of real estate property. Identification and analysis of functions, responsibilities, legal rights, liabilities, and leasing instruments of property management. Course is an elective for the California sales or broker's license. 0511.00



## 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)

*Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of 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 MATH 110 and SOCI 125 2201.00

### SCSCI-13 Introduction to Social Work (3) [Cx]

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

An introductory overview of social welfare and the societal institutions in the U.S. that structure the provision of social services. The course presents a historical perspective on the development of U.S. social work and human services. Special attention is given to current service delivery systems, their policies and procedures, and the tasks of culturally responsive social workers and human service workers within those settings. 2104.00

### 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. 2201.00

## SOCIOLOGY (SOC)

### SOC-10 Introduction to Sociology (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: ENGL-495 College Reading and Writing or 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 2208.00

### 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 2208.00

### 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 2208.00

### SOC-16 Marriage, Family and Relationships (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 2208.00

### SOC-17 Sociology of Crime (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

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. 2208.00

### SOC-18 Sociology of Aging (3)

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Advisory: SOC-10 Introduction to Sociology*

Social, cultural, and policy issues for an aging society. Diversity in the experience of aging: cultural, economic, gender, and ethnic differences. Age and aging as social constructs. Life-long age status and role expectations. Society's response to an increasingly aged population. May be offered as an Honors course. 2208.00

### 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.

2203.00

### 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. 2203.00

**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 2208.00

**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 2201.10

**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 2208.00

**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.  
 C-ID SOCI 115 2208.00

**SOC-80 Introduction to Research Methods in Sociology (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: SOC-10 Introduction to Sociology*  
*Advisory: SCSCI-10 Statistics for Social Science*  
 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 2208.00

**SPANISH (SPAN)****SPAN-1 Elementary Spanish I (4)**

Lecture 64 - 72 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. This course may also require completion of supplemental assignments.  
 C-ID SPAN 100 1105.00

**SPAN-2 Elementary Spanish II (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: SPAN-1 Elementary Spanish I or one year of high school Spanish*  
 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. This course may also require completion of supplemental assignments.  
 C-ID SPAN 110 1105.00

**SPAN-3 Intermediate Spanish I (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: SPAN-2 Elementary Spanish II or two years of high school Spanish*  
 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. This course may also require completion of supplemental assignments.  
 C-ID SPAN 200 1105.00

**SPAN-3SS Spanish for Heritage Speakers I (4)**

Lecture 64 - 72 hours.  
 Grading: Letter Grade (CSU; UC)  
*Prerequisite: SPAN-2 Elementary Spanish II or department determined equivalency (visit <https://www.chaffey.edu/acc/acd/language/spanish-3ss.php> to provide evidence to challenge this prerequisite)*  
 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 1105.00

**SPAN-4 Intermediate Spanish II (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: SPAN-3 Intermediate Spanish I*

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. This course may also require completion of supplemental assignments.

C-ID SPAN 210 1105.00

**SPAN-4SS Spanish for Heritage Speakers II (4)**

Lecture 64 - 72 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 student's 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 1105.00

**SPAN-8 Survey of Hispanic Literature: 1700 - Present (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: SPAN-3 Intermediate Spanish I, SPAN-3SS Spanish for Heritage Speakers I or department-determined equivalency*

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.

1105.00

**SPAN-9 Cultural Awareness through Conversation (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

*Prerequisite: SPAN-2 Elementary Spanish II or - Department determined equivalency*Spanish 9 survey found here: <https://www.chaffey.edu/acc/acd/language/spanish-9.php>

This course is designed to improve Spanish conversational skills and enhance cultural awareness for those students who have a degree of proficiency in Spanish or are heritage speakers. The course promotes a greater awareness of the nuances of the Spanish language through discussions and debates centering on the history, politics, society and culture of the Spanish speaking world. The course prepares students to be global citizens through self-reflection and thoughtful exploration of Hispanic cultures and communities in the U.S. and abroad. The course will be conducted in Spanish.

1105.00

**SPAN-13 Survey of Mexican Literature (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: ENGL-1A Composition*

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.

1105.00

**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.

1105.00

**STATISTICS (STAT)****STAT-10 Elementary Statistics (4)**

Lecture 64 - 72 hours.

Grading: Letter Grade (CSU; UC credit limitations)

*Other: Eligibility for STAT-10 Elementary Statistics as determined by the Chaffey College placement process as of March 2019, which will result in more students being able to enroll directly in STAT-10 Elementary Statistics*

*Prerequisite: MATH-450 Intermediate Algebra: A Critical Thinking Approach or MATH-420 Essentials of Intermediate Algebra**Advisory: Concurrent enrollment in STAT-610 Skill Building for Stat 10*

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. The Math department strongly recommends that any student wanting or needing extra support for this course to consider enrolling in STAT-610 to be taken concurrently with STAT-10. There is a 4 hour supplemental learning requirement that can be satisfied through the success centers, Supplemental Instruction, or by directed instructional assignments determined by the instructor.

C-ID MATH 110 1701.00

**STAT-610 Skill Building for Stat 10 (0)**

Lecture 32 - 36 hours.

Grading: Pass/No-Pass (Noncredit)

*Advisory: Concurrent Enrollment in STAT-10 Elementary Statistics*

This course is designed to be taken concurrently with Stat 10. The focus of the course is mathematical review of intermediate algebra topics for students who wish to re-acquire the skills needed to increase the likelihood of success in Stat 10. Course focuses on mastery of algebra competencies, including: linear equations, inequalities and systems; absolute value equations and inequalities; factoring; radical expressions; quadratic equations and inequalities; graphing of functions; composition and inverse of functions; exponential expressions and equations; sequences and series.

1702.00

**THEATRE (THEATRE)****THEATRE-1 Introduction to Theatre (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 1007.00

**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.

1007.00

**THEATRE-4 Theatre History: Ancient to 1700 (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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 1007.00

**THEATRE-5 Theatre History: 1700-Present (3) [Cx]**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

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.

1007.00

**THEATRE-7 Theatrical Script Analysis (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU)

This course explores principles, techniques and theories of play script analysis for theatrical production.

C-ID THTR 114 1007.00

**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.

1007.00

**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 1007.00

**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, monologues and scenes.

C-ID THTR 152 1007.00

**THEATRE-14 Stylized Acting (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

Advanced acting techniques necessary for drama of various types. Students will study acting styles such as Elizabethan, Commedia dell'arte, Comedy of Manners and contemporary styles of acting. Some work on dialects as needed for specific scenes.

1007.00

**THEATRE-18 Acting For The Camera (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Advisory: THEATRE-10 Beginning Acting*

Prepares the student for the particular demands of acting in front of the camera. Course will examine techniques of text analysis, cold reading, blocking, vocabulary and various camera shots.

1007.00

**THEATRE-20 Directing for the Stage (3)**

Lecture 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*Prerequisite: 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 stage productions.

1007.00

**THEATRE-30 Stagecraft (3)**

Lecture 32 - 36 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 1006.00

**THEATRE-32 Theatre Design-Lighting (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU)

*Advisory: THEATRE-30 Stagecraft*

Study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design.

C-ID THTR 173 1006.00

**THEATRE-35 Musical Theatre Performance I (3)**

Lecture 32 - 36 hours. Laboratory 48 - 54 hours.

Grading: Letter Grade (CSU; UC)

*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.

1007.00

**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.

1006.00

**THEATRE-37 Musical Theatre Performance II (3)**

Lecture 32 - 36 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. 1007.00

**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 1006.00

**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 1006.00

**THEATRE-44 Audio/Visual Design in Theatre and Live Entertainment (3)**

Lecture 32 - 36 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. 1006.00

**THEATRE-50 Main Stage Production Workshop -Rehearsal and Performance (3)**

Laboratory 144 - 162 hours.

Grading: Letter Grade (CSU; UC)

*Limitation on Enrollment: 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 1006.00

**THEATRE-52 Main Stage Production Workshop- Technical Theatre (2)**

Laboratory 96 - 108 hours.

Grading: Letter Grade (CSU)

*Limitation on Enrollment: 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. 1006.00

**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: 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, improvisational 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. 1006.00

**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. 1007.00

**THEATRE-496ABCD Internships in Technical Theatre and Entertainment Design (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: 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. 1006.00

**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. 0956.50

# STUDENT SUPPORT SERVICES

## ATHLETICS

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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 Inland Empire Athletic Conference (IEAC) 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

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Chaffey College Economic Development provides workforce training and development to meet the needs of business and industry in the region, as well as assists individuals to secure full-time employment through accelerated training programs. Services for employers include incumbent worker training, job placement, paid internships, and registered apprenticeships. To receive more information, please visit [www.intechcenter.org](http://www.intechcenter.org).

### INCUMBENT WORKFORCE

Chaffey College has worked with employers for over 20 years to develop and provide customized training solutions to their incumbent workforce. Chaffey has earned a reputation for being innovative, collaborative, and responsive to workforce training needs, as they have partnered with hundreds of employers and delivered custom training programs to thousands of employees.

Popular training topics include: leadership, performance improvement, communication, business skills, technical skills, and safety certifications. For more information, visit [www.chaffey.edu/workforce](http://www.chaffey.edu/workforce) or email [customizedtraining@chaffey.edu](mailto:customizedtraining@chaffey.edu).

## INTECH CENTER

The Industrial Technical Learning Center (InTech) is a regional training facility designed by industry for industry to train and upskill a workforce pipeline for Inland Empire business and industry. The InTech team works with individuals who are often unemployed, underemployed, dislocated workers, re-entry, youth and more to help them receive training (often at no cost) and transition them to a new career pathway.

Priority industry sectors targeted include construction, distribution, logistics, manufacturing, and utilities. InTech also works with the Inland/Desert Non-Union Unilateral Multiemployer Apprenticeship Committee with their two registered apprenticeship occupations: Industrial Maintenance Electrician and Industrial Mechanic.

For more information, please contact the InTech Welcome Desk at (909) 652-8488 or visit [www.intechcenter.org](http://www.intechcenter.org).

## EMPLOYMENT DEVELOPMENT

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### 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 <https://www.chaffey.edu/communityed/>. For more information, please call (909) 652-6041.

## HOUSING

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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

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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 <https://www.chaffey.edu/studentlife/>.

## STUDENT LIFE

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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](mailto: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 <https://www.chaffey.edu/studentlife/>. 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 2020-2021 are:

- Associated Press Club
- Business Elites
- Chaffey Chinese Club
- Chaffey Forensics Society
- Chaffey College Accounting Society
- Chaffey College Anime Club
- Chaffey College Anthropology Club
- Chaffey College Car Club
- Chaffey College Cyber Security Club
- Chaffey College Dungeons and Dragons Club
- Chaffey College EOPS Club
- Chaffey College Legal Society
- Chaffey College Recording Arts Club
- Chaffey College Student Chapter of IFMA
- Chaffey College Student Government (CCSG)
- Chaffey College Theatre Club
- Chemistry Club
- The College Church
- Culinary and Hospitality Club
- DREAMer's Club
- Democratic Club
- Film Makers Club
- The Game Development Club
- Hispanic Association of Colleges of Universities Alumni
- Interior Design Club
- Kappa Sigma Nu
- Kinesiology Club
- Latina Leadership Club
- The Lavender Coalition
- Men in Nursing
- Multicultural Club
- Muslim Student Association

- Philosophy Club
- Pinto Club
- Pre-Medical Society
- Psychology Club
- The Puente Project
- The Storyteller's Guild
- Umoja
- The Willow and the Stag Club

## 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 <https://www.chaffey.edu/personalsupport/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 Store 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. For more information, call (909) 652-6511 or visit [www.chaffey.edu/careercenter](http://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 <https://chaffey-csm.symplicity.com/>.

## 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) 652-6852.

## 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 <https://www.chaffey.edu/childdevelopment/> 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 placement 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 and Student Employment Office".

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.

### DPS (Disability Programs and Services)

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 <http://libguides.chaffey.edu/library>.

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 – 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/studentsupport/dps.php](http://www.chaffey.edu/studentsupport/dps.php).

### EOPS (Extended Opportunity Programs and Services)

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 <https://www.chaffey.edu/personalsupport/eops.php>.

### 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 <http://libguides.chaffey.edu/library> for current hours and more detailed information on our resources and services.

## 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](mailto:equity.support@chaffey.edu).

### 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](mailto: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 <https://www.chaffey.edu/cashier/>.

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. Visit us online at <http://libguides.chaffey.edu/successcenters>.

### Language Success Center

BEB-101, Rancho Cucamonga Campus  
ESL and Modern Languages: (909) 652-6907  
English courses: (909) 652-6820

### Math Success Center

MATH-121, Rancho Cucamonga Campus: (909) 652-6452

### Multidisciplinary Success Center

Library, (909) 652-6932

### Chino Success Center

CHMB-145, Chino Campus: (909) 652-8150

### Fontana Success Center

FNFC-122, Fontana Campus: (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 <https://www.chaffey.edu/student-support/academics-support/transfer.php>.

## 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. Obtain more information by calling (909) 652-6235 or visiting <https://www.chaffey.edu/spops/veterans.php>.

## 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/policiesandprocedures/index.php](http://www.chaffey.edu/policiesandprocedures/index.php) 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/students/student-handbook.php](http://www.chaffey.edu/students/student-handbook.php).

## 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/students/student-handbook.php](http://www.chaffey.edu/students/student-handbook.php).

## 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/policiesandprocedures/index.php](http://www.chaffey.edu/policiesandprocedures/index.php) (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/students/student-handbook.php](http://www.chaffey.edu/students/student-handbook.php).

## 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 Compliance Officer, Susan Hardie, Director, Human Resources, may be contacted at (909) 652-6531 or email to [susan.hardie@chaffey.edu](mailto:susan.hardie@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 email to [susan.hardie@chaffey.edu](mailto: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](mailto: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](mailto: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](mailto:amy.nevarez@chaffey.edu), or William Miller at (909) 652-6390, email [william.miller@chaffey.edu](mailto: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](mailto: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](mailto: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](http://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 Oficial de Cumplimiento del Título IX, Susan Hardie, puede ser contactado al teléfono (909) 652-6531, correo electrónico [susan.hardie@chaffey.edu](mailto:susan.hardie@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](mailto: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](mailto: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 política 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 Discapitados (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 Relevos 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](mailto: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 Orientación 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](mailto:amy.nevarez@chaffey.edu); o William Miller (909) 652-6390, o al correo electrónico [william.miller@chaffey.edu](mailto:william.miller@chaffey.edu).

## SECCIÓN 504/508: PROCEDIMIENTO DE QUEJA

Si un estudiante tiene una queja bajo las provisiones de la Sección 504 de 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](mailto:dps.staff@chaffey.edu). El coordinador de la ADA 504/508 se pondrá en contacto con todas las personas/partidos implicados e intentará 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](mailto:susan.hardie@chaffey.edu).













<b>Cobos, Rose Ann</b> <i>Biological Science</i>	<b>Extale, John Gilbert</b> <i>Business</i>	<b>Gregory, Donald J.</b> <i>Sociology</i>	<b>Hubert, Wayne</b> <i>Dean, Language Arts</i>
<b>Colbath, George C.</b> <i>Physical Education</i>	<b>Felsch, Fred O.</b> <i>Aeronautics, Student Advisor</i>	<b>Grimm, Lewis L.</b> <i>Physics, Engineering</i>	<b>Huenergardt, Myrna</b> <i>Health Services</i>
<b>Contino, Sam</b> <i>Automotive Technology</i>	<b>Fernandez, Priscilla</b> <i>Reference Librarian</i>	<b>Grise, Hendrik</b> <i>Art</i>	<b>Hultgren, Larry G.</b> <i>Aeronautics</i>
<b>Cook, June</b> <i>Business and Office Technologies</i>	<b>Fincher, Donald E., Sr.</b> <i>Radiologic Technology</i>	<b>Groneweg, William C.</b> <i>Dean of Admissions and Records</i>	<b>Hyams, Maureen</b> <i>Vocational Nursing</i>
<b>Corse, Pauline C.</b> <i>English</i>	<b>Finnie, Thomas S.</b> <i>Electronics</i>	<b>Gurich, Louise</b> <i>Court Reporting</i>	<b>Jaeger, Paul F.</b> <i>Physical Education</i>
<b>Cox, Beverly</b> <i>Dental Assisting</i>	<b>Fisk, Kent</b> <i>Automotive Technology</i>	<b>Haerens, Joy</b> <i>Dean, Business and Applied Technology</i>	<b>Ikeda, Robin</b> <i>Biological Science</i>
<b>Creasy Valdez, Dorothea E.</b> <i>Counseling</i>	<b>Fleck, Robert J.</b> <i>Art</i>	<b>Hafiz, M. David</b> <i>Dean, Admissions, Records, and Counseling</i>	<b>Jack, Clyde</b> <i>Counseling, Psychology</i>
<b>Cruz, Asiris</b> <i>History</i>	<b>Flores, Christine V.</b> <i>Counseling, EOPS</i>	<b>Haney, Gloria</b> <i>English</i>	<b>Jahr, Doris</b> <i>Nursing</i>
<b>Davidson, Volena Jones</b> <i>English</i>	<b>Flory, Vera E.</b> <i>English</i>	<b>Hardie-Townsend Sandra</b> <i>Child Development</i>	<b>Jaramillo, Luz</b> <i>English, Spanish</i>
<b>Davis, Deborah</b> <i>Child Development</i>	<b>Flum, Arthur E.</b> <i>Mathematics</i>	<b>Harmon, Wesley L.</b> <i>Counseling, Psychology</i>	<b>Jarman, Carol</b> <i>Certified Nursing Assistant</i>
<b>Davis, Homer W.</b> <i>Communication Arts</i>	<b>Frank, Marie G.</b> <i>Home Economics</i>	<b>Haug, Richard L.</b> <i>Computer Science</i>	<b>Johnson, Catherine E.</b> <i>Theatre Arts</i>
<b>Davis, Robert L.</b> <i>History</i>	<b>Frost, John S.</b> <i>Electronics</i>	<b>Haven, David F.</b> <i>Biological Science</i>	<b>Johnson, Eleanor</b> <i>Basic Skills, English</i>
<b>Dawson, Katherine</b> <i>Nursing</i>	<b>Fuller, Bonita L.</b> <i>Disability Programs and Services</i>	<b>Hemenway, Francis P.</b> <i>Interior Design, Home Economics</i>	<b>Johnson, Lawrence X.</b> <i>Aeronautics</i>
<b>Dawson, Sandra A.</b> <i>Vocational Nursing</i>	<b>Fuller, Douglas</b> <i>Court Reporting</i>	<b>Herman, Susan</b> <i>Nursing</i>	<b>Johnson, Mildred</b> <i>Mathematics</i>
<b>deDobay, Thomas</b> <i>Music</i>	<b>Gable, William</b> <i>Physical Education</i>	<b>Hernandez, Gene M.</b> <i>Autobody Repair</i>	<b>Jones, Volena</b> <i>English</i>
<b>Delgado, Ruth</b> <i>Counseling</i>	<b>Gatignol, Gilberte F.</b> <i>French</i>	<b>Hernandez, Joe D.</b> <i>Counseling</i>	<b>Judd, Wallace C.</b> <i>Law Enforcement</i>
<b>Des Lauriers, Dale A.</b> <i>Biological Science</i>	<b>Gaugh, Leslie S.</b> <i>Automotive Technology</i>	<b>Hicks, Charles</b> <i>English</i>	<b>Karet, Julia</b> <i>ESL</i>
<b>Des Lauriers, James R.</b> <i>Biological Science</i>	<b>Geiger, C. Fred</b> <i>Chemistry</i>	<b>Higbee, R. Eugene</b> <i>Spanish, English</i>	<b>Keenan, Catherine</b> <i>Chemistry</i>
<b>DeVillers, Linda</b> <i>Psychology</i>	<b>Geisel, Joseph W.</b> <i>Data Processing</i>	<b>Higgins, Julianne</b> <i>Nursing</i>	<b>Kellogg, Stephen J.</b> <i>Biological Science</i>
<b>Dickey, Marlin L.</b> <i>Geology</i>	<b>Gentile, Louis J.</b> <i>Business</i>	<b>Himaya, Divina C.</b> <i>Philosophy</i>	<b>Kerr, James J.</b> <i>Computer Information Systems, CISCO</i>
<b>Dinielli, Michael</b> <i>Dean, Language Arts</i>	<b>Gibbens, Loretta</b> <i>English, English as a Second Language</i>	<b>Hindman, Barbara</b> <i>Nursing</i>	<b>Ketchum, Donald J.</b> <i>Data Processing</i>
<b>Downie, Virginia</b> <i>Communication Studies</i>	<b>Gil, Gustavo</b> <i>Music</i>	<b>Hinrichsen, Kenneth C.</b> <i>President</i>	<b>Ketchum, Renee</b> <i>Nursing</i>
<b>Dunwoody, Verajean</b> <i>Psychology</i>	<b>Gingrich, Jacqueline</b> <i>Reading</i>	<b>Hodge, Cheryl R.</b> <i>Nursing</i>	<b>Killen, Richard R.</b> <i>English</i>
<b>Dutton, Andrea</b> <i>Radiologic Technology</i>	<b>Glenn, Elmer F.</b> <i>Mathematics</i>	<b>Holley, Helen</b> <i>Health Services Specialist</i>	<b>Kimbel, Kyle</b> <i>Home Economics</i>
<b>Dysart, Russell D.</b> <i>Geology, Mineralogy</i>	<b>Gonzalez, Crispin, Jr.</b> <i>Art</i>	<b>Hollenbeck, Charles L.</b> <i>Physics</i>	<b>Koenigshofer, Kenneth A.</b> <i>Psychology</i>
<b>Elber, Sylvia</b> <i>Music</i>	<b>Graham, Marian</b> <i>Dental Assisting</i>	<b>Hollist, Lynn O.</b> <i>Dean, Community Services</i>	<b>Konovnitine, Peter</b> <i>Geography</i>
<b>Encinas, Karen</b> <i>Fashion and Costume Design</i>	<b>Greenlaw, Helen M.</b> <i>Physical Education</i>	<b>Horsch, L.J.</b> <i>Social Science</i>	<b>Koyle, Ronald</b> <i>Drafting</i>
<b>Erkebaev, E. "Alec"</b> <i>Mathematics</i>	<b>Greever, Margaret Q.</b> <i>Dean, School of Physical, Life, and Health Sciences</i>	<b>Howard, Elaine</b> <i>Office Technology</i>	<b>Kuhlmann, Bobbie L.</b> <i>Accounting</i>
<b>Eskew, Benjamin E.</b> <i>English</i>		<b>Howard, Gilbert A.</b> <i>Real Estate</i>	<b>LaMay, Julie</b> <i>English</i>



<b>Lambert, Bonnie</b> <i>Accounting</i>	<b>Michie, Jack</b> <i>Assistant Superintendent, Institutional Development</i>	<b>Osgood, Joanne</b> <i>Business and Office Technologies</i>	<b>Robinson, W. Dario</b> <i>Lithography</i>
<b>Latham, Robert</b> <i>Political Science</i>	<b>Miller, Charles S.</b> <i>History</i>	<b>O'Sullivan, R. Timothy</b> <i>English</i>	<b>Rodriguez, Juan A.</b> <i>English as a Second Language</i>
<b>Lawlor, Joseph P.</b> <i>Director, Instructional Services</i>	<b>Miller, Fred</b> <i>Automotive Technology</i>	<b>Paplanus, Susan</b> <i>Nursing</i>	<b>Romero, Gloria D.</b> <i>English</i>
<b>Lightner, Catherine</b> <i>Assoc. Degree Nursing</i>	<b>Miller, Ralph H.</b> <i>Life Science</i>	<b>Parratt, Lloyd P.</b> <i>Biological Science, Health Science</i>	<b>Romero, Gloria</b> <i>Director, High School Relations</i>
<b>Lober, Robert M.</b> <i>Astronomy, Mathematics</i>	<b>Milliken, Daniel B.</b> <i>President</i>	<b>Payne, Clara</b> <i>English</i>	<b>Rose, Bea</b> <i>Philosophy</i>
<b>Lockwood, L. Gordon</b> <i>Radiologic Technology</i>	<b>Mitchell, Barbara J.</b> <i>History</i>	<b>Payne-Jones, Joanna P.</b> <i>Child Development</i>	<b>Rose, Florence</b> <i>Psychology, Sociology</i>
<b>Lowman, Judy Ann</b> <i>Geology</i>	<b>Montgomery, Mary Ellen</b> <i>Business and Office Technologies</i>	<b>Peaker, Allis B.</b> <i>English</i>	<b>Ross, Harley</b> <i>Correctional Science</i>
<b>Luebbers, Emma O.</b> <i>Business</i>	<b>Mossman, Shirley Nash</b> <i>Interior Design</i>	<b>Personius, Darwin N.</b> <i>Aeronautics</i>	<b>Russet, Peter</b> <i>Biological Science</i>
<b>Lyman, Karen</b> <i>Gerontology</i>	<b>Mundy, Linda</b> <i>Dental Assisting</i>	<b>Pelzer, Inge</b> <i>Executive Assistant to the Superintendent/President</i>	<b>Ryan, Terriann</b> <i>Radiologic Technology</i>
<b>Madden, Peggy A.</b> <i>English</i>	<b>Myers, Edward E.</b> <i>Anthropology, Biology, Physiology</i>	<b>Pender, Karen</b> <i>Mathematics</i>	<b>Sayles, Carol L.</b> <i>Dean, School of Social and Behavioral Sciences</i>
<b>Mahoney, Andree</b> <i>Art</i>	<b>Myers, Milton C.</b> <i>Counseling</i>	<b>Peters, Thomas</b> <i>Mathematics</i>	<b>Schesser, Frankie L.</b> <i>Business</i>
<b>Malone, Michael</b> <i>English</i>	<b>Myers, Pauline</b> <i>Counseling</i>	<b>Pierce, John W.</b> <i>Drafting, Engineering</i>	<b>Schesser, Robert D.</b> <i>Business</i>
<b>Marcotte, Linda</b> <i>Child Development</i>	<b>Navarette, D. Lynn</b> <i>Sociology</i>	<b>Pinkerton, Frank</b> <i>Assoc. Dean, Library/Learning Resources Dean, PE/Athletics</i>	<b>Schildberg, Jeane</b> <i>Computer Information Systems</i>
<b>Marino, Penny B.</b> <i>Fashion Merchandising and Design</i>	<b>Neece, Cheryl</b> <i>Reading</i>	<b>Pitts, Billie P.</b> <i>Business Education</i>	<b>Schindler, Ruth H.</b> <i>Allied Health Coordinator</i>
<b>Martin, Gerald E.</b> <i>English, German</i>	<b>Nehlsen, Carol</b> <i>Business and Office Technologies</i>	<b>Pompura, Sylvia</b> <i>Nursing</i>	<b>Sellers, Herbert D.</b> <i>Electricity</i>
<b>Martin, Woodford</b> <i>Computer Information Systems</i>	<b>Newton, Ralph J. E.</b> <i>Business Education</i>	<b>Porter, Ralph A.</b> <i>Dean, Educational Services</i>	<b>Serra, John A.</b> <i>Blueprint Reading and Drafting</i>
<b>Martyns, Leonard L.</b> <i>Business</i>	<b>Ngo, Boysie</b> <i>Computer Information Systems</i>	<b>Preble, Kipp</b> <i>Communication Studies</i>	<b>Seymour, John A.</b> <i>History</i>
<b>Mason, Jack M.</b> <i>Music</i>	<b>Nobile, Vincent</b> <i>History</i>	<b>Punter, Sam C.</b> <i>Administration of Justice</i>	<b>Shannon, Floyd E.</b> <i>Drafting, Engineering</i>
<b>Mather, Leonard S.</b> <i>Counseling, Education</i>	<b>Noble, Erna Smith</b> <i>Dental Assisting</i>	<b>Purkiss, William</b> <i>Communication Studies</i>	<b>Shannon, Joyce H.</b> <i>Music</i>
<b>Mather, Wiley W.</b> <i>Social Science</i>	<b>Norman, Rosamond</b> <i>English</i>	<b>Raithel, Janice C.</b> <i>Art</i>	<b>Sharp, Dawn</b> <i>History</i>
<b>Mays, R. Juanita</b> <i>Associate Degree Nursing</i>	<b>Normand, Thomas</b> <i>Counseling</i>	<b>Ratliff, Gena Vee</b> <i>Business</i>	<b>Shaw, Marilyn</b> <i>Physical Education</i>
<b>McAllister, Bernice L.</b> <i>Anthropology, Archaeology</i>	<b>Oakdale, Joyce</b> <i>Chemistry</i>	<b>Reeder, George A.</b> <i>Dance</i>	<b>Sheats, Terry L.</b> <i>Aeronautic Technology</i>
<b>McCall, Arlene</b> <i>Physical Education</i>	<b>Okura, Irene</b> <i>Disability Programs and Services</i>	<b>Requa, Marylee</b> <i>Sociology</i>	<b>Sheppard, Charles A.</b> <i>Theatre Arts</i>
<b>McClure, Carol</b> <i>Biological Science</i>	<b>Oliva, Victor R. Jr.</b> <i>Counseling</i>	<b>Reynolds, Joseph E.</b> <i>French, English</i>	<b>Silliman, Rachel</b> <i>English as a Second Language</i>
<b>McGee, John R., Jr.</b> <i>Correctional Science</i>	<b>Olivera, Cathy D.</b> <i>Disability Programs and Services</i>	<b>Richardson, Evelyn O.</b> <i>Nursing</i>	<b>Simpson, Jean B.</b> <i>Business</i>
<b>McPherson, Kenneth W.</b> <i>Cooperative Education</i>	<b>Olivera, Robert</b> <i>Dean, PE/Athletics</i>	<b>Rivas, Henry</b> <i>Correctional Science</i>	<b>Simpson, Paul</b> <i>Autobody Repair</i>
<b>Menzel, Stephen W.</b> <i>Vice President, Administrative Services</i>	<b>Olson, Betty M.</b> <i>Physical Education</i>	<b>Roberts, Myron</b> <i>English</i>	<b>Smith, Millicent A.</b> <i>Business Education</i>
<b>Merchant, Harold E.</b> <i>Chemistry</i>	<b>O'Neill, Maura</b> <i>Philosophy</i>	<b>Robinson, Mary V.</b> <i>Business Education</i>	<b>Smith, Phyllis M.</b> <i>Librarian</i>
<b>Metwalli, MaryEllen B.</b> <i>History</i>			

**Smith, Robert**  
*Art, Photography*

**Smith, Sharlene**  
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**Snyder, Olof E.**  
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**Snyder, Shirley**  
*English*

**Spring, Gardiner W.**  
*President*

**Standlee, 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**  
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**Sumpter, James B.**  
*Welding Technology*

**Swihart, Donald D.**  
*Chemistry*

**Syrop, Mitchell**  
*Multimedia/Digital Media*

**Talton, Marcha**  
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**Teitsworth, June**  
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**Theurer, Howard**  
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**Toister, Robert**  
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**Torres, Lillian S.**  
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**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**  
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**Weaver, Jesse H., Jr.**  
*Speech Communication*

**Webb, Ray O.**  
*Mathematics, Physics, Engineering*

**Weingartner, Judith**  
*English*

**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*

**Zmudka, Cathy**  
*Nursing*

**Zust, George**  
*Machine Tool Technology*

# PHONE DIRECTORY

Phone numbers are subject to change. All phone numbers are area code 909.

## RANCHO CUCAMONGA CAMPUS NUMBERS:

Main	652-6000
Admissions and Records	652-6600
Umaja	652-6200
CalWORKs	652-6045
Campus Store	652-6560
Career Transitions	652-6831
Cashier	652-6600
Child Development Center	652-6875
Counseling	652-6200
Extended Opportunity Programs & Services	652-6349/6358
Financial Aid	652-6199
Foundation	652-6545
GPS Center	652-6466
Language Success Center	
ESL and Modern Languages	652-6907
English	652-6820
Library	652-6800
Mathematics Success Center	652-6452
Multidisciplinary Success Center	652-6932
Orientation Appts	652-6239
Placement and Testing Center	652-6239
Puente Project	652-7460
Student Health Services	652-6331

## CHINO CAMPUS NUMBERS:

Main	652-8000
Administration	652-8010
Admissions and Records	652-8001
CalWORKs	652-6045
Campus Store	652-6560
Cashier	652-8001
Chino Success Center	652-8150
Community Center	652-8200
Contract Ed/Customized Training	652-7641
Counseling	652-8120
Extended Opportunity Programs & Services	652-6349/6358
Financial Aid	652-8140
GPS Center	652-8120
Library/Cybrary	652-8115
Placement/Orientation Appts	652-8120
Student Health Services	652-8190

## FONTANA CAMPUS NUMBERS:

Main	652-7400
Admissions & Records	652-7400
CalWORKs	652-6045
Campus Store	652-6560
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
Placement/Orientation Appts	652-7460

## DEPARTMENTS

Adult Education	652-6103/6154
Articulation	652-6920
Athletics	652-6290
Breeze, The (Student Newspaper)	652-6934
Campus Police (non-emergency)	652-6632
(Emergency 24 hour dispatch)	652-6911
Career Center	652-6511
Career Transitions	652-6831
Community Education	652-6041
CTE Counselors	652-6519
Disability Programs & Services	652-6379/6380
TDD/TTY Service	466-2829
Discipline	652-6510
Distance Education	652-6975
Foundation Office	652-6545
Health Services	652-6331
High School Partnerships	652-6103/6154
Honors Program	652-6263
InTech Center	652-8488
International Student Center	652-6195
Lost and Found	652-6634
Museum of Contemporary Art, Wignall	652-6490
Opening Doors	652-6201
Placement and Testing Center	652-6239
Probation and Dismissal	652-6201
Scholarship Information	652-6545/6589
Student Employment Office	652-6511
Student Government / CCSG	652-6594
Student Life	652-6590
Supplemental Instruction (SI)	652-6468
Theatre Box Office	652-6067
Transfer Center	652-6233
Veteran Services	652-6235

## SUBJECT AREA/SCHOOL NUMBERS:

Accounting & Financial Services	652-6830
Administration of Justice	652-6830
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 and Applied Technology, School of	652-6830
Business: Logistics Management	652-6830
Business: Management	652-6830
Business: Marketing	652-6830
Chemistry	652-6404
Child Development & Education	652-6253
Chinese	652-6902
Cinema	652-6066
CISCO	652-6830
Communication Studies	652-6902
Computer Information Systems	652-6830
Computer Science	652-6830

Cooperative Education	652-6852
Correctional Science	652-6830
Criminal Justice	652-6830
Dental Assisting	652-6671
Dance	652-6066
Disability Programs & Services	652-6379/6380
Drafting	652-6404
Earth Science	652-6404
Economics	652-6253
Education	652-6253
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	652-6404
Gerontology	652-6671
Guidance	652-6202
Health Sciences, School of	652-6671
Heating, Ventilation, AC (HVAC)	652-7657
History	652-6253
Homeland National Security	652-6830
Hospitality Management	652-8010
Humanities	652-6253
Industrial Electrical Technology	652-7657
Industrial Maintenance Mechanic	652-7657
InTech Center	652-8488
Interior Design	652-8010
Journalism	652-6902
Kinesiology	652-6290
Language Arts, School of	652-6902
Legal Studies	652-6830
Mathematics	652-6403
Mathematics & Science, School of	652-6402
Mechatronics	652-7657/7661
Music	652-6066
Nursing Assistant	652-8215
Nursing (ADN)	652-6671
Nursing (VN, ACT)	652-6671
Nutrition & Food	652-6290
Pharmacy Technician	652-6671
Philosophy	652-6253
Photography	652-6066
Physical Science	652-6404
Physics	652-6403
Political Science	652-6253
Psychology	652-6253
Public Health	652-6671
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





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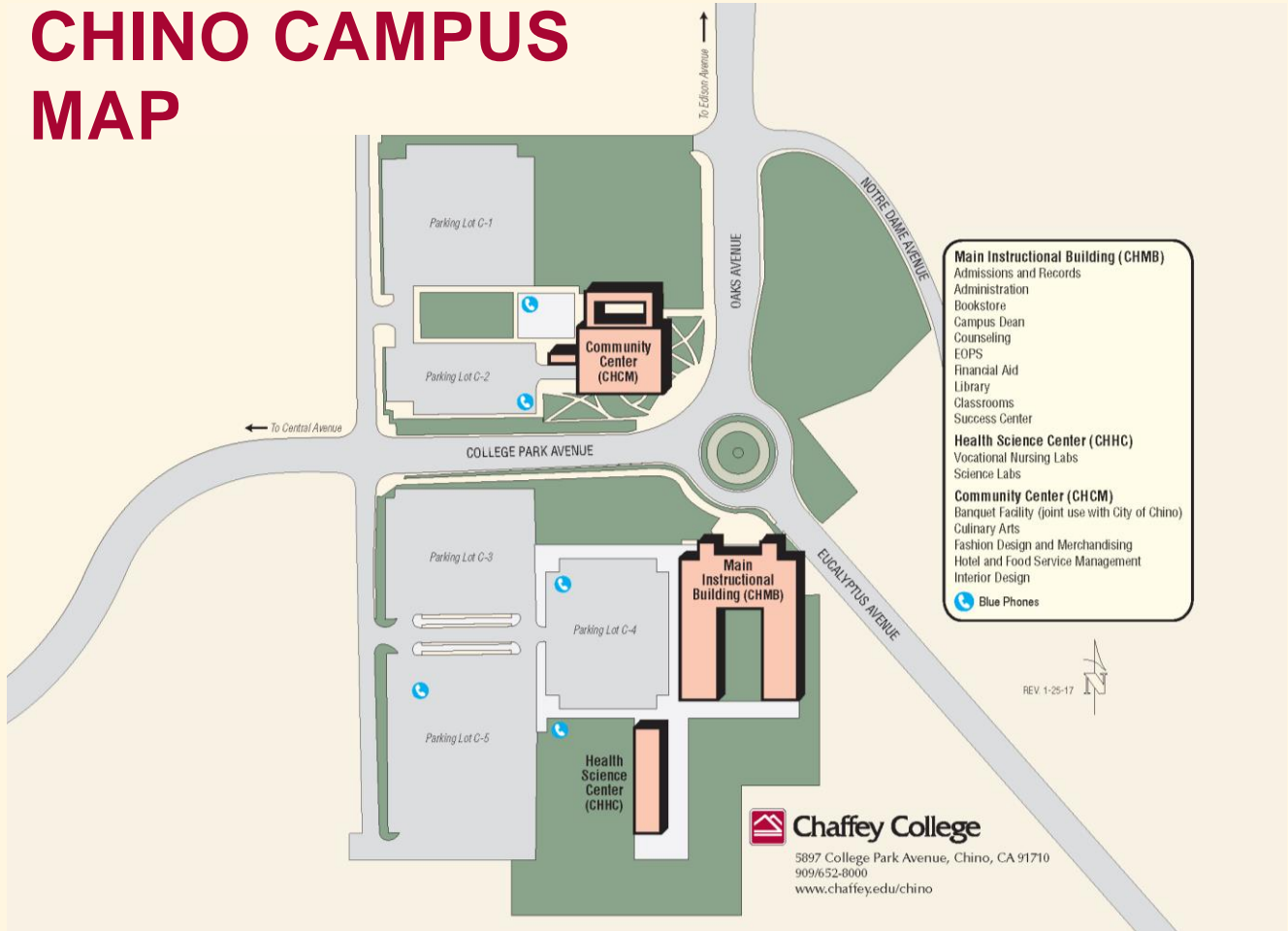
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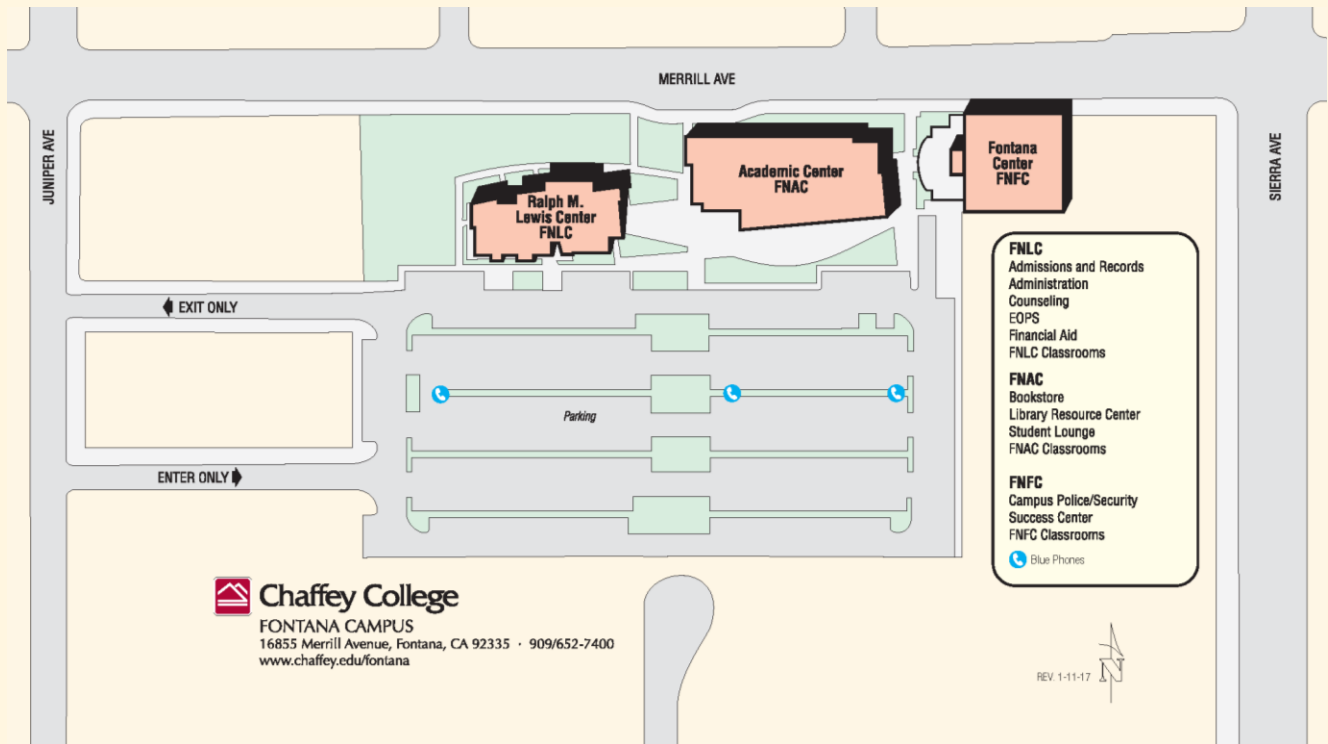
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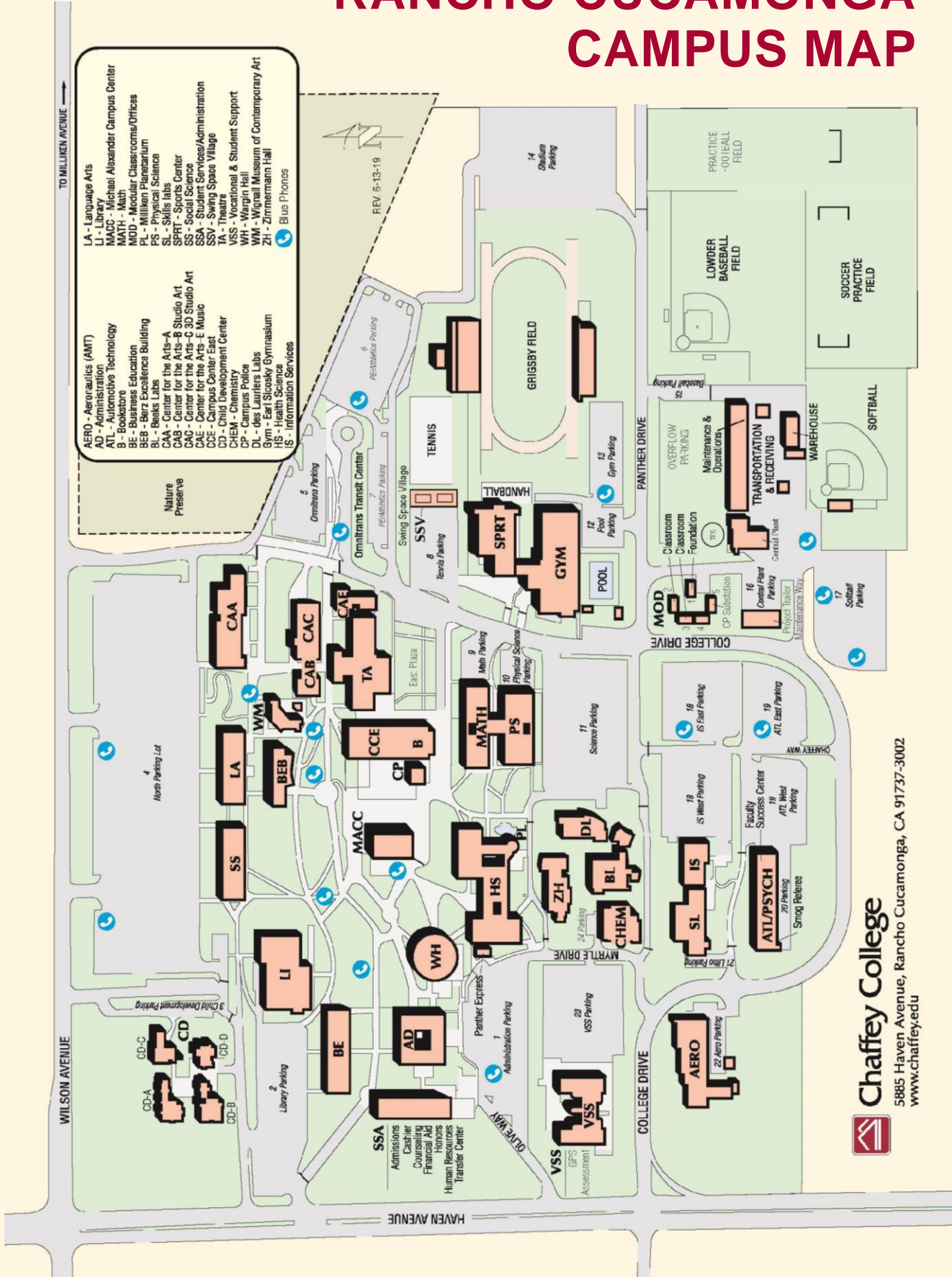
# CHINO CAMPUS MAP



# FONTANA CAMPUS MAP



# RANCHO CUCAMONGA CAMPUS MAP



# CHAFFEY COLLEGE DISTRICT MAP

Chaffey  College

*Improving lives through education.*



Map not drawn to scale  
Revised 6-1-16

