


## Greetings Students,

It is my pleasure to welcome you to the 2016-2017 academic year. I want to thank you for choosing Fullerton College as your college of choice. It is my hope that your experience here is a formative and fulfilling time for you.

The Course Catalog is your guide to understanding what you need to do to accomplish your educational goals at Fullerton College. The college offers more than 90 associate degrees and more than 100 certificate programs. You can find details here on each of these programs and the steps you need to take to move through your studies efficiently and reach your academic and career goals.

While the catalog provides all the essential information about classes and enrollment, it does not replace the impact that one-on-one guidance from a counselor can have on your success as a student. After the semester begins, I encourage you to make an appointment with a counselor in order to develop a personalized Student Education Program Plan (SEPP). This plan will become your step-by-step guide to help you maximize your educational experience at Fullerton College.

This is an exciting time to be a student at Fullerton College. In addition to our academic and vocational programs, the college offers numerous opportunities for students to get involved in college life. We have many student clubs, a fantastic Study Abroad Program, opportunities to work on campus, a robust Athletics Program and many other great programs for you to learn, grow and become part of our community during your time at Fullerton College. Please find us on SnapChat, Facebook, Twitter, Instagram and news.fullcoll.edu to keep track of exciting opportunities at Fullerton College.

I wish you the best of luck in your studies and I look forward to celebrating your success. Go Hornets!

Warm Regards,
Greg Schulz, Ed.D.
President, Fullerton College

## North Orange County <br> Community College District

1830 W. Romneya
Anaheim, CA 92801 (714) 808-4500
The mission of the North Orange County Community College District is to serve and enrich our communities and inspire life-long learning by providing education that is exemplary, relevant, and accessible.

Located approximately 40 miles southeast of Los Angeles, California, the North Orange County Community College District is the 12th largest in the nation, serving approximately 70,000 students each semester. The geographic boundaries of the District encompass 155 square miles and include Cypress College, Fullerton College, and the School of Continuing Education.

The District includes the following cities: Anaheim, Area, Buena Park, Cypress, Fullerton, La Habra, La Palma, Los Alamitos, Placentia, Rossmoor, Yorba Linda, and portions of the following cities: Garden Grove, La Habra Heights, La Mirada, Orange, Seal Beach, Stanton, Whittier, and unincorporated territory in both Los Angeles and Orange counties. The District is governed by a seven-member Board of Trustees, elected by trustee area.

NOCCCD is part of the California Community College system, one of three segments of public postsecondary education in the state. A seven-member Board of Trustees, elected by the citizens of the district, governs all programs and activities of the NOCCCD.

> Board of Trustees
> Stephen T. Blount
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Cheryl Marshall, Ed.D., Chancellor Greg Schulz, Ed.D., President, Fullerton College

## CATALOG <br> 2016-2017



# Fullerton College 

## North Orange County Community College District <br> 321 East Chapman Avenue <br> Fullerton, California 92832-2095 <br> (714) 992-7000 <br> Telecommunication Device for the Deaf <br> (714) 871-9192

## www.fullcoll.edu

REVISED March 26, 2018

Fullerton College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC), http://www.accjc.org), Western Association of Schools and Colleges (WASC), http://www.acswasc.org, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education and the California State Department of Education.

## Foreword

Fullerton College publishes a new catalog every year. The information published in the catalog is effective for the academic year beginning with the fall semester and concluding with the summer intersession. This catalog is effective Fall 2016 through Summer 2017.

## Statement of Assurance

Every effort is made to ensure that the course information, applicable policies, and other materials presented in the Fullerton College Catalog are accurate and current. In the event a correction or update is warranted, a catalog addendum will be published electronically and will be available for download.

## Catalog Rights

The requirements for degrees and certificates may change during the time a student attends Fullerton College.

Catalog rights are established when a student first takes classes at Fullerton College, and they are maintained through continual enrollment at the college. These rights protect students from being held responsible for changes made to their academic programs in the years that follow their initial enrollment.

Students maintain catalog rights by maintaining continuous enrollment at Fullerton College — that is, by receiving a grade of "A," "B," "C," "D," "F," "CR," "P," "NC," "NP," "RD," "W," or "I" on their transcripts for at least one course per academic year. Documented military or medical leave during the academic year will not be considered an interruption of enrollment. This policy supersedes all previous catalog rights provisions and applies only to programs at Fullerton College.

## NOTICE TO STUDENTS

The information contained in this catalog is advisory only and does not constitute a contractual agreement by the college or guarantee that course content will be strictly followed or fulfilled. Fullerton College and the North Orange County Community College District reserves the right to change at any time, without notice, academic requirements to graduate, curriculum course content and structures, and such other matters as may be within their control, notwithstanding any information set forth in this catalog.

## Academic Calendar 2016-2017 <br> North Orange County Community College District



All calendar dates are subject to change without notice.

| JANUARY | 2016 |  |  | 2017 |  |  |  |
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## Fullerton College Administration

President Greg Schulz, Ed.D.
Vice President, Student Services Gilbert Contreras, Ph.D.
Vice President, Instruction José Ramón Núñez, Ph.D.
Vice President, Administrative Services (Interim) Rodrigo Garcia, M.A.
Dean, Enrollment Services Albert Abutin, M.S.
Dean, Business, Computer Information Systems, and Economic Workforce Development Douglas Benoit, Ed.D.
Dean, Counseling and Student Development .Lisa Campbell, M.P.A.
Dean, Fine Arts John Tebay, M.M.
Dean, Humanities Dan Willoughby, M.S.
Dean, Library/Learning Resources and Instructional Support Programs and Services. Dani Wilson, M.A.
Dean, Mathematics and Computer Science Mark Greenhalgh, M.A.
Dean, Natural Sciences .Richard Hartmann, Ph.D.
Dean, Physical Education David Grossman, Ed.D.
Dean, Social Sciences Kathy Bakhit, Ed.D.
Dean, Student Support Services/Title IX Coordinator. Derek Vergara, Ed.D.
Dean, Technology and Engineering Ken Starkman, M.S.
Director, Academic Support Center .............................................................. Olivia Veloz, Ed.D.
Director, Athletics Scott Giles, M.S.
Director, Basic Skills Kristine Nikkhoo, M.A.
Director, Bookstore Nick Karvia, B.A.
Director, Cadena/Transfer Center Cecilia Arriaza, M.A.
Director, Campus Communications Lisa McPheron, M.A.
Director, Campus Health Services Vanessa Miller, Ph.D.
Director, Campus Safety Steve Selby, B.S.
Director, Disability Support Services Edward Roth, Ph.D.
Director, Financial Aid Greg Ryan, M.A.
Director, Institutional Research and Planning Carlos Ayon, M.S.
Director, Physical Plant/Facilities Larry Lara, B.S.
Director, Office of Special Programs Monica Martin, M.Ed.
Director, Student Activities Naomi Abesamis, M.A.
Director, Student Equity Deborah Perkins, M.S.
Manager, Campus Accounting Cyndi Grein, B.S.
Manager, Custodial Services Stephen Trapp, B.A.
Manager, Distance Learning Lisa Montagne, Ed.D.
Manager, Instructional Technology Services Robert Morison
Manager, International Students Program ..... Pilar Ellis, M.S.
Manager, Maintenance and Operations ..... Randy Harris, A.A.
Manager, Systems Technology Services. ..... Co Ho, M.B.A.
Registrar ..... Rena Martinez-Stluka, B.A.

## Instructional Divisions and Departments

Business and Computer Information Systems
Bldg 300, Room 310 - 714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu
Accounting (ACCT)
Business Management (BUS)
Computer Information Systems (CIS)
Computer Information Systems - Gaming (CISG)
Marketing Management (MKT)
Office Technology (OT)
Paralegal Studies (PLEG)
Real Estate (RE)
Counseling and Student Development
Bldg 2000, Room 2022 - 714.992.7085
Dean: Lisa Campbell
Website: counseling.fullcoll.edu
Counseling and Guidance (COUN)
Assessment/Orientation Center, Bldg 500, Rm 513, 714.992.7075

Cadena/Transfer Center, Bldg 200, Rm 212, 714.992.7086
CalWORKs, 315 N. Pomona, Fullerton, 714.992.7101
Career and Life Planning Center, Bldg 2000, 2nd Floor, 714.992.7121

Disability Support Services, Bldg 800, Rm 842, 714.992.7099
EOPS, Bldg 2000, 714.992.7097
Fine Arts
Bldg 1100, Room 1115 - 714.992.7034
Dean (Interim): John Tebay (Office 1115)
Email: jtebay@fullcoll.edu
Website: finearts.fullcoll.edu
Art (ART)
Digital Arts (DART)
Music (MUS)
Music - Applied (MUSA)
Theatre Arts (THEA)

## Humanities

Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: humanities.fullcoll.edu
English (ENGL)
English as a Second Language (ESL)
Foreign Languages
Arabic (ARAB)
Chinese (CHIN)
French (FREN)
German (GERM)
Italian (ITAL)
Japanese (JAPN)
Portuguese (PORT)
Spanish (SPAN)
Reading (READ)
Speech (SPCH)

Library Technology
Bldg 800, Room 823 (LLRC) - 714.992.7039
Dean: Dani Wilson
Website: library.fullcoll.edu
Library Research (LIB)
Mathematics and Computer Science
Bldg 600, Room 613-02 - 714.992.7041
Dean: Mark Greenhalgh
Website: math.fullcoll.edu
Computer Science (CSCI)
Mathematics (MATH)
Natural Sciences
Bldg 400, Room 411 - 714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu
Anatomy and Physiology (ANAT)
Biology (BIOL)
Chemistry (CHEM)
Earth Sciences (ESC)
Environmental Sciences and Technology (ENVS)
Foods and Nutrition (FOOD/NUTR)
Geology (ESC)
Health Education (HED)
Horticulture (HORT)
Microbiology (MICR)
Physics (PHYS)

## Physical Education

Bldg 1200, Room 1206 - 714.992.7045
Dean: David Grossman
Websites: pe.fullcoll.edu, fchornets.com,
and http://dance.fullcoll.edu
Physical Education Activities and Theory, Athletics (PE)
Dance (DANC)
Recreation (REC)
Wellness (WELL)

## Social Sciences

Bldg 1400, Room 1415 - 714.992.7047
Dean: Kathy Bakhit
Website: socsci.fullcoll.edu/
Anthropology (ANTH)
Child Development and Educational Studies (CDES)
Economics (ECON)
Ethnic Studies (ETHS)
Geography (GEOG)
History (HIST)
Philosophy and Religious Studies (PHIL)
Political Science (POSC)
Psychology (PSY)
Sociology (SOC)
Social Science (SOSC)
Women's Studies (WMNS)
Technology and Engineering
Bldg 700, Room 700 - 714.992.7051

## Dean: Ken Starkman

Website: techneng.fullcoll.edu
Administration of Justice (AJ)
Architecture (ARCH)
Automotive Technology (AUTO)
Cinema-Radio-Television (CRTV)
Communications
Construction Technology (CSTR)
Cosmetology (COSM)
Drafting Technology (DRAF)

Engineering (ENGR)
Fashion (FASH)
Interior Design (IDES)
Journalism (JOUR)
Machine Technology (MACH)
Metallurgy (METL)
Photography (PHOT)
Printing Technology (PRNT)
Technology (TECH)
Welding (WELD)
Woodworking (WOOD)

## General Information

About Fullerton College

Founded in 1913, Fullerton College has a rich tradition of student success. As one of five institutions of higher education in the city of Fullerton, the college is an integral part of a complex higher education system. Fullerton College offers a comprehensive academic program of lower division transfer courses and vocational training to prepare students for transfer as well as the technology-driven workplace.

The 83-acre campus features 10 major institutional buildings including conventional classrooms and laboratory facilities for science, art, computer technology, photography, automotive services, physical education, and other specialized programs. A full complement of athletic fields and facilities surrounds the campus.

The college enrolls approximately 23,000 students each semester and employs 315 full-time faculty members, approximately 500 adjunct faculty members, 325 classified employees and 21 managers.

## College Location

Fullerton College is located in the city of Fullerton, in Orange County, California.

For commuters, the beautifully landscaped campus is easily accessible from the 57 and 91 Freeways. The college is within close walking distance from the Metrorail station in downtown Fullerton, and buses regularly drop off and pick up students in front of the college on Chapman Avenue.

Fullerton College is in close proximity to several cultural and entertainment venues in Orange County and Los Angeles. It is also conveniently located near other institutions of higher learning in the surrounding cities.

## Continuing Education

The School of Continuing Education (SCE) is part of the North Orange County Community College District and offers business development and workforce training, a high school/GED completion program and personal enrichment (non-credit) courses for children, teens, and seniors.

SCE's Wilshire Center is located at 315 E. Wilshire Street in Fullerton across from Fullerton College. For more information, call (714) 992-9500, or visit www.sce.edu.

## Statement of Ethics

As representatives of Fullerton College, we all share the responsibility to conduct ourselves with integrity, and to act in a fair, consistent, and equitable manner. We recognize the need for openness and reliability in what we say and do. We are committed to addressing issues in a forthright and professional manner, and to engaging people without prejudice. As members of an educational community, we are committed to excellence in all that we do, and to adhering to the principles of ethical behavior established in this statement.

The conduct of each member of Fullerton College is expected to be consistent with and to comply with the principles contained in this statement. All members of the campus community are expected to engage in the following:

- Trustworthy conduct - including dependability, loyalty, and honesty in communications and actions.
- Respectful behavior - treating everyone with civility, courtesy, tolerance, and acceptance, and recognizing the worth, dignity, and unique characteristics of each individual.
- Accountability - taking personal responsibility for one's own actions and decisions.
- Fair and just actions - utilizing equitable processes in decision making.
- Compassion - caring for others, both within and apart from the campus community, and providing services to others in a manner that reflects our commitment to them and to their well-being.


## Statement of Mission, Vision, and Core Values

## Mission

We prepare students to be successful learners.

## Vision

Fullerton College will create a community that promotes inquiry and intellectual curiosity, personal growth and a lifelong appreciation for the power of learning.

## Core Values

We respect and value the diversity of our entire community.
We value tradition and innovation.
We support the involvement of all in the decision-making process.
We expect everyone to continue growing and learning.
We believe in the power of the individual and the strength of the group.
We expect everyone to display behavior in accordance with personal integrity and high ethical standards.
We accept our responsibility for the betterment of the world around us.
We value and promote the well being of our campus community.

## Admissions and Records/Registration

The college catalog must be prepared well in advance of the time period it covers; therefore, changes in some programs and policies may occur. Courses as described are subject to change without notice, and some listed courses are not offered each year. In addition, some courses or programs that are offered may have to be cancelled because of insufficient enrollment, elimination or reduction in programs, or for any other reason considered sufficient by the College president or designee.

## Academic Accommodations for Students with Disabilities

In accordance with Federal and State regulations, procedural language has been established to address the provision of educational accommodations to students with disabilities who are otherwise qualified to participate in the College's courses, programs and activities. Copies of the procedure are available in all Division Offices and Student Services areas. (See Disability Support Services)

## Admission Requirements

Admission to Fullerton College is governed by the laws of the State and such supplementary regulations as have been prescribed by the Board of Trustees.

The following persons are eligible to enroll in Fullerton College:

- Any high school graduate, OR
- Any person possessing a California high school proficiency certificate, GED, OR
- Any person 18 years of age or older who may benefit from instruction, OR
- Any K-12 student qualifying as a "Special Admit" student


## Bursar's Office

Student Services 2000 Building, 1st Floor<br>Website: http://fcbursar.fullcoll.edu<br>Phone: 714.992.7006<br>Hours: Mon-Fri: 8:00 am to 5:00 pm

The Bursar's Office (aka Campus Accounting), collects, processes, and records the numerous daily financial transactions that occur around campus. This office handles the banking, pays the bills, and processes deposits and requisitions for the college's numerous trust accounts. The Bursar's Office administers funded scholarships and approved third-party tuition payments and sells OCTA bus passes. It is also the disbursing location for some Financial Aid grants such as Chaffey. More information can be found on their website.

## ATM

The campus has two full-service Automated Teller Machines (ATMs) with 24-hour access. One is located on the main side of the campus on the north side of the 500 building. The second is across Chapman Avenue in front of the Bookstore, Building 2000. Both machines accept several different types of credit and bank debit cards. This service is offered by the SchoolsFirst Federal Credit Union (formerly OCTFCU) and is not affiliated with or a responsibility of the college or the Associated Students. Both machines dispense $\$ 5$ and $\$ 20$ bills and assess a charge for nonmembers of the credit union co-op. No charge will be assessed to students using their Higher One card.

## Corrections to Student Information

Documentation, such as, a marriage license, court order, naturalization papers, or other government issued identification is required for verifying a legal name change or date of birth. Requests to have a student's name or date of birth changed on official college records are submitted to the Admissions and Records Office.

Social Security number corrections are submitted to the Admissions and Records Office. Documentation substantiating the correction will be required.

## Military Experience Credit

College level correspondence courses completed through the United States Armed Forces Institute (USAFI) will be accepted for credit. The transcript for such courses must be mailed directly to the Admissions and Records Office from DANTES Contractor Representative (transcripts), Madison, Wisconsin 53713.

Service training schools conducted by the various branches of the Armed Forces are accepted for credit value as recommended by the latest edition of $A$ Guide to the Evaluation of Educational Experiences in the Armed Forces; American Council on Education.

A student may petition for an evaluation of military education and experience upon completion of 40 degree applicable units from an accredited college or university, including a minimum of 12 units at Fullerton College. It is the student's responsibility to petition for credit through the Veterans Resource Center.

A photocopy of the DD214 (discharge papers) must be submitted with the evaluation petition. The credit awarded is elective only and posted to the transcript upon graduation from Fullerton College. Elective credit granted for military work will not exceed 30 units.

## International Students

## F-1 Student Visa

The goal of the International Student Center is to provide educational opportunities for international students and to promote international understanding on campus and in the community. The following regulations govern the admission of F-1 student visa students to Fullerton College.

1. Application deadlines are as follows: Applicants must submit complete applications by July 1 (Fall) and December 1 (Spring). A \$40 non-refundable application fee is required for processing.
2. F-1 visa students are required to pay non-resident tuition, enrollment and health fees and are strongly encouraged to purchase a Campus Photo ID Card. See "Student Fees" for additional information.
3. F-1 visa students are required to complete a full course of study (minimum of 12 units) each Fall and Spring semester. In accordance with Federal regulations, failure to do so will be reported to the U.S. Department of Homeland Security.
4. Criteria for admission of F-1 visa students:
a. The applicant must demonstrate English proficiency as indicated by a minimum TOEFL score of 61 (iBT), an IELTS score of Band 5, or an iTEP score of Level 3.5. Applicants currently in the U.S. may take the Fullerton College ESL placement test as a substitute.
b. Applicants must be at least 18 years of age or have earned the equivalent of an American high school diploma or have attended 12 years of elementary and secondary schools. The student must submit academic records accompanied by a certified English translation. Evaluations of foreign transcripts and other admission documents will be based upon the recommendations of The Country Index, The World Education Series of the American Association of Collegiate Registrars and Admissions Officers, or other sources.
c. Applicants must provide evidence of financial responsibility. Certification of Parent, Self, or Sponsor Support and Bank Certification are required. Bank statements must be translated into English and represent American currency.
d. Applicants must submit original copies of transcripts of any college coursework completed. Foreign language transcripts must be accompanied by certified English translations.
e. Applicants must submit an essay describing their academic and career goals at Fullerton College (minimum 700 words).
f. Applicants must submit a copy of their valid passport and a $2 " \times 2$ " photograph.
g. Applicants who have attended other U.S. colleges or universities may be considered for admission provided the applicant meets Fullerton College admission requirements and is in status with U.S. Department of Homeland Security. F-1 visa applicants who have completed two or more years of college will be advised to seek admission to an institution offering upper division courses.
h. Applicants who have earned a Bachelors or Masters Degree must submit the 2nd Bachelors/Masters Contract.
i. Applicants who plan to transfer from another U.S. college, university, or English language school must submit:

- Copy of visa
- Copy of the electronic I-94
- Transfer Eligibility Form

After completion of the listed requirements, the applicant will be considered for admission and will be notified within two weeks. When accepted, the applicant will be sent an acceptance letter, form I-20, and registration and orientation materials.
6. The F-1 visa student shall be held to the same scholastic requirements and to the same College rules and regulations as other students.
7. F-1 visa students must purchase the health and accident insurance policy mandated by the college. This policy includes major medical coverage including repatriation and evacuation. Students who do not purchase health insurance will not be able to register for courses.
8. F-1 visa students are required to comply with U.S. Code of Federal Regulations, Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (CIS), and U.S. Immigration and Customs Enforcement (ICE) regulations that pertain to F-1 visa students. Review Code of Federal Regulations, Title 8 CFR Part 22 Section 214.2(f).
9. F-1 visa students will not be accepted for admission into any program where applications by qualified U.S. citizens exceed spaces available.

## F-2 Student Visa

## F-2 Visa Regulations

U.S. Federal Register states "accompanying spouses and children of academic and vocational nonimmigrant students with $\mathrm{F}-1$ or M-1 nonimmigrant status to enroll in study at an SEVP-certified school so long as any study remains less than a full course of study. F-2 and M-2 spouses and children remain prohibited from engaging in a full course of study unless they apply for, and DHS approves, a change of nonimmigrant status to a nonimmigrant status authorizing such study."

1. F-2 visa high school students must follow the admission procedures of the International Student Center and submit the Fullerton College Special Admit packet to the Admissions and Records Office.
2. Application deadlines are as follows: Applicants must submit complete applications by July 1 (Fall) and December 1 (Spring). A $\$ 20$ non-refundable application fee is required for processing.
3. F-2 visa students are required to pay non-resident tuition, enrollment, and health fees. Students are also strongly encouraged to purchase a Campus Photo ID Card. See "Student Fees" for additional information.
4. F-2 visa students may register in a maximum of 11 units each Fall and Spring semester.
5. Criteria for admission of F-2 visa students:
a. Applicants must provide evidence of financial responsibility. Certification of Parent, Self, or Sponsor Support and Bank Certification are required. Bank statements must be translated into English and represent American currency.
b. Applicants must submit:

- 2" $\times 2^{\prime \prime}$ photograph
- Copy of F-2 I-20
- Copy of their valid passport
- Copy of F-2 visa
- Copy of the electronic I-94
- F-2 Status Verification Form
- Consent to Treat a Minor Form, if 17 or younger

After completion of the listed requirements, the applicant will be considered for admission and will be notified within two weeks. When accepted, the applicant will be sent an acceptance letter, along with registration and orientation materials.
6. The F-2 visa student shall be held to the same scholastic requirements and to the same college rules and regulations as other students.
7. F-2 visa students are required to comply with U.S. Code of Federal Regulations, Department of Homeland Security (DHS), U.S. Citizenship and Immigration Services (CIS), and U.S. Immigration and Customs Enforcement (ICE) regulations that pertain to F-1 visa students. Review Code of Federal Regulations, Title 8 CFR Part 22 Section 214.2(f).

## F-1 Visa Concurrent Enrollment

Students enrolled full time at another institution from which they have a valid I-20 are permitted to enroll at Fullerton College on a part-time basis. The "F-1 Student Enrollment Agreement" form must be completed, approved by the student's school and the Fullerton College International Student Center and submitted with the application for admission. F-1 students must pay all appropriate tuition and fees. A $\$ 20$ non-refundable application fee is required for processing.

## B-1/B-2 Tourist Visa Regulations

U.S. Federal Code states that B visa holders "violate the conditions of his/her status if he/she enrolls in a course of study. [Those] who desire to enroll in a course of study must either obtain an $\mathrm{F}-1$ or $\mathrm{M}-1$ non-immigrant visa from a consular officer abroad and seek re-admission to the United States, or apply for and obtain a change of status." B visa holders are encouraged to speak directly with the International Student Center about obtaining F-1 status in order to legally enroll at Fullerton College. Expired $B$ visa holders are encouraged to speak directly to the Admissions \& Records office for enrollment information.

## F-2 Visa Regulations

U.S. Federal Register states "accompanying spouses and children of academic and vocational nonimmigrant students with $\mathrm{F}-1$ or A-1 nonimmigrant status to enroll in study at an SEVP-certified school so long as any study remains less than a full course of study. F-2 and M-2 spouses and children remain prohibited, however, from engaging in a full course of study unless they apply for, and DHS approves, a change of nonimmigrant status to a nonimmigrant status authorizing such study."

For more information regarding international student admissions and the F-1 visa, go to http://isc.fullcoll.edu or contact the International Student Center at (714) 992-7078 or isc@fullcoll.edu. The ISC is located in Room 220 in the College Center.

## Permanent Resident Status

Admissions requirements are the same as for United States citizens. Applicants may be asked to present their permanent resident cards, and/or other immigration documents at the time of application. No photocopied cards will be accepted. Residency is based on one year from the date on the application for the visa, or the permanent resident card, or other immigration document. Students must have resided in California for one year and one day prior to the opening day of instruction of the semester or term, as set by the Board of Trustees, and must prove intent to make California their permanent residence.

## Other Visas

Contact the Admissions and Records Office for further information.

## Visa Dependence

Legal stay typically expires when a dependent child turns 21. Dependent children should contact the International Student Center 6-12 months before turning 21 to discuss a possible change of an $\mathrm{F}-1$ status.

## All Visas

Visa regulations subject to change.

## Matriculation

Matriculation is a process by which the student and the college enter into an agreement in order to identify and achieve the student's educational goals. In compliance with the Student Success Act of 2012 (SB1456), and Fullerton College's longstanding commitment to help students succeed, all non-exempt students seeking to enroll in courses will participate in some or all of the components of the matriculation program.

## Matriculation Status

Students may be exempt from orientation, assessment, counseling, advising, or student education plan development when proof of one or more of the following is provided:
A. Completion of an associate degree or higher;
B. Enrolled at the college for a reason other than career development or advancement, transfer, attainment of a degree or certificate of achievement, or completion of a basic skills or English-as-a-Second Language course sequence;
C. Completion of an approved assessment test within the last two years (assessment test scores must be provided);
D. Enrolled at the college solely to take a course that is legally mandated for employment as defined in section 55000 or necessary in response to a significant change in industry or licensure standards;
E. Enrolled at the college as a Special Admit Student pursuant to Education Code section 76001 (and not intending to take courses in math, reading, English and/or ESL).

Any student who receives exemption from one or more of the above services will not be eligible to receive priority registration.

Any student exempt from orientation, assessment, counseling, advising, or student education plan development may choose to participate in these services.

A student may petition to be EXEMPT from one or more matriculation requirements by completing and filing a "Matriculation Services Eligibility Form." These forms are available from the counseling office. The completed form must be filed with the Dean of Counseling or Matriculation Coordinator. Students will be notified of action on their petition no later than three days after the petition is filed.

## Matriculation Services

Matriculated (non-exempt) students will be provided the following services:

1. Orientation - Students will receive an overview of college services, programs, certificates, degrees, majors, and registration procedures. Assessment test scores are explained as guides for registering for writing, reading, ESL and mathematics courses. Orientation is completed online prior to assessment testing and may be accessed through each student's personal myGateway account.
2. Skills Assessment - Students will receive an evaluation of their learning skills in reading, English, English as a Second Language (ESL), mathematics and/or chemistry. This is done through the use of tests, review of past school records (high school and college), and other information presented during a counseling interview. Assessment tests are available for native speakers of English as well as for those with limited English proficiency.
3. Counseling - Students will receive assistance from counselors to plan their semester class schedule and to initiate a Student Educational Program Plan. All students are encouraged to visit a counselor during the year. Online counseling is available to students seeking answers to general questions about policies and procedures, program requirements, prerequisites, course offerings, services and transferability of courses. Online counseling may be reached through the counseling department homepage at http://onlinecounseling.fullcoll.edu/.
4. Student Educational Program Plan - New students are encouraged to see a counselor for help planning their courses prior to their appointed registration time. Students should see a counselor for assistance in developing a Student Educational Program Plan (SEPP) no later than the semester after they complete 15 units.
5. Follow-Up - Progress checks and assistance by counselors and instructors help students make successful progress towards their goals. Students on academic/progress probation are notified at the end of each regular term and students on dismissal status are notified each year at the end of the Spring term.

These matriculation services are designed to provide assistance to students so that their opportunities for success and achievement of their goals are improved. Students wishing to defer any aspect of the matriculation process may do so at the Counseling Department. Students wishing to appeal any decisions or recommendations regarding courses to be taken based upon assessment results may file a petition with the Dean of Counseling or Matriculation Coordinator (see Matriculation Appeals).

## Matriculation Appeals Procedures

All matriculated students have the right to challenge or appeal any step in the matriculation process. A Matriculation Appeals Petition may be filed for any of the following concerns:

1. Petition for exemption - Students may petition to be exempted from assessment, orientation and/or counseling. The student shall complete and file a "Matriculation Services Eligibility Form" with the Dean of Counseling or Matriculation Coordinator. The Dean of Counseling or Matriculation Coordinator will notify the student within three days of the decision regarding his/her appeal.
2. Review of placement decisions - For English as a Second Language (ESL), English or reading placement appeals, the student shall make an appointment with the Dean of Counseling. The Dean of Counseling shall see the student within three (3) working days. If the Dean of Counseling is unavailable within that time, the student shall take the appeal directly to the Dean of Humanities. For mathematics placement appeals, the student shall make an appointment with the Dean of Counseling. The Dean of Counseling shall see the student within three (3) working days. If the Dean of Counseling is unavailable within that time, the student shall take the appeal directly to the Dean of Mathematics and Computer Science. In all cases, the student shall present documents and information to support his/her appeal. The decision of the Dean shall be given in writing and shall serve as final decision in the appeal. Students approved for a higher course placement should see a counselor for course clearance for registration purposes.
3. Enrollment limitations: prerequisites/corequisites -A prerequisite is a requirement that must be met before enrollment in a restricted course may be permitted. For example, before PHYS 221 F General Physics can be attempted, the prerequisite MATH 150AF Calculus must be completed with a grade of "C" or better. Course prerequisites are identified in the College Catalog. Section 55003 of the Matriculation Regulations permit the following types of prerequisites and corequisites:
(1) Completion of any course in a sequence of related courses if understanding or technical performance is necessary for success in later courses in the sequence. An example of this is a foreign language sequence. Before enrolling for SPAN 203 F it may be necessary to complete SPAN 101 F and 102 F .
(2) Prerequisites may also refer to skills measured by assessment instruments, methods or procedures where a required level of performance is necessary for success in a course or program. Some ways in which skills are measured are through placement tests, high school transcripts, or counselor interviews which help determine placement in English, ESL, reading and mathematics.
(3) Enrollment limitations may also include corequisites, which generally require a student to concurrently enroll in one course as a condition of enrollment in another course. For example, the corequisite MUS 107 F Harmony I is required when enrolling for MUS 103 F Beginning Musicianship. However, with some exceptions, corequisites may also be completed prior to enrollment in a restricted course.

Student Rights to Challenge Prerequisites/Corequisites: Section 55003 of Title V states: Any prerequisite or corequisite may be challenged by a student on one or more of the grounds listed below. The student shall bear the initial burden of showing that grounds exist for the challenge. Challenges shall be resolved in a timely manner and, if the challenge is upheld, the student shall be permitted to enroll in the course or program in question. Grounds for challenge are:

1. The prerequisite or corequisite has not been established in accordance with the district's process for establishing prerequisites and corequisites.
2. The prerequisite or corequisite is either unlawfully discriminatory or is being applied in an unlawfully discriminatory manner.
3. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
4. The student will be subject to undue delay in attaining the goal of his or her educational plan because the prerequisite or corequisite course has not been made reasonably available.

## How to Challenge Prerequisite/Corequisite:

- A petition to challenge a prerequisite/corequisite may be filed with the Dean of the division responsible for the course. All petitions must be filed prior to the first day of the semester.
- A petition to challenge a prerequisite/corequisite because the prerequisite/corequisite was not established in accordance with the district's process for establishing prerequisite/ corequisites or because the student has prior knowledge or ability to succeed in the course may be filed with the Dean of the division responsible for the course.
- A petition to challenge a prerequisite/corequisite because it is discriminatory or is being applied in a discriminatory manner may be filed with the Matriculation Coordinator who will convene a committee consisting of the Director of Equity and Diversity, the Matriculation Coordinator and a member of the Matriculation Committee to review the petition.
- Students wishing to appeal the decision of the Dean(s) may do so by meeting with the Vice President of Instruction. Students wishing to appeal the decision of the committee regarding a discriminatory application of a prerequisite or corequisite may do so by meeting with the Dean of Counseling.

4. Complaint of unlawful discrimination - If a student feels assessment, orientation, counseling, prerequisites (or any other Matriculation procedure) is being applied in a discriminatory manner, a petition may be filed with the Matriculation Coordinator. The Matriculation Coordinator shall convene a three (3) member panel consisting of the Director of Equity and Diversity, the Matriculation Coordinator and an additional member to review the student's petition. The panel shall meet and provide a written notification to the student within seven (7) working days. (Students wishing to appeal the committee's decision may do so by meeting with the Dean of Counseling.) Petitions for the above appeals are available in the Counseling Center.

## Matriculated Student Responsibilities

All students shall be required to:
A. Identify an education and career goal
B. Diligently engage in course activities and complete assigned coursework
C. Complete courses and maintain progress toward an educational goal and completing a course of study
D. Complete a comprehensive educational plan after completing 15 semester units of degree applicable credit coursework or prior to the end of the third semester of enrollment.

Non-exempt first-time students shall, within a reasonable period of time, be required to:
A. Identify a course of study
B. Be assessed to determine appropriate course placement
C. Complete an orientation activity provided by the college
D. Participate in counseling, advising, or another education planning service pursuant to section 55523 to develop, at a minimum, an abbreviated student education plan.

For further information regarding the above Matriculation information, contact the Matriculation Coordinator at (714) 992-7245.

## Open Enrollment Policy

It is the policy of the 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 open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to Chapter 11 Division Two Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

## Orientation

See Matriculation in this section.

## Refunds

(Pursuant to section 58508 of Subchapter 6 of Chapter 9 of Division 6, Title 5 of the California Code of Regulations.)

Students who withdraw from college or drop semester length classes during the first two weeks of the Fall or Spring semester will be eligible for a refund. This includes enrollment, tuition, health, A.S. Sticker, and parking fees. Refer to the current class schedule or contact the Admissions and Records Office for refund deadlines for short term, late starting or Summer term classes, as deadlines can be as early as the first or second day of class. A refund processing fee of $\$ 10$ will be withheld once each term.

Refunds will be mailed approximately six to eight weeks after the beginning of the semester.

## Registration

Registration is the process of becoming officially enrolled in classes. All new and former (returning) students must submit an application and be admitted to the college before registering. An application must be submitted online through OpenCCCApply. Visit the website at www.fullcoll.edu for information and instructions. For students without Internet access, computer terminals are available in the lobby of the Admissions and Records Office, Student Services Building 2000.

Registration is by appointment. See below for priority registration criteria:

## Continuing Student

Currently enrolled at Fullerton College and will receive a grade or "W."

- To qualify for priority registration, continuing students MUST:
- Not have exceeded 100 units (not including units in basic skills courses)
- Be in good academic standing
- Not have been academically dismissed
- Not have been on probationary status for two consecutive terms
- Have completed $75 \%$ or more of their units with $A, B$, C, CR, P
- If the above requirements have been met, registration appointments will be based on units/hours earned at both Fullerton and Cypress colleges.


## New Student

Never enrolled in classes at Fullerton College

- To qualify for priority registration, new students MUST complete the following:
- Online Orientation
- Assessment Testing
- Student Education Plan
- If the above requirements have been met, registration appointments are based on application submission date


## Former (Returning Student)

Previously attended Fullerton College or currently enrolled but will not receive a grade or "W"

- To qualify for priority registration, former (returning) students MUST meet BOTH "Continuing Student" and "New Student" requirements.


## Special Admit Students

K-12 grade level students concurrently enrolled at Fullerton College

- Special Admit students are not eligible for priority registration

Throughout the registration process (including class petitioning), certain deadlines must be established. These deadlines are necessary in order to comply with State attendance laws and must be followed by all faculty and students. Failure to comply with these deadlines may result in the student not being allowed to attend or receive credit for the class.

## Residency for Tuition Purposes

## (per Education Code, Section 68060)

The Office of Admissions and Records determines the resident status of all new and returning students. Responses to the Application for Admission and, if necessary, other evidence furnished by the student are used in making this determination. The burden of proof to clearly demonstrate both physical presence and the intent to establish California residence lies with the student. A student who does not submit adequate information to establish the right to classification as a California resident will be classified as a non-resident. Some visa types are precluded by federal law from establishing residency.

The resident determination date is the day immediately preceding the opening day of instruction of the semester or term as set by the Board of Trustees. Generally, residency requires actual physical presence in California at least one year prior to the residence determination date, coupled with proof of the intent to make California one's home. Generally, California residency is established by one of the following:

1. If the applicant is under the age of 18 , his or her parents must have had legal residence in California for a minimum of 12 consecutive months preceding the day before the first day of the term.
2. If the applicant is 18 but not yet 19 years of age, the applicant and the applicant's parents or legal guardian must have residence in California for a minimum of 12 consecutive months preceding the day before the first day of the term.
3. If the applicant is 19 years of age or older, the applicant must have residence in California for a minimum of 12 consecutive months preceding the day before the first day of the term.

Non-citizen students holding visas which do not preclude them from establishing residency in California (for example: permanent resident visa, refugee status, or amnesty approval), must have legal residence in California for a minimum of 12 consecutive months preceding the day before the first day of the semester.

## FACTORS CONSIDERED TO DETERMINE RESIDENCY

A person's presence in California and the factors below are considered in determining California residency. No one factor determines residency.

- Being licensed to practice a profession in California
- Filing California State Income taxes as a resident
- Having an active checking and/or savings account in a bank in California
- Having paid non-resident tuition in another state
- Owning residential property in California for personal use
- Possessing a California Driver's License and a vehicle registration in California
- Showing proof of employment in California
- Possessing a divorce decree issued in California


- Showing California as "home of record" on military records (DD214 or Leave and Earnings Statement)
- Voting in California

IMPORTANT: Residency clarification is determined for each student when the admission application is accepted. Any student who is classified as a resident, but who becomes a non-resident at any time by virtue of a change of residence, by his or her own action or by the person from whom his or her residence is derived, is obligated to notify the Admissions \& Records Office immediately.

## NON-RESIDENT STUDENT

A student's resident status is determined at the time of application. A non-resident student must pay non-resident tuition in addition to the enrollment fee and other fees (including a $\$ 12$ Capital Outlay Fee per Ed Code 76141) for credit classes.

## ASSEMBLY BILL AB540

This act allows all persons, including undocumented immigrant students, who meet the requirements set forth in Section 68130.5 of the Education Code to be exempt from non-resident tuition in California's colleges and universities.

The requirements are:

- High School attendance in California for three or more years
- Graduation from a California high school or attainment of the equivalent thereof (i.e., GED or Certificate of High School Proficiency) prior to the start of the term
- Registration as an entering student at, or current enrollment at, an accredited institution of higher education in California not earlier than the Fall semester or quarter of the 2001-2002 academic year
- In the case of a person without lawful immigration status, the filing of an affidavit with the college stating that the student has 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
- All students who do not meet the California residency requirements must file an affidavit with the College. The affidavit is included in the California Non-Resident Tuition Exemption form which is available in the Admissions and Records Office.

Students living outside the state and enrolled via distance education are not eligible for the AB540 exemption (Revised Guidelines for Implementation of AB540 - Firebaugh).

## SENATE BILL 150

Community college districts are permitted to exempt nonresident special part-time students from the requirement to pay non-resident tuition for community college credit courses. The term "special part-time student" refers to students who have been recommended by the principal of the pupil's school and have parental permission to attend a community college during any session or term and who enroll in 11.99 or fewer units per semester, or the quarter equivalent, in accordance with Education Code section 76001. The exemption does not apply to special full-time students.

Districts that elect to provide this exemption should develop, adopt, and publish a policy for consistently granting the exemption. As it relates to the development of the local policy, it is our belief that this exemption is not intended to apply to categories of students who would be precluded from qualifying for the AB540 non-resident tuition exemption; i.e., a) students who actually reside outside of California and enroll via Distance Education and b) students on most non-immigrant visas. There is an exception for "T" and " $U$ " non-immigrant visa holders who were recently made eligible for the AB540 non-resident tuition exemption under Education Code Section 68122, so a district policy could permit students holding either of these two non-immigrant visa types to also qualify for this new non-resident tuition exemption.

A student receiving a non-resident tuition exemption under SB150 does not receive resident status for the purpose of fees or financial aid. Rather they are exempt from non-resident tuition fees under this law. These students do not qualify for the BOG Fee Waiver or any other financial aid. However, please note that districts are permitted to exempt special part-time students, including those that have non-resident status, from the per unit enrollment fee pursuant to Education Code Section 76300(f).

## SENATE BILL 141

This bill requires districts to exempt non-resident tuition from a non-resident student who is a U.S. citizen and who resides in a foreign country, if that student meets all of the following requirements.
i. Demonstrates a financial need for the exemption.
ii. Has a parent or guardian who has been deported or was permitted to depart voluntarily under the federal Immigration and Nationality Act.
iii. Moved abroad as a result of the deportation or voluntary departure.
iv. Lived in California immediately before moving abroad.
v. Attended a public or private secondary school in California for three or more years.
vi. Upon enrollment, will be in his or her first academic year as a matriculated student in California public higher education.
vii. Will be living in California and will file an affidavit with the community college stating that he or she intends to establish residency in California as soon as possible.
viii. Documentation shall be provided by the student as required by statute as specified in Education Code section 76140(a)(5).

A student receiving a non-resident tuition exemption under SB141 does not receive resident status for the purpose of fees or financial aid. Rather they are exempt from non-resident tuition fees under this law. These students do not qualify for the BOG Fee Waiver or any other state financial aid until they establish California residency. As citizens, SB141 students may apply and qualify for federal financial assistance such as Pell, FSEOG and federal student loans.

## Special Admit Students

Students may enroll in college classes as Special Admit students while concurrently enrolled at another school at the K-12 grade level. Enrollment is for advanced, enrichment courses. Special Admit students must be recommended by their principal or school designee and must meet all course prerequisites. K-8 students must also be recommended by the respective Instructional Dean at the college.

## Persons under 18 years of age who are not enrolled in public schools:

Persons participating in Home School Programs or persons under 18 years of age who have not graduated from high school and are not currently enrolled in school may also be eligible as Special Admit students. 9th-12th grade Home School Programs must be accredited by the Western Association of Schools and Colleges and students must obtain the signature of the College President or designee on the Special Admit application.

If a local high school or ROP program offers a course in the subject area requested, the student may not enroll in the equivalent course at Fullerton College.

Applicants must pay all applicable fees at the time of registration.
Part-time Special Admit students (enrolled in 1-11 units) in grades 9-12 are exempt from enrollment fees, but must pay health fees.

Part-time Special Admit students (enrolled in 1-11 units) in grades K-8 must pay enrollment and health fees.

Full-time Special Admit Students (enrolled in 12 units or more) must pay enrollment and health fees.

## Students on an $\mathrm{F}-1$ visa are not eligible to enroll as a Special Admit student.

Restrictions are placed on high school students wishing to take some Fullerton College courses, including, but not limited to, English, ESL, reading and math.

For further information on the Special Admit Program, contact the Admissions \& Records Office at (714) 905-5162 or the Counseling Division at (714) 992-7084.

## Student Fees

- Fees are subject to change
- Fees are payable by cash (in person only), check, MasterCard, VISA or Discover card

Returned checks must be paid in the form of cash or money order, and a $\$ 25.00$ service charge will be added to the amount owed.

All checks returned for "Stop Payment" will also be subject to the $\$ 25$ service charge. A student's enrollment at Fullerton College as well as his/her credit may be affected.

## A.S. Benefits Validation

See "Student Activities."

## Campus Photo ID Card

All students are strongly encouraged to purchase a campus identification card. This card serves as positive photo identification for the Library, the Admissions and Records Office, various labs, the Bookstore, and other needed areas/services. A current Schedule/ Bill and valid picture ID is needed at the time of production and/or validation. The charge for a Campus ID Card is $\$ 3.50$. All ID cards not picked up by the last day of the semester purchased will be voided. Replacement and voided Campus ID cards are also $\$ 3.50$.

## Course Fee

These fees are noted in the class schedule.

## Enrollment Fee

The enrollment fee is $\$ 46$ per unit. This fee is subject to change by legislative action.

## Health Fee

All students who enroll in classes through Fullerton College are required to pay a $\$ 19$ Health Fee per semester (\$16 for the Summer term). This Health Fee entitles students to a variety of health services. Health Fees are charged to all students whether or not they choose to use health services. Courses taken off campus, online, and during the weekend are also required to pay the Health Fee.

Any student who depends exclusively on prayer for healing in accordance with the teachings of a bona-fide religious sect, denomination or organization is exempt from paying the health fee. Upon request, the health fee will be refunded to any student who withdraws from all courses prior to the $10 \%$ date of the length of the course.

## Non-Resident Tuition Fee

All non-resident students will be charged a capital outlay fee of $\$ 12$ per semester unit for the 2016-2017 school year. Note: All non-residents must also pay the enrollment fee and health fee.

## Non-Resident Capital Outlay Fee

All non-resident students will be charged a capital outlay fee of $\$ 12$ per semester unit for the 2016-2017 school year. Note: All non-residents must also pay the enrollment fee and health fee.

## Parking Fee

To park on campus, parking permits can be purchased:

| $\$ 35(\$ 20$ during Summer Term) | Auto |
| :--- | :--- |
| $\$ 20(\$ 10$ during Summer Term) | Motorcycle |
| $\$ 30(\$ 20$ during Summer Term) | Students with BOGW Fee |
|  | Waiver |

Parking fees may be paid during registration. A limited amount of metered parking is available. For additional information, see "Parking" under "College Policies."

## Transcripts

## High School Transcripts

All matriculated students should have official transcripts sent to the Counseling Department from their high schools.

## Other College Transcripts

Students with previous college units should have official transcripts from all colleges attended sent to the Fullerton College Admissions and Records Office. These transcripts can verify completion of prerequisite courses, eliminating the necessity of taking all or part of the placement test, and can assist the academic counselors in working with the students. Official transcripts from other colleges are required for evaluation toward a certificate, associate degree, or meeting general education requirements for transfer. Copies of transcripts from other colleges must be requested from each institution.

## Fullerton College Transcripts

The Admissions \& Records Office prepares and permanently retains a record of each student's academic work. Only coursework taken at Fullerton College will be shown on the transcript. Transfer credits are included only if other college coursework has been used to fulfill graduation requirements.

Transcripts may be requested via electronic/web, mail or in person. Fax, phone and email requests are not accepted. For detailed information on transcript ordering, go to www.admissions. fullcoll.edu.

Students who have completed the General Education Certificate requirement need to request that an evaluation is included with the transcript at the time the request is made (for additional information, refer to the General Education Breadth Requirements-Four Year Colleges and Universities). No rush, web or electronic requests for this service.

It is the student's responsibility to ensure all grade changes, academic renewal, appeals petition, and certificate/degree postings are complete prior to requesting a transcript.

## Transcript Fees

All transcript fees are payable at the time the transcript request is submitted. The first two transcripts EVER requested are free. Fees are $\$ 3$ per copy thereafter. On demand/rush transcripts are $\$ 10$ plus the transcript fee. Fullerton College accepts credit cards, checks, money orders, or cash as form of payment. Credit card payments are only accepted online or in person. Cash payments may be made at the Admissions \& Records Office but are not recommended to be sent through the mail. Please be advised that ALL fees are subject to change without notice to the student.

## Holds

A HOLD on a student's record may prevent Admissions and Records from processing a transcript request. If a student has outstanding financial obligations to the college, a transcript will not be issued.

In accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA), records may not be released to a third party without prior written authorization of the student. Contact Admissions and Records for more information. A picture ID of the student or authorized person is required for ALL transactions made in person.

## Verification of Student Status

To conveniently serve our students, Fullerton College has partnered with the National Student Clearinghouse to provide Degree and Enrollment Verification of past and present Fullerton College students. This self service is free of charge for students and may be obtained immediately online, by logging into myGateway.

Third party verifications may be obtained through www. studentclearinghouse.org. For third party fee information, refer to the National Student Clearinghouse website.

In rare occasions, where a verification form must be completed by the Admissions \& Records Office, a fee of $\$ 3$ per copy will be charged. Regular processing time is 10 business days PLUS mailing time (if applicable). Rush requests are an additional \$10 and processed between 24-48 hours PLUS mailing time (if applicable). Please be advised that ALL fees are subject to change without notice to the student.

## Academic Information

## Academic Honors

## Dean's Honor List

Students who officially complete (as shown on their transcript) 12 or more degree applicable units in a semester and earn a grade point average between 3.0 and 3.74 are placed on the Dean's Honor List.

## President's Honor List

Students who officially complete (as shown on their transcript) 12 or more degree applicable units in a semester and earn a grade point average of 3.75 or above are placed on the President's Honor List.

## Honors at Graduation

Students whose cumulative grade point average (excluding nondegree credit courses) is 3.30 or higher will graduate with honors. High honors are awarded to those graduating with a cumulative grade point average (excluding non-degree credit courses) of 3.75 or higher. Spring grades will not be used in computing the grade point average for the graduation ceremony, but will be used in determining the final grade point average for the diploma. All transfer work (with the exception of upper division units) from other colleges will be used in computing grade point average at graduation.

## Acceptance of Transfer Credits

Evaluation of other college coursework must be requested by students through the Fullerton College Counseling Division. Students transferring from colleges accredited by the following recognized regional accrediting associations will be granted lower division credit for courses entered on official transcripts (MSA, MSCHE, NASC, NCA/NCA-HLC, NEASC-CIHE, NWCCU, SACS, WASC).

Students requesting credit for previous coursework from foreign colleges or universities must have their transcripts evaluated by an approved credential evaluation service. Students may only receive elective credit for up to 30 units of lower division coursework.

Transferring units will be posted at the time of graduation.
A maximum of 9 upper division units can be counted as elective units. Upper-division units will not be counted toward general education or major. Grades from upper division courses will not be used when calculating the GPA.

## Adding or Dropping a Class

All adds, drops and withdrawals are to be completed ONLINE through myGateway by the established deadline dates. If the student receives an Add Authorization Code form an instructor, it is the student's responsibility to officially enroll into the class using the ADD code through myGateway on or before the deadline. Failure to do so will result in the student not being enrolled in the class.

A student will not be permitted to add a new full-term course after the end of the second week of school. For adding shortterm courses (less than a semester in length) including latestart or short-term courses, the student should review the class schedule for published deadline dates.

## Section Change

A section change denotes dropping a course and replacing it by transferring to a section that has different hours, days, instructor for the same course and/or transferring from a lower to a higher OR a higher to a lower level course. Courses must meet within the same date range.

## Attendance

Regular and prompt attendance in class and laboratory sessions is expected of every Fullerton College student. Students, therefore, should be thoroughly informed of and should comply with the following attendance regulations:

Attendance at the first class meeting is advised because of enrollment demands. Any student not reporting to the first class may be dropped by the instructor. In the case where a class is taught entirely online, instructors may drop students who have not been in contact with the instructor by the end of the first day of classes for that semester or short-term session. Students should not rely on the instructor to drop them from classes. Non-attendance does not constitute an official drop. Failure to officially withdraw may result in a failing grade.


#### Abstract

Absences By direction of the Chancellor of Community Colleges of California, attendance shall be taken at all class sessions. Absences are handled as follows:


After a student accumulates in any class more than a week's absences (more than the number of times the class meets per week), consecutive or nonconsecutive, an instructor may drop the student according to the drop deadline dates.

For short-term or intersession classes, an instructor may drop a student who accumulates absences greater than the equivalent of one week of class during a regular semester.

For online classes, an absence may be identified as a missed assignment and/or inactivity in the course site.

Non-attendance or non-payment for a class does not release students from their responsibility to drop a class and may result in a failing grade being awarded.

## Illness and Authorized Absences

1. If a student accumulates an excessive number of absences due to illness or other reasons, and the instructor feels that the student can no longer profitably continue in the course, the instructor may drop the student from class.
2. A student who must miss one or more classes because of a field trip or other authorized activity, such as athletics or music groups, may obtain an Authorized Absence Excuse from the instructor under whose supervision the activity will occur. The student shall have this excuse signed by the instructors of the classes that will be missed before the absence occurs. It is recommended that this form be completed at least two days before the activity. The signed excuse must be presented to the instructor in charge of the activity.
3. No absence excuses a student from making up the work missed. Students should realize that every absence may adversely affect their grades.
4. In the event a student is absent for a prolonged period of time, it is expected that the student will make contact with all instructors immediately to advise the instructor of this absence and the reasons behind it. The instructors can then decide whether or not the student may continue in the class or withdraw. It should be noted that failure to make this contact and follow through with the instructors could result in the student receiving a substandard grade in the class.

## STUDENT RESPONSIBILITY

While an instructor may drop a student who has poor attendance, if a student wishes to drop a class, it is the student's responsibility to $\log$ onto myGateway and drop. Failure to officially withdraw from a class may result in a grade of "F," or "NP" being assigned.

## Audit Policy

Auditing of designated, approved college courses is permitted under specific conditions. Students may audit a designated course only if they have previously taken the course and received a passing grade and/or taken the course the maximum times allowable at Fullerton College.

An enrolled student choosing to audit a course must file an "Audit Request Form" in the Admissions \& Records Office no later than the add deadline of the course. Both instructor and Division Dean approval is required prior to submitting the form. Once the request has been made, students will not be permitted to change from an audit to a credit status.

Fees charged for auditing college courses are subject to change. See the Admissions \& Records Office for current Information and procedures. The fees per unit do not include the additional mandatory health fee. All students are strongly encouraged to purchase the campus photo ID card. All fees are payable at the time of submitting the petition. (Fees are not refundable.) Students on fee waivers must pay the auditing fees.

Audit petitions and procedures are available in the Admissions and Records Office.

## Classification of Students

Students are classified based on their class load as follows:

| Full-Time | Enrolled in 12 or more units |
| :--- | :--- |
| Part-Time | Enrolled in fewer than 12 units |
| Freshman | Fewer than 30 units completed |
| Sophomore | 30 or more units completed |

The minimum unit load to be classified as a full-time student is 12 units. A maximum load for any student is 19 units. Exception to the 19 -unit maximum may be available with counselor approval.

It may be pertinent for students to consider the following semester unit requirements for particular privileges and activities:

Associated Students Elected Office: 5 units per semester, unless otherwise listed in "Eligibility For Student Offices," form available in the Office of Student Activities (Room 223).

Athletic Eligibility: Full time: 12 units including P.E. classes
Veterans - See Veterans Resource Center (Room 518)
Work Study and Financial Aid - Full time: 12 units per semester; 3/4 time: 9 units per semester; 1/2 time: 6 units per semester

## Work Hours/Class Guidelines

For each hour spent in class, a student should plan to spend about two hours in study and homework. On the 16 -week calendar, a full load of 15 units will equate to 17 hours of class time plus 34 hours in study and homework for a total of 54 hours a week - more than a full-time work week. Following are suggested work hours/class guidelines:

| WORKING HOURS/WEEK | UNITS |
| :---: | ---: |
| None | $12-16$ |
| 10 | $10-11$ |
| 20 | $7-9$ |
| 30 | $3-6$ |
| $30+$ | $1-3$ |

In order to maintain an academic balance, the following information should be considered:

1. Students can expect to spend at least $3-1 / 2$ hours (one hour and 10 minutes in class and two hours and 20 minutes outside of class) per week for each unit taken.
2. Employment time and college time combined should not exceed 60 hours weekly.
3. Students should distribute study time appropriately for each class - often preparation for a lecture class differs from preparation for a laboratory class.
4. Students should consult frequently with their instructors their office hours are designed for that purpose.
5. To assist in their academic success, students should use the tutoring services, the library, counselors, and other support services.

## Course Progression

Students are expected to take courses on an accepted progressive basis. Students will not receive credit for classes which are considered lower in degree of advancement than those already completed.

## Course Repetition

## PASSING GRADE

A course in which a student has earned an "A," "B," "C," "CR" or "P" may only be repeated as indicated in the catalog. (Refer to the skills, performance, or activity section below)

Once a student has completed the maximum number of allowable repetitions, a student may be blocked from registering in this course. Active participatory courses that are grouped by related content in the areas of fine arts and physical education will count toward the maximum allowable repetitions. A student
may file a petition for an exception in the Admissions and Records Office. This petition must be approved before the student will be permitted to register.

## SUBSTANDARD GRADE

Students may repeat the same course no more than two times in colleges within the District in which substandard grades ("D," "F," "NC," "NP" or "W") were assigned. Students may file a Petition to Repeat a Course to request additional repeats due to verifiable extenuating circumstances. Petitions may be filed in the Admissions and Records Office.

When repeating a course with a substandard grade and submitting an Appeals Petition, the last grade earned will count toward the grade point average and previous grade(s) will be discounted or forgiven. Only the first two substandard grades may be excluded in GPA calculations. The student's permanent academic record will be annotated such that all course work that has been taken and forgiven or repeated will remain legible, insuring a true and complete academic history. (Refer to Appeals Petition under College Policy and Rules)

## CALIFORNIA CODE OF REGULATIONS AND COURSE REPEATABILITY

Prior to Fall 2013 courses that develop similar skills (a) at increasingly sophisticated levels of practice, and/or (b) that are applied to different content (such as a drama course in which students master increasingly demanding roles in different plays) may have been offered as repeatable courses. Recent changes have been made to portions of Title 5 of the California Code of Regulations governing repetition of credit courses. The general rule from this change in Title 5 is that district policy may not permit a student to repeat a credit course if the student received a satisfactory grade on the previous enrollment. A satisfactory grade would include A, B, C, CR, or P. Title 5 regulations allow for exceptions to the general rule that include:

- Courses properly designated by the district as repeatable,
- A subsequent enrollment due to significant lapse of time,
- Variable unit courses offered on an open-entry/open-exit basis,
- Extenuating circumstances,
- Occupational work experience courses,
- Students with disabilities repeating a special class,
- Legally mandated courses, and
- Courses necessary as a result of significant change in industry or licensure standards.

For an additional enrollment to be allowed for any of the exceptions listed above except the first bullet the student must meet the circumstances specified in the regulations for the specified exception. For a course to be designated as repeatable by the district it must meet certain criteria. The new regulations on course repetition apply to a district meaning that a student may not repeat a course or its equivalent taken at either Fullerton College or Cypress College.

Beginning with the Fall 2013 semester district policy may designate only three types of courses as repeatable:

- Courses for which repetition is necessary to meet the major requirement of a California State University (CSU) or University of California (UC) for completion of a bachelor's degree,
- Intercollegiate athletics, and
- Intercollegiate academic or vocational competition.

Courses that do not fall under one of the three types listed above may not be designated as repeatable. Student enrollment in a repeatable course is limited to what is necessary for the first two years of undergraduate education which equates to a maximum of four enrollments. In some instances, depending on the course, the number of enrollments may be less than four. In the determination of the total number of enrollments a district must count all prior enrollments by a student in a course or courses that should be equated.

Additional enrollment limitations have been placed on active participatory courses that are related in content in physical education (PE), visual arts, and performing arts. As indicated above all active participatory courses in these areas, if they do not meet one of the three criteria that allow it to be repeatable, can only be taken once for credit. If there exists a group of courses related in content in physical education, visual arts and performing arts that are active participatory then a student is limited to a total of four enrollments within each group of these courses.

## LAPSE OF TIME

Students may repeat a course where the student has received a satisfactory grade and there has been a "significant lapse of time" since completion of the class. Fullerton College has defined a "significant lapse of time" as five (5) years. Students who believe they have extenuating circumstances may submit a Petition to Repeat a Course. Petition forms are available in the Admissions and Records Office. (Title 5, Section 55043).

## Credit by Examination

The basic purpose of Credit by Examination is to allow unit credit for prior or advanced knowledge of class material by the student. Currently enrolled students may be permitted to obtain Credit by Examination in subject matter fields in which they are especially qualified through previous training or experience for which credit or advanced placement has not previously been given. Only those courses approved for Credit by Examination will be eligible. Examinations will be sufficiently comprehensive to determine that the student has essentially the same knowledge and skills as a student who successfully completes the course.

Credit by examination is available under the regulations listed below:

1. Any currently enrolled student not on academic probation may challenge a course subject to the approval of the division offering the course. Not all courses may be challenged. Divisions allowing credit by examination are Business and Computer Information Systems, Fine Arts, Natural Science (BIOL 101 F and BIOL 102 F only), and Technology and Engineering. Contact the appropriate Division Office for information.
2. A student may challenge and receive credit for a maximum of twelve semester units. EACH COURSE MAY BE CHALLENGED ONLY ONCE.
3. The student has the option of receiving an earned letter grade on the transcript for all challenged courses.
4. The division may stipulate that a grade of Pass $(P)$ will be granted instead of a letter grade.
5. No student will be allowed to challenge a course less advanced than that which the student has already completed, and no challenge will be allowed for a course in which the student has previously enrolled and received a grade.
6. No challenge will be allowed for a course in which a student is enrolled after the first two weeks of the semester.
7. Students must pay enrollment and health fees.
8. Students on fee waivers must pay the enrollment fees for credit by examination.
9. Credit will not be posted to the transcript until all fees, fines, or holds have been resolved.

## Procedure:

To initiate a petition for Credit by Examination, the student must confer with either an instructor teaching the course or the appropriate Division Dean. If it is determined that the student's prospects for success in the examination are satisfactory, the student will complete the Credit by Examination petition, obtaining the signatures of the instructor and the Division Dean. Petitions are available in the division offices. The time and place of the examination, its content, and the arrangement for its administration are determined by the division.

## Distance Education Online, Hybrid, TeleWeb

Fullerton College offers Distance Education courses as an option to traditional, on campus, face-to-face courses. As defined by Title 5 § 55200, Distance Education is "instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology."

While providing students with quality instruction, Distance Education offers access on and off campus, convenience and flexibility. Delivery options include:

Online - offered primarily or mostly online. Note: Some instructors may require coming to campus for orientation and/ or testing.

Hybrid - combines a percentage of class time online and a percentage on campus.

Teleweb - combines video viewing (via cable television and/or streaming), online technologies, and some campus attendance.

The registration process, fees, and academic credit are the same for Distance Education courses as for traditional on campus courses. For registration and specific course information, go to: www.fullcoll.edu. For a listing of distance education courses, frequently asked questions, general information, and more, go to: http://online.fullcoll.edu.

## Grading System

## Grades and Grade Point Average

Student performance in courses is indicated below. Grades which carry point value, and which are used in determining the grade point average (GPA), are as follows:

| Symbol | Definition | Grade Points Per Unit |
| :--- | :--- | :--- |
| A | Excellent | 4 |
| B | Good | 3 |
| C | Satisfactory | 2 |
| D | Passing, less than | 1 |
|  | Satisfactory |  |
| F | Failing | 0 |

The following are not part of the GPA computation:

| P | Pass | at least satisfactory - units <br> awarded not counted in GPA |
| :--- | :--- | :--- |
| NP | No Pass | less than satisfactory, or <br> failing - units not counted <br> in GPA |
| W | Withdrawal | No units granted |
| UD | Ungraded | No units granted |

The meaning of each symbol is as follows:
A - Superior or Excellent (4 grade points). Honor grade indicating excellence earned as a result of consistently superior examination scores; consistently accurate and prompt completion of assignments; ability to deal resourcefully with abstract ideas; superior mastery of pertinent skills; and promise of success in field relating to the subject.

B — Better than Average - Good (3 grade points). Honor grade indicating competence earned as a result of high examination scores; accurate and prompt completion of assignments; ability to deal well with abstract ideas; commendable mastery of pertinent skills; and promise of continued success in sequential courses.

C - Average - Satisfactory (2 grade points). Standard college grade indicating successful performance earned as a result of satisfactory examination scores; generally accurate and prompt completion of assignments; ability to deal with abstract ideas; average mastery of pertinent skills; and sufficient evidence of ability to warrant entering sequential courses.

D - Less than Satisfactory (1 grade point). Substandard grade indicating the meeting of minimum requirements only earned as a result of low examination scores; generally inaccurate, incomplete or late assignments; inadequate grasp of abstract ideas; barely acceptable mastery of pertinent skills; or insufficient evidence of ability to make advisable the enrollment in sequential courses.

F - Failing (no grade points). Non-passing grade indicating failure to meet minimum requirements earned as a result of non-passing examination scores; inaccurate, incomplete or late assignments; failure to cope with abstract ideas; inadequate mastery of pertinent skills; or repeated absence from class. "F" grades are figured in total units attempted in computing the grade point average.

## How to Calculate a GPA

1. Multiply the grade value of the course by the units attempted for that course. The product of this multiplication will be the grade points.
2. Divide the cumulative grade points by the cumulative units attempted.

Example:

| Course | Grade <br> Value | Multiply | Units <br> Attempted | Equals | GPA HRS <br> (units <br> attempted) |
| :--- | :---: | :---: | :---: | :---: | :---: |
| MATH 100 F | $\mathrm{A}=4$ | x | 4 | $=$ | 16 |
| ENGL 060 F | $\mathrm{B}=3$ | x | 4 | $=$ | 12 |
| GEOG 100 F | $\mathrm{C}=2$ | x | 3 | $=$ | 6 |
| PE 215 F | $\mathrm{D}=1$ | x | 2 | $=$ | 2 |
| PHIL 100 F | $\mathrm{F}=0$ | x | 3 | $=$ | 0 |
|  |  | TOTALS: | $\mathbf{1 6}$ |  | $\mathbf{3 6}$ |

Divide 36 (Grade Points column) by 16 (Units Attempted column) and the G.P.A. $=2.25$

## Pass/No Pass Policy

Courses in which P (Pass)/NP (No Pass) grading is allowed are designated in the class schedule and in the course descriptions in this catalog. P/NP is not the same as auditing.
$\mathbf{P}$ - Pass is equivalent to the satisfactory grade of "C." "P" will award units completed, but will not be computed into the grade point average.

NP - No Pass is a substandard grade, equivalent to the grades of "D" or "F." "NP" grades will not be computed into the grade point average, but will enter into calculations for progress probation.

If a course is listed in the College Catalog as "Letter Grade or Pass/No Pass Option," a student choosing to take the course with a P/NP grade must file a "Pass/No Pass Grade Request" form in the Admissions and Records Office no later than the add deadline of the course. Once the request is submitted, the grading option is not reversible. Students may enroll in up to six units each semester in courses with a PASS/NO PASS option.

Students should investigate the policies of the institutions to which they may wish to transfer to determine the acceptability of $P$ (Pass) grades in courses in the student's major, since many universities and colleges do not accept $P$ (Pass) grades in such courses. Many institutions will consider an NP (No Pass) as a failing grade. Likewise, students planning for graduate work should realize that some graduate schools do not look favorably on $P$ grades.

## Non Evaluative Grades

I - Incomplete. Incomplete academic work at the end of the term caused by unforeseeable, emergency and justifiable reasons may result in an "I" symbol being entered in the student's record. The condition of removal of the " $\mid$ " and the grade to be assigned shall be stated by the instructor in a written record. This record must be given to the student with a copy on file with the Admissions and Records Office until the " $I$ " is made up or the one-year time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated or when the one-year time limit for completing the work has passed.

The "I" must be made up no later than one year following the end of the term in which it was assigned. The " 1 " symbol shall not be used in calculating units attempted nor for grade points.

A student may petition for a time extension due to unusual circumstances through the Admissions and Records Office. A student may not re-enroll in a class for which an "l" symbol is shown on the student's transcript.

IP — In Progress. The "IP" symbol shall be used to denote that the class extends beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of an evaluative grade must await its completion. The "IP" symbol shall remain on the student's transcript in order to satisfy enrollment documentation. An "IP" symbol shall not be used in calculating grade-point averages. The student must register in the same course for the next semester. Failure to do so will result in an assignment of a grade by the instructor in place of the "IP."

MW - Military Withdrawal. Upon verification of military orders, the symbol "MW" will be assigned to students who are called to military service and withdraw from courses. Military withdrawal shall not be counted in progress probation or dismissal calculations.

RD - Report Delayed. The "RD" symbol may be assigned by the Dean of Admissions and Records only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade-point averages.

W - Withdrawal. A "W" is a grade indicated when the student has withdrawn from a course. It is not included in the grade point average computation. (See "Withdrawal Policy.")

## Assignment of Grades

The final grade is wholly within the responsibility of the instructor, regardless of whether it is an A, B, C, D, F, P, NP, I, IP or W.

Please Note: In a number of courses, principally in English, foreign languages, science and mathematics, a student may not progress to a more advanced study in a subject in which the student has received a "D" grade.

## Non-Degree Credit Courses

Non-degree credit courses are courses that earn credit, but are not counted toward the 60 units required for the associate degree. Non-degree courses are intended to assist students in performing the skills needed for college level courses. Non-degree courses do apply toward residency, athletic eligibility, work study and financial aid, veteran's benefits, associated student body office, and full-time status. The degree or non-degree credit status is indicated at the end of every course description.

## Honors Program

## College Center, Room 225, 2nd Floor

The Fullerton College Honors Program is designed to meet the needs of students who seek a challenging educational experience that goes beyond the regular degree program. The Honors Program incorporates a stimulating interdisciplinary approach for a more in-depth investigation of topics. Classes are kept intentionally small (20-25 students) to facilitate a discussion/seminar rather than lecture format. A reduced class size also encourages a more collaborative learning experience where students from different backgrounds and disciplines can interact more freely with each other and with the faculty members.

Honors students are eligible for special scholarships at Fullerton College and the opportunity to apply for Honors scholarships at four-year transfer institutions. Honors students may also apply to the Collegiate Honors Council. Honors students will have Honors sections designated on their transcripts, and students who complete the Honors Program requirements will have a special designation on their transcripts and degrees. Students in the Honors Program will also be eligible for priority and/or guaranteed transfer in their major to selected colleges and universities. For further information and application forms, please contact the Honors Program at Fullerton College at (714) 992-7133 or visit our website at http://honors.fullcoll.edu.

## Honors Courses - Equivalency

An honors version of any Fullerton College course, designated by the letter " H " after the course number and before the letter " $F$ " designation for Fullerton College courses, is considered equivalent to the traditional version of the course for the purpose of meeting Fullerton College prerequisite, corequisite, General Education (GE), and major requirements. Thus, an honors course may be used to meet any Fullerton College requirement satisfied by the traditional version of that course.

## Remedial Limitation

The State of California has implemented a regulation limiting the number of units students can earn for remedial/pre-collegiate basic skills courses to 30 semester units. In accordance with those guidelines, the North Orange County Community College District has established the following policy (AB 1725 Chapter 973, Statutes of 1988).

## Basic Skills Courses

Basic skills courses are defined as one or more levels below college level English and one or more levels below intermediate algebra. The North Orange County Community College District has designated certain courses as remedial/pre-collegiate basic skills courses. These courses include reading, writing, computation, learning skills, and study skills designed to ensure acquisition of those skills necessary for successful completion of associate degree, transfer and occupational courses. Fullerton College lists the following as its Basic Skills courses: COUN 071 F, COUN 072 F, COUN 075 F, ENGL 039 F, ENGL 059 F, ENGL 060 F, ESL 025 F, ESL 029 F, ESL 035 F, ESL 036 F, ESL 038 F, ESL 039 F, ESL 045 F, ESL 046 F, ESL 047 F, ESL 048 F, ESL 049 F, ESL 050 F, ESL 056 F, ESL 058 F, ESL 080 F, ESL 081 F, ESL 082 F, ESL 083 F, MATH 004 F, MATH 006 F, MATH 007 F, MATH 010 F, MATH 015 F, MATH 020 F, MATH 030 F, READ 027 F, READ 036 F, READ 056 F, READ 096 F.

## Exemptions

All remedial courses taken by students enrolled in English as a Second Language courses are exempted. Students identified by the District for learning disabled programs are also exempted. When, because of closed enrollment, students are unable to enroll in the next higher level ESL course, they do not lose their exemption status. Students with documented disabilities may petition the Admissions and Records Office for exemption status on a case-by-case basis.

## Review and Release of Information

All student records of Fullerton College are maintained in accordance with the provisions of the Family Rights and Privacy Act of 1974. Copies of the complete text of this act are available in most libraries (see "Family Educational and Privacy Rights" in Shepherd's Acts and Cases by Popular Names). The two basic elements of the Act are the student's right to review and challenge his/her record and the conditions under which information in the record can be released to outside parties.

1. Students may request access to challenge the correctness or appropriateness of any part of the record. However, students are advised that grades, though a part of the record, are considered final as assigned by the instructor and can only be challenged on the basis of clerical error, fraud, bad faith, or incompetence. Refer to Grade Change/Appeal Process for additional information.

Students requesting to review their own records must present proper photo identification.
2. Student information (except for directory information) cannot be released without signed permission of the student. However, student information will be released to those legally entitled to access under this Act. Directory information may include student's name, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most previous public or private school attended by the student, and any other information authorized in writing by the student. (NOCCCD BP 5040 effective April 2009)

Additionally, under the Solomon Amendment, all branches of the United States Armed Forces may request telephone numbers and addresses of all students age 18 to 35 for recruitment purposes.

Currently enrolled students may request the information listed above be kept confidential. A "Notice to Deny Disclosure of Personal Information" must be filed in the Admissions and Records Office within the first two weeks of the semester. In the absence of having this form on file, the college may release information to any person or agency requesting such information.
3. The law requires consent of the student or a court order before the District may release student records. When student records are subpoenaed, the student will be notified by mail to the last address on file of any such access, and the student shall have the right to request a copy of any information released in this manner.
4. Any questions regarding the student's rights under this act should be directed to the Dean of Admissions and Records.

## Fullerton College Student Learning Outcomes

Student Learning Outcomes (SLO) are defined in terms of the knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences. Fullerton College has SLOs for courses (course-level SLOs), programs (PSLOs) and at the institutional level. More information about the College SLOs can be found on the website (http://slo.fullcoll.edu/).

## Institutional Student Learning Outcomes

The Institutional Student Learning Outcomes for Fullerton College are designed to reflect the college's General Education outcomes and are intended as knowledge, skills, abilities, and attitudes students will develop as a result of their overall experience at the college. Upon successful completion of transfer curriculum and/ or when receiving an Associate's degree from Fullerton College, a student will have learned competency in all of the ISLO areas. Measurement of these ISLOs will be at the course level.

Students who complete certificates at the college will have benefit of some number of the ISLOs and measurement of those will be at the program level.

A single course is not expected to meet all the ISLOs, but each course does contribute to at least one of the ISLOs.

1. Communication: Students will be able to apply the principles of language and rational thought to communicate effectively.
A. Read: Students will be able to comprehend and interpret various types of written information.
B. Write: Students will be able to communicate opinions, ideas, and information in writing, including the creation of letters, reports, manuals, and graphs using correct grammar, spelling, punctuation, and appropriate language, style and format.
C. Listen: Students will be able to interpret, and respond appropriately to verbal and nonverbal messages.
D. Speak: Students will be able to organize ideas and communicate verbally as appropriate to the audience and the situation, including participation in conversations, discussions, and group activities.
2. Critical Thinking and Information Competency: Students will be able to think critically by analyzing data in addressing and evaluating problems and issues in making decisions.
A. Analysis: Students will be able to apply rules and principles to new situations, discover rules and apply them to solve problems, use logic to draw conclusions from data, and differentiate between facts, influences, assumptions, and conclusions.
B. Compute: Students will be able to use basic numerical concepts, tables, graphs, charts, and basic geometric shapes to explain concepts or ideas.
C. Research: Students will be able to identify the need for data, obtain data from various sources, organize, process and maintain records of data collected, and analyze data for relevancy by using current technology.
D. Solve Problems: Students will be able to recognize whether or not a problem exists, identify components of a problem or issue, create a plan of action to resolve an issue, and monitor, evaluate and revise the plan as necessary.
3. Global Awareness: Students will be able to demonstrate an understanding of the world.
A. Scientific Observation and Methodology: Students will be able to apply scientific processes to solve problems and measure and observe natural phenomena; and will be able to design and perform experiments to analyze the major differences and connections between social, natural, and physical science.
B. Global Systems and Civic Responsibility: Students will be able to interface with people from a variety of backgrounds and analyze different cultural beliefs and behaviors; and will be able to recognize important economic and political issues in the local community, the state, the country, and the world. Students will also be able to evaluate the importance of the natural environment to human well being and the impact of human activity on the well being of the global environment.
C. Artistry: Students will be able to assess the visual arts, dance, music, and literature of many cultures, and will be able to analyze the methods used to create art and interpret its meaning. Students will also be able to engage in some artistic creative endeavors.
4. Personal Responsibility and Professional Development: Students will be able to demonstrate self-awareness, social and physical wellness, and workplace skills.
A. Self Awareness: Students will be able to accurately assess their own knowledge, skills, and abilities; to self motivate and set realistic goals; to accept criticism; and to respond appropriately to changing situations.
B. Social and Physical Fitness and Wellness: Students will be able to manage personal health and well being and to demonstrate appropriate social skills in group settings.
C. Workplace Skills: Students will learn to be dependable, reliable, and accountable; to meet deadlines and complete tasks; to maintain a professional attitude; and to work as a productive member of a team.

## Program-Level and Course-Level SLOs

The program-level SLOs can be found in the catalog embedded in the description of each program and Course-Level SLOs are printed in the syllabus provided by the instructor for each course.

## Study Abroad

The Study Abroad Program provides students with opportunities to enrich their educational experiences by studying abroad for a semester or a summer term, depending on the program, while receiving Fullerton College units. The program normally offers only courses that can be enriched by the foreign environment. In addition, students gain a multicultural experience by living in a society that is different from that of the United States.

Fullerton College works jointly with Cypress College of the North Orange County Community College District in offering this program. On several occasions Fullerton and Cypress have cooperated with other community college districts in the Study Abroad locations.

The foreign locations and the courses offered vary from semester to semester. Over the past decade Fullerton College has offered courses in China, Costa Rica, Germany, Great Britain, France, Italy, Spain, Australia, Ireland and the Czech Republic. The program in Cambridge, England has been repeated six times since its inception in 1986.

The courses offered in this program are Fullerton courses, which meet degree and transfer requirements, either as general education courses or elective units. Fullerton and Cypress faculty teach these courses.

There is an application process for interested students, beginning early in the semester prior to departure to the foreign location. For further information, call (714) 732-5688 or visit the website: http://studyabroad.fullcoll.edu.

## Tests/Exams

Class instruction includes frequent examinations throughout the semester so that students can judge their progress. Final examinations are required in all courses as a requirement for credit in the course.

## Wait Time for Late Instructors

Instructors are to include on their course syllabi or to notify their students at the first class meeting that if, due to unforeseen emergencies, the instructor does not arrive at the scheduled start time for class, students are to remain in class for fifteen minutes (unless otherwise notified by the division). If they do not receive notification to wait for their instructor to arrive, after fifteen minutes the students may leave with no penalty for absence or assigned work due for that class meeting.

## Withdrawal Policy

For the purpose of this policy, a " $W$ " is viewed as an indication that the student has withdrawn from a course without affecting the student's grade point average. Failure to officially withdraw by the established deadline date may result in the assignment of an "F" grade for the course.

## Instructor Initiated

Through 75\% of the course, a student may be withdrawn if no longer participating in the course. Definitions of non-participation shall include, but are not limited to, excessive unexcused absences. Refer to the Attendance Policy for additional information.

## Student Initiated

STUDENT RESPONSIBILITY - While an instructor officially may withdraw a student who has poor attendance, it is the student's responsibility to withdraw if the student does not continue in attendance. All student withdrawals are to be completed ONLINE through myGateway by the established deadline date. Failure to do so may result in the student receiving a failing grade.

## Recording on Transcripts

No "W" shall be recorded on the student's transcript when withdrawing from a course according to the following guidelines:
A. Full Term Courses: withdrawal prior to the third week of the term.
B. Short Term Courses (meeting less than the full term length): withdrawal by the $20 \%$ point of the length of the course.

A "W" will be recorded on the student's transcript when withdrawing from a course according to the following guidelines:
A. Semester Length Courses: withdrawal during the third week through the 12th week of the term.
B. Short Term Courses (courses less than a semester in length): withdrawal after the $20 \%$ point through $75 \%$ point of the course.

## Military Withdrawal

Students called to military service during a semester in progress should contact the Admissions and Records Office to have a "MW" (military withdrawal) noted on their academic transcript. A copy of military orders are required.

## College Policies and Rules

## Academic Freedom

(This represents Board Policy AP4030, adopted 2/12/08)
The Association of American Colleges and the American Association of University Professors have long recognized that membership in the academic profession carries with it special responsibilities. The protections provided under this section are correlative with certain duties. Academic freedom must be balanced with the obligation of the District to protect the right of students to learn in an environment characterized by civility, open inquiry, and rigorous attention to the search for the truth, free of unlawful discrimination.

It is recognized that an essential function of education is a probing of opinions and an exploration of ideas that may cause some students discomfort. The District affirms the use of a variety of teaching methodologies to fulfill its obligation to raise difficult and meaningful questions in the educational development of students in curricular and co-curricular settings. Faculty members are entitled to freely discuss issues germane to their subject matter as measured by professional standards set by the community of scholars. This freedom involves the right to introduce controversial topics, as long as the manner of presentation involves objective reasoning and rational discussion. There shall be no curtailment of faculty presentation of factual or theoretical material relating to all points of view.

Faculty are citizens, members of a learned profession, and officers of an educational institution. When they speak or write as citizens, they should be free from institutional censorship or discipline. However, when doing so, they should apply the best standards of their professions and make every effort to indicate they are not speaking for the institution.

The District will consult with discipline faculty chosen by the Academic/Faculty Senate with respect to contemporary practices and professional standards for course content and delivery when evaluating issues of academic freedom.

## Academic Honesty

Students are expected to abide by ethical standards in preparing and presenting material which demonstrates their level of knowledge and which is used to determine grades. Such standards are founded on basic concepts of integrity and honesty. These include, but are not limited to, the following areas:

1. Students shall not plagiarize, which is defined as
A. stealing or passing off as one's own the ideas or words of another, or
B. using a creative production without crediting the source.

The following cases constitute plagiarism:

- paraphrasing published material without acknowledging the source,
- making significant use of an idea or a particular arrangement of ideas, e.g., outlines,
- writing a paper after consultation with persons who provide suitable ideas and incorporating these ideas into the paper without acknowledgment, or
- submitting under one's own name term papers or other reports which have been prepared by others.

2. Students shall not cheat, which is defined as
A. using notes, aids, or the help of other students on tests or exams in ways other than those expressly permitted by the instructor, or
B. misreporting or altering the data in laboratory or research projects involving the collection of data.
3. Students shall not furnish materials or information in order to enable another student to plagiarize or cheat.

Instructors may deal with academic dishonesty in one or more of the following ways:

1. Assign an appropriate academic penalty such as an oral reprimand or point reduction.
2. Assign an "F" on all or part of a particular paper, project, or exam.
3. Report to the appropriate administrators, with notification of same to the student(s), for disciplinary action by the College. Such a report will be accompanied by supporting evidence and documentation.

See Student Conduct for additional information.

## Academic Renewal Policy

The Academic Renewal Procedure (51318, California Administrative Code) permits the alleviation of a student's previously-recorded substandard academic performance which is not reflective of the student's present demonstrated ability and level of performance. As a consequence, Academic Renewal may gain for students the benefits of their current level of ability and performance and not permanently penalize them for poor performance in the past.

Therefore, within the regulations listed, Fullerton College may disregard particular previously recorded substandard work from a student's cumulative grade point average.

The regulations for course alleviation follow:

1. Only units taken at Fullerton College may be alleviated, not units taken from another college(s). The maximum number of units that may be alleviated is 24 .
2. A minimum of twelve (12) units must be completed at any accredited college or university, with a grade point average of 2.5 in all units since the last semester of requested renewal.
3. A minimum of 12 months must have elapsed since the most recent coursework to be alleviated was recorded.
4. Courses that meet the present educational goals of the students and are appropriate for repetition may be exempt from consideration for alleviation.
5. Courses used in awarding an Associate Degree cannot be alleviated.
6. A student may be granted academic renewal only once and it is irreversible once posted to the transcript.
7. Academic renewal by Fullerton College does not guarantee that other institutions outside the District will approve such action. This determination will be made by the respective transfer institutions.
8. Only substandard grades (D, F, NC, NP) can be alleviated.

## Application for Academic Renewal

To apply for Academic Renewal, students must complete the petition form in the Admissions and Records Office. Official transcripts of all academic work (from all accredited schools) must be on file in the Admissions and Records Office at the time of request for Academic Renewal.

## Recording of Academic Renewal

When academic work is alleviated, grades are not removed. They are noted and subtracted from the grade point average. All entries remain legible so that a true and complete record is maintained. There is no assurance that alleviated courses will be treated similarly by other educational institutions outside the District.

## Children on Campus

Children are not allowed on campus unless supervised by a parent or guardian. Children may not attend classes or computer labs (unless the course is specifically designed to include children). Children must be supervised so educational activities are not interrupted and may not be left unattended in common areas such as the library, student center, food services area, quad or college parking lots.

## Drug-Free Environment

It is the policy of the North Orange County Community College District to maintain a drug-free educational, employment, and business environment. The unlawful manufacture, distribution, dispensing, possession, or use of alcohol or any controlled substance is prohibited on District property during Districtsponsored field trips, activities, or workshops, and in any facility or vehicle operated by the District. Any student who violates this policy will be subject to disciplinary action, which may include suspension, expulsion, and referral for prosecution. Information regarding the District's Drug-Free Environment Policy may be obtained by contacting the campus Office of the Vice President (714) 992-7074 or the Office of the District Director of Human Resources at (714) 808-4822.

## Compliance for Employees

The District intends to make every effort to provide and maintain a drug-free workplace. Pursuant to the Drug-Free Schools and Communities Act Amendments of 1989, it is unlawful to manufacture, distribute, dispense, possess, use or sell illicit drugs and alcohol in all buildings, property, facilities, service areas and satellite centers of the district. Any employee violating this policy will be subject to disciplinary action, which may include termination. Any employee convicted under a criminal drug and/or alcohol statute for conduct in the workplace or while on District business must report this conviction within five (5) calendar days to the Vice Chancellor, Human Resources.

## Compliance for Students

The District intends to make every effort to provide and maintain a drug-free campus. Pursuant to the Drug-Free Schools and Communities Act Amendments of 1989, it is unlawful to manufacture, distribute, dispense, possess, use or sell illicit drugs and alcohol in all buildings, property, facilities, service areas and satellite centers of the District. All students are required to comply with this policy as a condition of their continued enrollment. Any student violating this policy will be subject to disciplinary action, including suspension, and up to expulsion.

Legal Sanctions Under Federal, State and Local Laws are available in the following locations:

1. Student Activities Office, Building 200, Room 223
2. Campus Safety Department, 1500 Building

## Alcohol/Drug Abuse Counseling, Treatment, Rehabilitation Information

Referral information and Social Service Directories for Orange, Los Angeles, and San Bernardino Counties are available for students in the College's Student Health Center.

## Electronic Devices

The use of radios, electronic recording devices, CD players, iPods, or MP3 players without headphones is prohibited on campus except in connection with approved campus/classroom activities. NOTE: Electronic recording devices may only be used in classrooms with the permission of the instructor, or as an approved educational accommodation through Disability Support Services.

## Grade Change/Appeal Process

The College recognizes the legal right of faculty to set standards of performance and to apply them to individual students. Therefore, the instructor is the final authority in determining grades that are assigned to students and that appear in their permanent academic records. Students have a right to inquire how their grade was determined. Students have the right to have someone accompany them throughout the process. The following procedures apply to changes of grades except for changes of Incomplete (I) and Withdrawal (W) grades.

1. In general, all course grades are final when filed by the instructor. Students have access to view their final grades on myGateway after the course ends. These grades become a part of the student's official record.
2. Students have the right to formally appeal the final grade in a course. Students have the right to have someone accompany them throughout the process. As per California Education Code Section 476224(a), 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 mistakes, fraud, bad faith, or incompetency, shall be final. Appeals are limited to situations in which the student believes the grade is prejudicially, capriciously, or arbitrarily assigned.
3. A request for grade change should be initiated by the student within the next regular semester, but no later than two years, following the award of the original grade.
4. If the instructor determines that there is a valid basis for the change, a Request for Grade Change form shall be completed by the instructor in the Office of Admissions and Records.
5. If the instructor determines there is not a valid basis for the change and denies the student's request, the student may proceed to the appeals process.

Appeal form must be directed to the instructor of the course and a signed copy maintained by student. If further action is necessary, the student should present the written complaint to the Division Dean, and if necessary, the Vice President of Instruction. (Students are referred to the college's Student Complaint Procedures as stated in the catalog and available at division offices.) Once the grade appeal request has entered the formal process, it cannot be resolved informally.

## Nondiscrimination Statement

The policy of the North Orange County Community College District is to provide an educational, employment, and business environment, including but not limited to, access to its services, classes, and programs in which no person shall be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, gender, gender identification, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, or military and veteran status, or as otherwise prohibited by state and federal statutes, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics in any program or activity of the District that is administered by, directly funded by, or that receives any financial assistance from the Chancellor or Board of Governors of the California Community Colleges. Discrimination on the basis of sex or gender also includes sexual harassment.

The following person is designated by the North Orange County Community College District as the Responsible Officer/Section 504 and Title IX Coordinator for receiving and coordinating the investigation of all unlawful discrimination complaints filed pursuant to section 59328 of Title 5 of the California Code of Regulations, and for coordinating compliance with Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, Title IX of the Education Amendments of 1992, and response to discrimination complaints related thereto:

Name: Irma Ramos
Position: Vice Chancellor, Human Resources
Address: 1830 W. Romneya Drive
Anaheim, CA 92801-1819
Telephone: (714) 808-4826

Students and employees who believe they have been subjected to unlawful discrimination, including sexual harassment, or who seek information regarding the District's Unlawful Discrimination Policy should contact the Office of the Vice Chancellor, Human Resources.

## Victims of Sexual Assault

Students who are victims of sexual assault occurring on District property or on an off-campus site or facility maintained by the District, or who seek information or assistance regarding a sexual assault, should contact the campus Director of Health Services at (714) 992-7093 or the Director of Campus Safety at (714) 992-7080. Except as may otherwise be required by law, all inquiries will be maintained in confidence. Victims of sexual assault should immediately report the incident to the Campus Safety Department, Fullerton Police Department and the campus Title IX officer. The Title IX Officer for the campus is the Dean of Student Support Services (714) 992-7088. The Title IX Officer for the District is the Vice Chancellor of Human Resources (714) 808-4826.

## Prohibition of Harassment

The policy of the North Orange County Community College District is to provide an educational, employment, and business environment including but not limited to access to its services, classes, and programs in which no person shall be subjected to unlawful harassment and where such environment is free from unwelcome sexual advances, requests for sexual favors, sexual favoritism, or other verbal or physical conduct or communications constituting sexual harassment. It shall also be free of other unlawful harassment, including but not limited to harassment that is based on: ethnic group identification, national origin, religion, age, sex, gender, gender identification, gender expression, race, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, or military and veteran status of any person, or because he or she is perceived to have one or more of the foregoing characteristics. Students and employees who believe they have been harassed or retaliated against in violation of this policy should immediately report such incidents by following the procedures described in Administrative Procedure 3410, Unlawful Discrimination.

The following person is designated by the North Orange County Community College District as the Responsible Officer for receiving and coordinating the investigation of all unlawful harassment complaints, including sexual harassment:
Name: Irma Ramos
Position: Vice Chancellor, Human Resources
Address: 1830 W. Romneya Drive
Anaheim, CA 92801-1819
Telephone: (714) 808-4826

## Parking

All vehicles parking on campus must display a current parking permit or daily park-ur-self receipt on the lower driver side windshield facing outward with the number of the permit clearly visible. Daily parking permits are available from the yellow vending machines available in designated parking lots, the Campus Safety Office or the Bursar's Office.

Do not park in carpool parking spaces or specially reserved parking spaces. Students are encouraged to use alternate transportation methods such as walking, bicycles, carpooling, or public transportation to reduce parking congestion and pollution and to help conserve energy. Skateboarding, skating and bike riding are prohibited on campus grounds.

## Medical Parking

Students should purchase their parking permit at the time of registration. Students can go to the Campus Safety Office (1500 Bldg) and pick up a Verification for Temporary Medical Parking form to take to their medical provider and have it filled out. Students then bring that completed form to the Campus Safety Office along with their student parking permit. The student parking permit will then be exchanged for a medical parking pass that is good for only one semester and will allow them to park in staff lots (not handicap parking stalls).

Further parking information is available by contacting the Campus Safety Department at (714) 992-7080 ext. 0 or visiting Campus Safety.

## Petitions and Appeals

Petitions for extenuating circumstances and general appeals that relate to policies on admissions, readmission after academic dismissal, graduation requirements, grades and credit, repetition of courses, academic renewal, or withdrawals, etc., should be directed to the Admissions and Records Office. The Academic Standards Committee convenes monthly to review petitions.

## Probation and Dismissal Policy

In accordance with State regulations, the following probation and dismissal policy has been established. The primary purpose is to assure that a student is making progress toward an educational objective and to alert the student and the student's counselor to the possible need for additional counseling and/or special services.

## Placement on Probation

A. Academic Probation. A student who has attempted at least 12 semester units at the college shall be placed on academic probation if the student has earned a cumulative grade point average below 2.0 in all units taken at the college.
B. Progress Probation. A student who has enrolled in a total of at least 12 semester units at the college shall be placed on progress probation when the student receives grades of "W," "I," "NC" or "NP" in a total of $50 \%$ or more of all units for which the student has enrolled at the college.

## Removal from Probation

A. Academic Probation. A student shall be removed from academic probation when the student's cumulative grade point average in all units completed at the college is 2.0 or higher.
B. Progress Probation. A student on progress probation shall be removed from probation when the percentage of units in the "W," "I," "NC" or "NP" category drops below 50\% of all units for which the student has enrolled at the college.

## Standards for Dismissal

A. Academic Dismissal. A student who has been placed on academic probation and earned a cumulative grade point average of less than 2.0 in two consecutive semesters will be subject to scholastic dismissal.
B. Progress Dismissal. A student who has been placed on progress probation for two consecutive semesters shall be subject to scholastic dismissal.

For purposes of " $A$ " and " $B$ " above, consecutive semesters shall exclude the summer session. The college shall make a reasonable effort to notify a student who is subject to academic and progress dismissal no later than the start of the fall semester each year.

A student on probation who registers for the next term will be considered a "conditional registrant." Students are notified by mail when placed on probation or dismissed. Scholastic dismissal will be noted on the student's transcript.

## Re-Admission

A student who has been dismissed because of either poor academic achievement or poor progress may be considered for readmission on a conditional basis. The student must file a Petition for Readmission with the Admissions and Records Office. After the petition is reviewed by the Academic Standards Committee, the student will be notified by email.

A student who is readmitted after academic dismissal will be placed on a probationary status and shall be required to maintain a semester grade point average of 2.00 and a cumulative grade point average greater than 2.00 by the end of the next Spring semester.

A student who is readmitted after progress dismissal will be placed on a probationary status and shall be required to complete $50 \%$ or more semester units, and reduce the cumulative percentage of withdrawals, no credit, no pass and/or incompletes to less than $50 \%$ of the cumulative units enrolled by the end of the next Spring semester.

## Smoking on Campus

Fullerton College is a smoke-free campus. (NOCCCD AP 3570, based on Government Code 7697)

## Standards of Student Conduct and Discipline Policy

The standards of student conduct and disciplinary action for violation of Board Policy 5500 were approved by the NOCCCD Board on January 28, 2003, were revised on October 23, 2007, and were drawn in compliance with Sections 66300, 66301, 76030, 76033, 76034 and 76036 of the State Education Code.

Students are expected to respect and obey civil and criminal law and shall be subject to the legal penalties for violation of the city, county, state, and national law(s).

Student conduct must conform to Board Policy and college regulations and procedures. As cited in BP5500, "A student who violates the standards of student conduct shall be subject to disciplinary action including, but not limited to, the removal, suspension or expulsion of the student." Misconduct, which constitutes "good cause" for disciplinary action includes, but is not limited to, the following:

1. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, the open and persistent defiance of the authority of, or persistent abuse of, District personnel, or violating the rights of other students.
2. Failure to identify oneself when requested to do so by District officials acting in the performance of their duties.
3. Cheating, plagiarism in connection with an academic program (including plagiarism in a student publication), or engaging in other academic dishonesty.
4. Dishonesty, forgery, alteration, or misuse of District documents, records, or identification, or knowingly furnishing false information to the District.
5. Misrepresentation of oneself or of an organization to be an agent of the District.
6. Causing, attempting to cause, or threatening to cause physical injury or physical or verbal abuse or any threat of force or violence, to the person, property, or family of any member of the college community, whether on or off District property as defined above.
7. Willful misconduct which results in injury or death to a student or to District personnel, or which results in the cutting, defacing, or other damage to any real or personal property of the District.
8. Unauthorized entry into, unauthorized use of, or misuse of property of the District.
9. Stealing or attempting to steal District property or private property on District premises, or knowingly receiving stolen District property or stolen private property on District premises.
10. Causing or attempting to cause damage to District property, or to private property on North Orange County Community College District.
11. Unlawful use, sale, possession, offer to sell, furnishing, or being under the influence of any controlled substance listed in the California Health and Safety Code, section 11053 et seq., an alcoholic beverage, or an intoxicant of any kind, or any poison classified as such by Schedule D in Section 4160 of the Business and Professions Code or other State law defining controlled substance while on District property, or at a District function; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in the California Health and Safety Code, section 11014.5.
12. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the District.
13. Possession, sale, use, or otherwise furnishing of explosives, dangerous chemicals, deadly weapons or other dangerous object including, but not limited to, any facsimile firearm, knife or explosive on District property, or at a District function, without prior written authorization of the Chancellor, college president, School of Continuing Education Provost, or authorized designee.
14. Engaging in lewd, indecent, or obscene behavior on District property, or at a District function.
15. Violation of municipal, state, or federal laws in connection with attendance in programs or services offered by the District, or while on District property or at District-sponsored activities.
16. Soliciting or assisting another to do any act (including the purchasing, transporting or consumption of any controlled substance), while under the supervision of a District official, which would subject a student to expulsion, suspension, probation, or other discipline pursuant to this policy.
17. Attempting any act constituting cause for disciplinary action as identified in the above sections of this policy.
18. Committing sexual harassment as defined by law or by District policies and procedures.
19. Engaging in harassing or discriminatory behavior based on race, sex (i.e., gender), religion, age, national origin, disability, sexual orientation, or any other status protected by law.
20. Engaging in physical or verbal intimidation or harassment of such severity or pervasiveness as to have the purpose or effect of unreasonably interfering with a student's academic performance, or District employee's work performance, or of creating an intimidating, hostile or offensive educational or work environment.
21. Engaging in physical or verbal disruption of instructional or student services activities, administrative procedures, public service functions, authorized curricular or co-curricular activities or prevention of authorized guests from carrying out the purpose for which they are on District property.
22. Stalking, defined as a pattern of conduct by a student with intent to follow, alarm, or harass another person, and which causes that person to reasonably fear for his or her safety, and where the student has persisted in the pattern of conduct after the person has demanded that the student cease the pattern of conduct. Violation of a restraining order shall, without more, constitute stalking under this policy.
23. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct or where the presence of the student causes a continuing danger to the physical safety of students or others.
24. Engaging in expression which is obscene, libelous, or slanderous according to current legal standards, or which so incites students as to create a clear and present danger of the commission of unlawful acts on District property, or the violation of the lawful administrative procedures of the District, or the substantial disruption of the orderly operation of the District.
25. Use of the District's computer systems or electronic communication systems and services for any purpose prohibited by Administrative Procedure 3720, Computer \& Electronic Communication Systems, or for any act constituting cause for disciplinary action as provided in this policy.

Furthermore, no student shall be suspended from a college or School of Continuing Education program or expelled unless the conduct for which the student is disciplined is related to college, School of Continuing Education or District activity or attendance. Any violation of law, ordinance, regulation or rule regulating, or pertaining to, the parking of vehicles, shall not be cause for removal, suspension, or expulsion of a student.

The Chancellor shall establish procedures for the imposition of discipline on students in accordance with the requirements for due process of law. The procedures shall identify potential disciplinary actions including, but not limited to, the removal, suspension or expulsion of a student.

The Chancellor shall establish procedures by which all students are informed of the rules and regulations governing student behavior.

## Summary Suspension

When serious violations of college regulation or procedures occur as a result of inappropriate student conduct, the college shall take immediate action (summary suspension) to resolve the problem. The action may occur as follows:

1. Removal from Class - the involuntary removal of a student from class by an instructor for a maximum period of two consecutive class sessions.
2. Removal from Facility - the involuntary removal of a student by an administrator from a District or College facility, or facility under the control of the District or College for a maximum period of two consecutive days.
3. Withdrawal of Consent to Remain on Campus withdrawal of consent by the President or the President's designee for a student or other person to remain on a College campus in accordance with California Penal Code section 626.4 where the College President has reasonable cause to believe that the student has willfully disrupted the orderly operation of the campus.

## Definitions:

1. Expulsion - The involuntary removal of a student from the District and all District programs for one or more terms, or permanently, by action of the Board of Trustees.
2. Formal Hearing - A hearing conducted before a hearing officer or hearing panel in accordance with administrative procedures during which the student and the District may call and examine witnesses and present documentary evidence.
3. Formal Complaint - This procedure is recommended for general serious or ongoing complaints or concerns regarding Fullerton College faculty, staff, services, instruction and/or classes. Any and all should be addressed as soon as the issue arises. Grade appeals follow the Grade Appeal Process. The student should refer to the Fullerton College Catalog for the specific processes for these exceptions: student-to-student conduct, grade appeal and sexual harassment.
4. Informal Hearing - A meeting between the student and the Student Discipline Officer or designee in accordance with administrative procedures to discuss the charges and provide the student with the opportunity to respond to the charges orally, or in writing.
5. Informal Complaint - Informal concerns of a non-serious nature may be reported to the appropriate Dean. Such complaints will be reviewed and considered; however, no formal response will be provided.
6. Suspension - The involuntary removal of a student for good cause from one or more classes or from the college by the President or designee for a limited period of time, which can be short-term or long-term suspension (up to ten consecutive days).
7. Removal from Class - The involuntary removal of a student from class by an Instructor for a maximum period of two consecutive class sessions.
8. Removal from Facility - The involuntary removal of a student by an administrator from a District or College facility, or facility under the control of the District or College, for a maximum period of two consecutive days.
9. Disciplinary Probation - A status between good standing and suspension or expulsion. It covers a stated trial period and disciplinary conditions required of the student. At the end of the trial period, it shall be determined, based on whether or not the probationary conditions have been met, if the student is to be returned to good standing, suspended, recommended for expulsion, or subject to other disciplinary action.
10. Loss of Privileges - Disciplinary action involving the loss of certain student privileges, such as eligibility to participate in extracurricular activities, for a stated period of time.
11. Formal Reprimand - Written admonition or warning to cease and desist from conduct that has been determined to violate the standards of student conduct. A formal reprimand becomes part of a student's permanent record and is considered in the event of future violations of the standards of student conduct.
12. Informal Reprimand - An oral admonition or warning to cease and desist from conduct that has been determined to violate the standards of student conduct. A record of the fact that an informal reprimand has been issued may be retained as part of a student's record for a period of up to one year and is considered in the event of future violations of the standards of student conduct during the period of retention. It is the student's responsibility to request that the record be removed upon expiration of the period of retention.
13. Withdrawal of Consent to Remain on Campus Withdrawal of consent by the President or the President's designee for a student or other person to remain on a College campus in accordance with California Penal Code section 626.4 where the College President has reasonable cause to believe that the student has willfully disrupted the orderly operation of the campus.

## Student Complaint Process

## Informal

The student shall resolve the issue directly with the faculty or staff member directly involved. Students who are uncomfortable speaking to the faculty or staff member have the right to have someone accompany them throughout the process.

## Formal

1. It is the student's responsibility to initiate the formal complaint process. The college has a legal responsibility to deal directly with the student. The designated complaint forms will be available in division offices.
2. The student should contact the appropriate division/area office to initiate the formal complaint process. A signed complaint form should be addressed to the Dean or Director of the division/area.
3. If the student feels the issue is not resolved at the division/ area level, or if the complaint concerns the Dean or Director, the student can ultimately contact Fullerton College's Vice President of Student Services or the Vice President of Instruction. Both offices are located on the first floor of Building 100.
4. The student will be notified in writing after each formal step using the designated student complaint form.

## Student Right-to-Know Act

Student Right-to-Know (SRTK) is a federally-mandated public disclosure of specific college-related information, as per the U.S. Code of Federal Regulations (CFR): Title 34 - Part 668. The following highlights are sub-sections of the two basic laws that mandate specific college information:

## CFR: Title 34 — Part 668.46: Information on Completion or Graduation Rates

The college completion rates or graduation rates (including transfer rates and student athlete rates - Part 668.49) will be made accessible to the public. The rates are derived from yearly IPEDS - Graduation Rate Survey submissions and are currently coordinated through the California Community College Chancellor's Office under the terms of the "Student Right-to-Know Subscription Agreement." SRTK rates are based upon approximately three percent (3\%) of the student population.

## Publication Requirements

It is mandatory that the statistics for completion and graduation rates and crime activities are made public by January 1st of each year (unless otherwise indicated) to all current and prospective students and high school counselors in the areas of admissions, literature, brochures, catalogs, and websites, or anytime a student enters into a financial obligation with a school (excluding application fees). Data on remedial instruction, job and training programs, retention of student and graduation and completion rates are available through a link on the Fullerton College website (http://scorecard.cccco.edu/scorecardrates.aspx?collegeID=862) to the California Community Colleges Student Success Scorecard.

## Completion and Transfer Rates

Over 1,350 students transfer annually from Fullerton College to UC, CSU or regionally-accredited California independent or out-of-state colleges or universities.

- Fullerton College sends approximately 85-90\% of all transfers to California State University campuses. The top CSUs in terms of number of Fullerton College transfers are: Cal State Fullerton, Cal State Long Beach and Cal Poly Pomona
- Fullerton College transfers students statewide. The top UCs in terms of number of Fullerton College transfers are: UC Irvine, UC Los Angeles, UC Riverside and UC Berkeley
- Fullerton College is in the top five California Community Colleges in terms of overall transfers to the University of Southern California (USC).


## Campus Safety Institutional Security Policies and Crime Statistics

| CRIMES | ON-CAMPUS |  |  | PUBLIC PROPERTY |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| Murder/Non-Negligent Manslaughter | 0 | 0 | 0 | 0 | 0 | 0 |
| Negligent Manslaughter | 0 | 0 | 0 | 0 | 0 | 0 |
| Forcible Sex Offenses | 0 | 1 | 0 | 0 | 0 | 0 |
| Non-Forcible Sex Offenses | 0 | 0 | 0 | 0 | 0 | 0 |
| Arson | 0 | 0 | 0 | 0 | 0 | 0 |
| Robbery | 0 | 0 | 0 | 0 | 0 | 1 |
| Aggravated Assault | 3 | 1 | 0 | 0 | 0 | 0 |
| Burglary | 5 | 0 | 4 | 0 | 0 | 0 |
| Motor Vehicle Theft | 1 | 3 | 2 | 1 | 0 | 0 |
| SPAyyyyy |  |  |  |  |  |  |

## SPECIAL CATEGORY ARREST

| Weapons Possession | 1 | 1 | 0 | 0 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Drug Abuse Violation | 4 | 3 | 3 | 0 | 0 | 0 |
| Liquor Laws | 0 | 0 | 0 | 0 | 0 | 0 |
| Hate Crimes | 0 | 0 | 0 | 0 | 0 | 0 |

ARRESTS AND DISCIPLINARY REFERRALS

| Hate Crimes | 0 | 1 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Violation of Drugs | 3 | 2 | 5 | 0 | 0 | 0 |
| Violation of Liquor Laws | 1 | 3 | 0 | 0 | 0 | 0 |
| Violation of Weapons | 1 | 0 | 0 | 0 | 0 | 0 |

VIOLATION AGAINST WOMEN ACT (VAWA)

| Sexual Assault |  |  | 2 |  |  | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Domestic Violence |  |  | 1 |  |  | 0 |
| Dating Violence |  |  | 0 |  |  | 0 |
| Stalking |  |  | 2 |  |  | 0 |

## CFR: Title 34 — Part 668.47: Institutional Security Policies and Crime Statistics

Public Law 101-542: The Higher Education Act of 1965 was amended via the current Student Right-to-Know and Campus Security Act through Public Laws 102-26, 102-208 and 102-325. The regulations require the college to disclose information about campus safety policies and procedures and certain crime statistics.

The Act also requires additional information including security policies. A full text of the security policies can be found on the Campus Safety internet site, www.campussafety.fullcoll.edu.

Please refer to the Annual Security Report.

## Safety for the Fullerton College Community

Campus safety and personal safety is everyone's business at Fullerton College. Students, faculty, staff and visitors are partners in creating an atmosphere that is safe and conducive to a positive learning environment.

Fullerton College maintains a Campus Safety Department with officers available 24/7. Individuals are encouraged to report all crimes to the Campus Safety Department in a timely manner. The Campus Safety Department (1500 Bldg, south of the fourstory parking structure off Lemon Street) can be reached at (714) 992-7080, ext. 0 for routine business and (714) 992-7777 for emergencies. There are also many emergency phones throughout the campus that will immediately connect any student with a Campus Safety officer.

Fullerton College is a safety department and not a police department. Fullerton College has an MOU with the Fullerton Police Department to investigate all crimes on the Fullerton College campus. The Fullerton Police Department is located at 237 W . Commonwealth Avenue, Fullerton, CA 92832, (714) 738-6700. Students, staff, faculty and visitors are encouraged to report all crime to the Fullerton Police Department.

## Access to Campus Facilities

BUILDINGS - Fullerton College Campus Safety officers have the authority to ask persons for identification and determine whether individuals have lawful business at Fullerton College. Most campus buildings are open from 6:30 am to 10:30 pm, Monday through Friday. On weekends, opening of specific buildings is accomplished based upon scheduled use and/or special request.

Individuals who need to be in campus buildings or areas other than during regularly-scheduled work hours should notify the Campus Safety Department of their presence and request access to the building.

Some campus rooms and areas may be protected by intrusion alarms. Before entering such areas, the Campus Safety Department should be called. Campus buildings will normally be locked from 11:00 pm on Friday to 6:30 am on Monday. As previously stated, Campus Safety personnel will unlock doors for weekend classes and other events as published in the Master Calendar located at www.fullcoll.edu under "Campus Calendar."

COLLEGE PROPERTY - No district property may be removed from the campus without expressed written permission from the Division Dean or Area Supervisor. Unauthorized removal of district property from the campus is a violation of the law and may be prosecuted by the District.

## Campus Safety Services

It is the policy of the North Orange County Community College District's Board of Trustees to protect the members of the total college community and to protect the property of Fullerton College. Under the general direction of the Vice President of Administrative Services, the Campus Safety Department shall ensure that reasonable protection is provided by using methods that fit within and contribute to the educational philosophy and process of the institution.

Fullerton College has a formal memorandum of understanding with the Fullerton Police Department to request assistance for incidents that require resources not available at Fullerton College. The college will summon the assistance of other agencies to provide services for incidents that require special resources.

## Crime Prevention

One of the essential ingredients of any successful crime prevention program is an informed public. It is the intent of Fullerton College to inform students and staff, in a timely manner, of any criminal activity or security problems which may pose a reasonable threat to their physical safety. Such information will normally be distributed through various means, such as cell phone alerts, social media alerts, reported on the campus website, student publications, and/or memos or bulletins.

Another critical element of a campus safety program is training. Campus Safety, Student Health Services, and the Student Activities offices sponsor programs on various topics ranging from sexual assault awareness to substance abuse prevention.

Finally, all effective crime prevention programs include some measure of people watching out for one another. All staff and students are asked to be ALERT, SECURITY CONSCIOUS and INVOLVED. To report suspicious behavior, call the Campus Safety Department business line at (714) 992-7080 or emergency line at (714) 992-7777.

## Substance Abuse

In accordance with Public Law 101-226 "Drug-Free Schools and Communities Act Amendment of 1989," the Board of Trustees of the North Orange County Community College District prohibits the unlawful possession, use, or distribution of illicit drugs and alcohol by students, employees, and the public, on Fullerton College property and as part of any Fullerton College sponsored or sanctioned activity.

Any students or employees in violation of this policy are subject to disciplinary action up to and including expulsion from Fullerton College or termination from employment for violations of the standards of conduct.

The decision to take disciplinary action in any instance rests with the Board of Trustees after consideration of the recommendations of the Fullerton College President.

The possession, use, and sale of alcoholic beverages by anyone on Fullerton College-controlled property is a misdemeanor as per California Business Code 25608 and a violation of the NOCCCD Policies Relating to Students. The use, sale, or possession of any illegal drug is a violation of State law and any person found in violation may be subject to arrest by Federal, State, local or Campus Safety personnel. Criminal prosecution is separate from any administrative discipline that may be imposed by the District.

## For more information, contact:

## FC Admissions and Records

(714) 992-7075

2000 Building — 1st Floor

## FC Student Activities

(714) 992-7095

200 Bldg, Room 223

FC Campus Safety
(714) 992-7080

1500 Building
FC Cadena/Transfer Center
(714) 992-7086

200 Bldg, Room 212

For a complete Campus Safety Plan and/or more detailed information regarding the Student Right-to-Know and the Jeanne Clery Disclosure, visit the Fullerton College website: www.fullcoll. edu/ - at the Student Services drop-down menu, click on Campus Safety/Parking. Once there, click on Student Right-to-Know.

## Withholding Student Records

NOCCCD BOARD POLICY Section 5035 Student Personnel, Withholding Student Records, Adopted 6/14/05

Probable Cause: The President, or designee, may place a hold on a former or current student's registration, grades and/or transcripts for a period of no more than three working days for probable cause. In the event that the President, or designee, continues this hold on a student's records, the student must be informed in writing that such a hold is being placed on his/her record and the reason for that hold.

Financial Obligations: In accordance with Title 5, Subchapter 7.5, Section 59410, grades, transcripts, diplomas, and registration privileges, or any combination thereof, shall be withheld from any student or former student who has been provided with written notice that he or she has failed to pay a proper financial obligation due to the district or a college. Any item or items withheld shall be released when the student satisfactorily meets the financial obligation.

The definition of proper financial obligation shall include, but is not limited to: student fees; obligations incurred through the use of facilities, equipment or materials; library fines; unreturned library books; materials remaining improperly in the possession of the student; and/or any other unpaid obligation a student or former student owes to the District. A proper financial obligation does not include any unpaid obligation to a student organization.

A hold may be placed on a student's academic record and subsequent term registration when the student has an outstanding obligation to the college. Once the student satisfies the obligation, the hold will be released.

Students must contact the respective office/department listed below to clear any hold:

## Hold Type

Accounts Receivable Admissions Info Required Bursar's Hold
Disciplinary
Financial Aid
Foundation
International Student
Library Materials/Fees
Physical Education
Registrar's Hold
Scholastic Dismissal
Special Admit Form
Transcript
Unpaid Balance

## Office to Contact

Bursar
Admissions and Records
Bursar
Student Support Services
Financial Aid
Foundation Office
International Student Center Library
Physical Education
Admissions and Records
Admissions and Records
Admissions and Records
Admissions and Records
Admissions and Records

## Support Programs and Services

## Academic Support Center (ASC)

800 Bldg (LLRC), 1st Floor - (714) 992-7065 academicsupport.fullcoll.edu

The Academic Support Center (ASC) provides free services to ALL Fullerton College students and staff to help them achieve academic success. The Center is comprised of three related areas: the Skills Center, the Tutoring Center, and the Writing Center.

Skills Center - (714) 992-7144 Room 801
Email: skillscenter@fullcoll.edu
Website: skillscenter.fullcoll.edu

- Self-paced support for skill development in study skills, critical thinking, science, English and a variety of other subjects
- Administration of make-up exams for all Fullerton College courses
- Instructional lab support for courses in reading, English as a Second Language, foreign languages, and writing

Tutoring Center - (714) 992-7151 Room 806
Email: tutoringcenter@fullcoll.edu
Website: tutoringcenter.fullcoll.edu

- Free tutoring for most college courses by CRLA-trained, faculty-recommended tutors
- Walk-in tutoring for accounting, chemistry, physics, math; appointment tutoring for most other academic subjects
- Various workshops offered each semester
- ESL Specialist tutors provide individual and small group tutoring, workshops, and conversation groups
- Computers available for academic use

Writing Center - (714) 992-7153 Room 808
Email: writingcenter@fullcoll.edu
Website: writingcenter.fullcoll.edu

- One-on-one writing consultations
- Assistance with all stages of the writing process in all disciplines
- Appointments available: 30-minute sessions (2) per week; DSS and EOPS students may receive additional time
- Walk-in tutoring often available.


# Admissions and Records 

2000 Bldg, 1st Floor - (714) 992-7075 admissions.fullcoll.edu

The Admissions and Records Office admits and registers all students; maintains, retrieves, and distributes student records and transcripts; serves as the final evaluation of all graduation applications; reports attendance data to appropriate agencies; and provides information and support to students, faculty, administrators, and the community.

## Assessment/Orientation Center

3000 Bldg, Rm 3023 - (714) 992-7417 assessment.fullcoll.edu

The Fullerton College Assessment Center offers required assessment tests for enrollment in math, English, reading, ESL and chemistry courses. All placement testing is by appointment only. Walk-in testing is NOT available. A picture ID and a valid FC ID\# is required in order to take assessment tests. The assessment test is not a timed test, but allow 2-1/2 hours to complete all three sections of the assessment test and one hour for each single subject test. Upon completion of the assessment and orientation, new students will be scheduled for a group advising session.

## Students can schedule their assessment test at assessment.fullcoll.edu.

## Bookstore

## 2000 Bldg, 1st Floor - bookstore.fullcoll.edu

Offering all of the materials needed for Fullerton College students to succeed in their education, the Bookstore is located in the Student Services Building (2000) facing Chapman Avenue. A complete selection of the textbooks and course materials required or recommended by faculty is arranged in easy-to-locate fashion by department, course numbers and CRN. In addition, extensive classroom and office supplies, study aids, college clothing, giftware, small electronics, books, and snacks are available in the store. During the semesters, the Bookstore is open Monday through Thursday 7:30 am to 6:00 pm, and Friday 7:30 am to 5:00 pm. Special hours for breaks, holidays, rush periods, and inventory are posted in the Bookstore, at bookstore.fullcoll.edu and on Facebook. Students may also call (714) 992-7008. Online textbook ordering at bookstore.fullcoll.edu.

## Cadena Cultural Center

## College Center, Room 212, 1st Floor - (714) 992-7086 cadena.fullcoll.edu

The Cadena Cultural Center supports the mission and core values of the college in serving the needs of its diverse student population. The center strives to be an advocate and the nexus for the community to engage in conversations and actions to enhance multiculturalism at Fullerton College.

The center offers students, faculty, and staff information about serving the needs of AB540, undocumented students, Lesbian/ Gay/Bisexual/Transgender/Queer/Inter-sexed/Questioning, as well as students from historically underrepresented groups such as African American, Native American, Latino/a, and Asian/Pacific Islander.

Center staff encourages the entire campus community to attend and participate in the center activities and services. The following services are provided to the campus community:

- Cultural celebrations
- Tours to local museums and cultural sites
- Guest speakers
- Seminars
- Student forums and conversation circles
- Library of films and documentaries


## CalWORKs

## 315 N. Pomona (west of campus between Whiting and Wilshire) - (714) 992-7101 - calworks.fullcoll.edu

The CalWORKs Program is designed for students who are receiving AFDC/Welfare. Students are assigned to a CalWORKs Counselor who provides the guidance and support needed to achieve academic success while meeting welfare-to-work requirements. A team approach is used to advocate for student rights. Services include:

- Academic, career, and personal counseling
- Child care grants for both on- and off-campus child care
- Referral to both on- and off-campus resources for basic needs and emergency support services which include housing/ emergency shelter, food, clothing, rental and utility assistance, mental health, etc.
- Collaboration with on-campus programs in order to ensure student needs are met (DSS; EOPS/CARE; Financial Aid; Skills Center, etc.)

Students who are considering applying for cash aid are encouraged to schedule an appointment with a CalWORKs Counselor prior to application, in order to secure an overview of the county CalWORKs Program requirements. Students that have been sanctioned and want information regarding how to cure their sanction are also encouraged to contact the office. Office hours: MondayFriday, 8 am-5 pm.

## CalWORKs Program Eligibility

- Parents as well as children must be receiving cash aid (i.e., parents who are no longer receiving cash aid and are only receiving cash aid for their children are not eligible);
- Must be able to provide proof of program eligibility via county documentation in order to receive CalWORKs program services;
- No unit minimum.


## Campus Dining

## 200 Bldg - (714) 732-5784 - fullcolldining.com

The Food Court, located in the College Center (Building 200), features several branded concepts including The Grille at Fullerton, Wholly Habaneros, Slice of Life Pizza and Pasta, Buzzy's Deli-Salad Station, Simply-To-Go featuring a wide variety of freshly made grab-and-go items, and Jamba Juice.

Stinger's Café, located in the Historic Library Courtyard (Building 840), offers Starbucks coffees and espressos with Simply-To-Go items made fresh daily.

Beverage and snack vending units are located throughout the campus for 24/7 availability.

## CARE: Cooperative Agencies and Resources for Education

## 2000 Bldg, 2nd floor - (714) 992-7097 - eops.fullcoll.edu

CARE was established by the State of California in 1982 as a supplemental component of EOPS to provide support services and activities for the single, head of household student, who also receives CalWORKs/TANF funds as income assistance. This program was designed to promote self-sufficiency through education, training and student support services. The CARE program offers the following services to eligible participants:

- Academic Counseling
- Auto Repair Grants
- Book Service Award (bookstore credit for textbooks)
- Educational Supplies
- Transportation Support (parking permits, bus passes and/or gas cards)
- Campus Meal Cards
- Seminars, Workshops and Motivational Events
- Life, Career and Academic Planning
- EOPS/CARE Counseling Courses
- Community Resources and Referrals
- Application Support (Financial Aid, Scholarship, Transfer, Job...)
- Tutoring


## CARE Program Eligibility

- Must be qualified for EOPS (please see EOPS qualifications)
- Must be 18 years of age or older
- Currently receiving cash aid benefits (or dependent child(ren) are receiving cash aid)
- Designated by county/state as single head of household
- Have at least one child under 14 years of age

There are additional program requirements that a student must meet each semester to remain eligible and served by CARE. Please contact the EOPS/CARE office for more information.

## Career and Life Planning Center

## 2000 Bldg, 2nd Floor - (714) 992-7121 — careercenter.fullcoll.edu

The Career and Life Planning (CLP) Center's mission is to provide students assistance with making informed decisions and choosing a major and career. The CLP Center embodies Fullerton College's vision, creating a community that promotes inquiry and intellectual curiosity, personal growth and a life-long appreciation for the power of learning. The Career Planning Process encourages students to research, network, and experience their choices to begin career exploration in order to make and/or confirm their decisions (as described on our website). Services are available to students throughout the career development process which include:

- career research assistance to facilitate career exploration
- career counseling to assist with career decision-making (during non-registration times)
- workshops on various career development topics
- resume and cover letter writing assistance
- mock interviews
- career-related assessments (free and fee-based)
- online occupational and educational databases
- postings of full-time, part-time, and temporary employment opportunities


## Child Development Laboratory School

1830 Bldg - (714) 992-7069 - jeverett@fullcoll.edu<br>(714) 992-7070 — apage@fullcoll.edu

The Child Development and Educational Studies Laboratory School has been in continual operation since 1959 and is an important component of the Child Development and Educational Studies Department and Social Sciences Division. The Lab not only provides a quality educational environment for pre-school aged children and their families, it also serves as a training and demonstration school for students interested in the fields of Child Development and Early Childhood Education.

The Lab is licensed by the Department of Social Services, and funded in-part by the State Department of Education. The center serves families without regard to sex, race, religion, ethnicity or sexual preference and makes every effort to accommodate children with varying abilities.

The Lab School is open year round, Monday through Friday, 7:30 am-6:00 pm, but is closed for specific campus holidays. All children in attendance receive a nutritious breakfast, lunch and afternoon snack.

There is typically a waiting list to attend the Lab School. Preference is given to Fullerton College students, faculty, and staff; however, families from the community are strongly encouraged to apply.

## Counseling and Student Development

## 2000 Bldg, 2nd Floor - (714) 992-7084 counseling.fullcoll.edu

The Fullerton College Counseling and Student Development Division provides services for students through the Counseling Center, the Counseling Resource Center, the Career and Life Planning Center, the Cadena/Transfer Center, the Assessment Center, Disability Support Services, the Veterans Resource Center and the Career Center. In addition, the division provides student development courses in College Study Skills, Career Development and Educational Planning. (See course offerings under Counseling.)

The center also provides online counseling. This web-based email service is available on the Fullerton College website and allows students to ask general counseling questions. This service is not intended to take the place of in-person appointments, but rather as a resource for general questions.

The Counseling Center offers new, continuing and returning students individual appointments with counseling faculty to:

- Assist students in appropriate selection of math, English and basic skills courses
- Assist students in clarifying their career goals
- Assist students in preparing a Student Educational Planning Program (SEPP), which meets the requirements for college majors, career preparation and transfer to four-year colleges and universities
- Assist students in resolving concerns about life management issues
- Provide information on college policies and regulations
- Provide orientation and new student group advising
- Provide students with information on transfer, major preparation, and general education requirements
- Provide students with unofficial progress checks for certificates, associate degrees and transfer requirements
- Provide unofficial evaluations of other college transcripts
- Provide walk-in general information counseling


## Disability Support Services

## 840 Bldg, Room 842 - (714) 992-7099 - dss.fullcoll.edu

The Disability Support Services (DSS) office provides a variety of services for students with documented disabilities, including learning disabilities, visual, hearing and mobility impairments, psychological conditions, acquired brain injuries, and other medical disabilities. Services are provided in compliance with state and federal legislation.

In accordance with federal and state regulations, procedural language has been established to address the provision of educational accommodations to students with disabilities who are otherwise qualified to participate in the College's courses, programs and activities.

The DSS office supports students in achieving their educational goals by providing services and accommodations in a timely and effective manner.

Students who have a verifiable disability qualify for support services through the DSS office. The services are designed to support students in the achievement of their academic and career vocational goals. Reasonable accommodations are determined by the DSS counselor/specialist on an individual basis. Services and accommodations are based on the educational abilities and functional limitations unique to each student.

In order to receive services from DSS, one must:

1) Be currently enrolled as a Fullerton College student; and
2) Provide detailed documentation of a disability from an appropriate professional and/or participate in the learning disability assessment process through DSS.

## Services That May Be Provided:

- Test taking accommodations
- Specialized counseling
- New DSS student orientation
- Early registration accommodation
- Alternate media
- Notetaking assistance
- Interpreting services
- Learning disability assessment
- Assistive and adaptive technologies
- Adaptive computer and learning strategies classes


## Entering Scholars Program (ESP)

500 Bldg, Room 800C - (714) 992-7170

The Entering Scholars Program (ESP) is a comprehensive program designed with first-time college students in mind. ESP classes incorporate student success activities designed to support students new to Fullerton College.

## EOPS: Extended Opportunity Program and Services

2000 Bldg, 2nd Floor - (714) 992-7097 - eops.fullcoll.edu

Extended Opportunity Program and Services is a support services program designed to provide entry, retention and transition services for educationally and economically disadvantaged students. These support services are designed to assist and contribute to the student's academic success.

## Counseling Services

Experienced staff are available to assist students in adjusting to the college environment by providing information on campus policies, financial aid, scholarships, campus, and community referrals. The counseling staff is comprised of professional counselors and paraprofessionals. Professional counselors are available for guidance, assessment, academic, career and personal counseling. Paraprofessionals assist in class scheduling, registration and a variety of other services for the purpose of supporting student retention and successful transition to either employment or higher education.

## Financial Aid Information

The EOPS Financial Aid specialist acts as the formal link between EOPS and the Financial Aid Office. The specialist provides assistance to students in applying for the various types of financial aid available and in completing the various financial aid forms. Assistance is available in the research and application for appropriate scholarships.

## Information on Eligibility

The following eligibility criteria apply in order for a student to be considered for the EOPS Program:

- Completed less than 70 units (or 6 semesters) of college level coursework
- Educationally disadvantaged as determined by the EOPS Program
- Enrolled full time (12 units) when accepted by the EOPS Program
- Qualified to receive a Board of Governors Grant (BOGG)
- Resident of California


## Outreach Services

This component provides prospective students with information and assistance on admissions and services available at Fullerton College. Efforts are focused on the local high school campuses and in the community to identify EOPS eligible students interested in Fullerton College. Prospective students are provided with college presentations, seminars, and a College Preparation Conference.

## Financial Aid

## 100 Bldg, Room 115 - (714) 888-7588 -

financialaid.fullcoll.edu
FINANCIAL AID OFFICE MISSION - The mission of the Financial Aid Department is to provide information and financial aid support to all eligible students attending Fullerton College. Staff members are devoted to the educational needs of all individuals in the community and the varying specific educational needs of our students. Whatever the student's major or career goal, Financial Aid helps the students know more about Financial Aid and the application process at Fullerton College. Their motto is "Financial Aid and You: Working Together for Student Success."

APPLICATION PROCEDURE - Students wishing to apply for financial aid should submit a FAFSA (Free Application for Federal Student Aid) at www.fafsa.gov and list the Fullerton College school code, which is 001201 . The application period for financial assistance for the 2016-2017 school year is January 1, 2016 through June 30, 2017. Students are strongly encouraged to select the IRS Data Match on the FAFSA to expedite the processing of their financial aid file. When the student receives his/her SAR (Student Aid Report) from the Department of Education, the next step is to go to the Fullerton College Website, sign in to myGateway, click on Student Links and follow the applicable steps. Complete any supporting documentation as requested on myGateway.

ELIGIBILITY - Specific eligibility requirements may be found in the Consumer Brochure on the Fullerton College Financial Aid website. Basic Federal grant eligibility criteria are as follows:

- Demonstrates a financial need according to a recognized Federal system on need analysis
- Does not owe a repayment on any previously-received Federal grants
- Does not yet possess a Bachelor's Degree
- Enrolled as a regular student in an eligible program
- Has no drug-related convictions while on Financial Aid
- Maintains satisfactory academic progress
- Males must be registered with the Selective Service System
- May not be in default on any Perkins, Stafford, Plus or Direct Loan
- Possesses a high school diploma, GED certificate
- Student must be a U.S. citizen, or eligible non-citizen
- Working toward a degree or certificate program

Basic Loan eligibility criteria are:

- Demonstrates a financial need
- Enrolled in at least 6 units (half time)
- Maintains satisfactory progress
- Prior loan aggregate amounts are taken into account to determine loan eligibility


## Programs

## FEDERAL PELL GRANT

A grant from the Department of Education to students for educational expenses based on need

## FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)

Designed to assist students who have exceptionally high financial need and are eligible for the Pell Grant

## FEDERAL WORK-STUDY (FWS) PROGRAM

Provides jobs for students who need financial aid and meet the need and eligibility requirements. FWS allows students to earn money to help pay for educational expenses. Must be enrolled at least half time and say "yes" to the WorkStudy question on the FAFSA Application.

## FEDERAL DIRECT SUBSIDIZED LOAN PROGRAM

Provides students with low-interest loans for educational expenses (which are subsidized by the government as long as the student is enrolled at least half-time in college courses). The interest rate may vary from year to year.

## FEDERAL DIRECT UNSUBSIDIZED LOAN PROGRAM

Provides loans for students who do not qualify, in whole or in part, for subsidized loans. Authorized under a federal law called the Higher Education Amendments of 1992, the terms of the unsubsidized loans are the same as the terms for subsidized loans, except the interest begins to accrue immediately, and can be paid quarterly or capitalized and paid at the end.

## CAL GRANTS

Cal Grant is a grant offered by the State of California and is open to California residents and Dream Act students attending a college or university in California. The grant has an annual application deadline of March 2nd for the following academic year, and is based upon need, income, and GPA. There is an additional deadline of September 2nd for California Community College only. Students must file both a completed FAFSA or Dream Act application, and a GPA Verification Form prior to the deadline, in order to be considered. Note: Students who have over 24 completed units at Fullerton College will have their GPA transmitted automatically to the state if the student attended Spring 2013, Summer 2013, Fall 2013 or Spring 2014. These Students do not need to complete the GPA Verification process. All other students (if attempted less than 24 units) need to complete a GPA Verification form and take the form to their prior high school or college to be certified. Additional information on Cal Grant is available in Fullerton College's Cal Grant brochure on the financial aid website.

## BOARD OF GOVERNORS' ENROLLMENT FEE WAIVER

BOG-FW, or Board of Governor's Fee Waiver, is a state sponsored program that waives enrollment fees for qualifying students who are California residents or Dream Act students. Students may be eligible for a fee waiver even if they are not eligible for other financial aid. BOG-FW applicants do not have to be enrolled in a minimum number of courses - whether the student takes .5 units or 26 units, the enrollment fee may be waived. BOG-FW applicants only need to apply once to have fees waived for the academic year: summer, fall, winter and spring.

## How do students apply?

To apply for the BOG-FW, students must complete the application which can be accessed through myGateway and clicking on the financial aid link on Webstar. There are four methods under which students may apply. Students only need to qualify for one method to have their fees waived. Students submitting a BOG application may also need to submit proof of prior year income, such as 1040 Federal tax return and W2's. Electronic signatures for the BOG application are available for students and parents on the 2015-2016 application.

## Method A

For students on public assistance programs: TANF/CalWORKS, SSI/SSP, SSAI, SSAS, or General Assistance. Certification must be obtained from the appropriate agency and documentation will be required to verify a student's eligibility. Most documentation must be dated within the last 30 days.

## Method B

For low-income students whose previous year income was within qualifying income guidelines. Federal tax returns may be required.

## Method C

This is awarded to students who applied through the FAFSA or Dream Act application and were eligible according to Federal guidelines. Students who qualify under Method $C$ do not need to complete a separate BOG-FW application.

## Method F

BOGG F is for Dependents of Disabled or Deceased California Veterans or National Guard, recipients of the Congressional Medal of Honor, children of recipients of the Congressional Medal of Honor, or dependents of victims of the September 11, 2001 terrorist attack. Certification must be obtained from the appropriate agency and documentation will be required to verify a student's eligibility. Most documentation must be dated within the last 30 days.

## Return to Title IV

Return to Title IV funds is a federal law regarding a student's responsibility in paying money back if the student leaves school. If a student receives a grant and then withdraws from all of his/ her classes, that student may owe money back to the Federal Program. According to the date of withdrawal, the Financial Aid Office will calculate the part of the grant the student earned and what is owed. Note: if the withdrawal was after earning $60 \%$ of the grant, the student will not owe any repayment.

## Fullerton College Foundation

The Fullerton College Foundation, Inc. is a 501(c)3 non-profit public charity. It was founded in 1959 by Dr. H. Lynn Sheller, then President of Fullerton College, for the purpose of providing support to Fullerton College and its students. The foundation solicits, receives and distributes gifts, grants and contributions from individuals, businesses, corporations, and private foundations in order to financially support programs and projects that benefit the college. Today the foundation has more than 200 scholarships available to help students achieve their educational goals and continues to provide institutional support. For more information visit the foundation's website at http://fullcollfoundation. org/ or call (714) 992-7790.

## Gainful Employment Programs

Gainful Employment regulations require the college to provide consumer information to prospective and current students for vocational and certificate programs. These requirements comprise what is known as "Gainful Employment." Data considered to be public information for these programs can be obtained by visiting the College website at www.fullcoll.edu and clicking on "Academic Programs" and then "Gainful Employment." Additionally, the Net Price Calculator is available on our College website at: http://www. fullcoll.edu/prospective-students/tuition-costs.

## Health Services

## 1200 Bldg, Room 1204 - (714) 992-7093 healthservices.fullcoll.edu

Health Services provides health care and personal counseling to the students of Fullerton College. Health Services is open from 8:00 am to 7:00 pm Monday through Thursday and 8:00 am to 5:00 pm on Friday during the Fall and Spring terms. The summer schedule is variable. The mandatory health fee (payable at the time of registration) includes the following services:

- Clinical Medicine - Physician and nurse-practitioner consultation by appointment, diagnosis and treatment are free of charge. Clinical laboratory testing,* radiology referral and follow-up,* medications and/or prescriptions,* minor surgery,* referral to community hospitals/specialist.
*Available at low cost for students
- Crisis Intervention and Personal Counseling - Individual consultation with a licensed psychologist based on crisis intervention model. Referrals available to private and community health agencies.
- Health Care - Health/wellness counseling, screening for immediate or follow-up care, emergency care for illness, first aid for traumatic injuries, hearing appraisals, maintenance of health records, accident reporting, health education, referral to community agencies. A student accident insurance plan* is maintained by Health Services.
*Deductibles and limitations apply


## Your Health Fees at Work

Student Health Services provide all of the services you will or would find in a routine medical clinic. Most of the services, such as a visit to the physician, nurse practitioner, RN, psychologist, or health educator, are at no cost to you. Laboratory tests, immunizations, medications, pelvic exams and employment or wellness exams are provided at very low fees. [HOURS: Nurses are available from 8:00 am-7:00 pm Monday through Thursday and from 8:00 am-5:00 pm on Friday. Physicians, Nurse Practitioners, Health Educator, and Psychologists by appointment.]

## Housing

The College does not have a student housing facility. A list of housing is available to students in Student Activities, Room 223, 2nd Floor, College Center. Included is information on rentals, rooms for rent, apartments for rent, roommates wanted, roommates available, and brochures.

## International Student Center

College Center — Room 220, 2nd Floor - (714) 992-7078 isc.fullcoll.edu isc@fullcoll.edu

The International Student Center (ISC) provides services to international students on the $\mathrm{F}-1$ student visa and those seeking an F-1 student visa. The ISC is a full-service office dedicated to supporting international students both academically and personally. International students benefit from specialized and individual attention. Services and programs include:

- International admissions (new, transfer, and change of status students)
- Academic counseling
- Immigration advising
- New Student Orientation and Welcome Week activities
- Housing and American host family resources
- Employment authorization and resources
- Cultural activities and social events
- California Cousins Mentor Program

More information on the F-1 student visa can be found at http:// educationusa.state.gov and at studyinthestates.dhs.gov.

## Library Services (LLRC)

800 Bldg (LLRC) - (714) 992-7039 - library.fullcoll.edu
The library assists students, faculty, and staff to attain their educational and informational goals in a supportive library environment by offering a combination of innovative and traditional library services.

In the library, users will discover a large book collection, including current best sellers and faculty reserve materials, as well as a media and print periodical collection housed in a beautiful structure of Spanish-Moorish design, which was inaugurated in early 2005. Faculty librarians provide research assistance virtually and in person from the Reference Desk, instructing users how to effectively access and use library resources. A dedicated paraprofessional staff is also on hand to assist students in the library.

Librarians teach information literacy in classroom environments. Library Instruction Sessions are offered throughout the academic school year for students wishing to improve research and critical thinking skills needed to succeed at college. Regardless of whether they are on or off campus, users have access to a wealth of resources via the library's website, including the library's online catalog, periodical databases, and research guides and tutorials.

The library also provides desktop computers and laptops with Internet access and word processing. Adaptive computer stations are available for persons with disabilities. Printing and photocopying in color and B\&W are available for a fee. Wireless computing is available on the second floor of the library to currently-enrolled students.

For library hours and more information: library.fullcoll.edu.

## Lost and Found

The central location for all lost and found articles is the Campus Safety Department located in the 1500 Building. Articles will be tagged, logged, and properly secured for 90 days. Items may be claimed at the Campus Safety Department.

## Math Lab

800 Building, Room 807 - (714) 992-7140 math.fullcoll.edu/mathlab.html

The Fullerton College Math Lab located in the LLRC has been in continuous operation since 1967. It provides services in a supportive environment where students can receive supplemental support services specific to courses, textbooks and instructors. The Lab offers individual tutoring, CD and DVD lectures, computer tutorials, online homework programs, individual and group study locations, and a place for make-up quizzes and tests to be administered. During the first week of classes each semester, eligible students may visit the Math Lab and receive class orientations explaining the services offered. Student attendance is tracked electronically when students scan in and out of the Lab using their student ID cards.

The Computer Science Lab is located inside the Math Lab. This lab supports classes in the Computer Science Department.

See the website for hours of operation and other information.

## The Puente Project

2000 Bldg, 2nd Floor - (714) 992-7240 puente.fullcoll.edu

The Puente Project is an academic, counseling and mentoring program, that for more than 30 years has supported students in building the skills necessary for success in their academic and career goals. Students enrolled in the Puente Project work closely with their counselor, English instructor and mentor, to prepare for successful transfer to four-year universities and colleges. The Puente Project is open to all students and is especially committed to increasing the number of successful first-generation college students. Puente students enjoy:

- Guaranteed English, Counseling and Math classes
- Higher graduation and transfer rates from Fullerton College
- Leadership opportunities
- Networking opportunities
- Graduating from four-year universities and returning to the community as leaders and mentors


## Eligibility

- Placement into ENGL 100 F or self-select to ENGL 099 F; requires clearance by Puente Counselor
- In-take appointment
- Completion of SEPPs
- Enrollment in Puente English, Counseling and Math classes
- Attend all scheduled events


## ROTC

Through arrangements with local universities, reserved officer training is available to students of Fullerton College. For more details concerning concurrent enrollment, scholarships, requirements, and opportunities with the three branches of the armed services, contact the following:

Air Force ROTC
Loyola Marymount, Los Angeles
(310) 338-2770

Army ROTC
California State University, Fullerton
(657) 278-5545

Navy ROTC
University of California, Los Angeles
(310) 794-9425

## Security Escorts

Campus Safety Officers are on campus 24/7 and can provide an escort at any time. You can contact Campus Safety business phone line at (714) 992-7080, ext. 0. You can contact Campus Safety emergency phone line at (714) 992-7777. You can also reach Campus Safety by using the Emergency Phones located throughout the campus and the four story parking structure.

## Service Learning

College Center, 2nd Floor, Room 225 - (714) 992-7067 specialprograms.fullcoll.edu

Service Learning provides the opportunity for students to connect the classroom to the community. These real-world experiences result in active, enhanced learning, civic engagement, commitment to helping others and helping provide solutions regarding issues that affect the community and world.

## TAP: Transfer Achievement Program

Counseling Center, 2nd Floor, Building 2000 (714) 992-7084 - tap.fullcoll.edu

The Transfer Achievement Program (TAP) is a comprehensive program designed to encourage and support students in their goal of transferring to a four year college or university. Some of the benefits of the program include:

- Reserved sections of English, reading, math and counseling
- Opportunities to take leadership roles in the program
- Additional personal and academic support from instructors, counselors, and peer facilitators
- Opportunities to develop a peer support system
- Classes in college success and career and life planning
- Opportunities to visit leading universities


## Transfer Center

## College Center, Room 212, 1st Floor - (714) 992-7086 transfer.fullcoll.edu

The Transfer Center is a dynamic campus resource available to help Fullerton College students stay motivated, excited, and prepared to transfer to a four-year university. There are many steps to transfer, from college exploration to college selection, major exploration to major preparation, not to mention the entire application process. The center provides services to help students explore, prepare, and succeed in their transfer plans. Services and activities include the following:

- Information on transfer, admissions, deadlines and resources
- Appointments with academic counselors to help students create education plans
- Appointments with university representatives
- Application assistance
- College fairs held every Fall and Spring semester with representatives from the CSU, UC, private and out-of-state institutions in attendance
- Computer stations with internet access for any college-related research
- Field trips to California colleges and universities
- Basic financial aid and scholarship information and listings
- Monthly e-newsletter providing the most recent transfer information and services
- Major prerequisite information (guide sheets and internet sources)
- Seminars and workshops on transfer planning for UC/CSU/ Private/Out-of-State universities


## Teacher Preparation - Center for Careers in Education (CCE)

College Center, 2nd Floor, Room 225 - (714) 992-7067 teacherprep.fullcoll.edu

The Center for Careers in Education (CCE) helps prepare students to become effective teachers in a profession that is in need of trained, diverse individuals. It offers resources and services to help students reach their career goal through participation in teacher preparation courses, early field work experiences, an integrated teacher preparation program with Cal State University Fullerton, Club Teach, specialized academic advisement/counseling, and CBEST test preparation workshops.

## Umoja Program

500 Bldg, Room 513 - (714) 992-7155 umoja.fullcoll.edu

The Umoja Program is designed to provide essential educational support and services to increase the academic success, retention, degree completion, and transfer rates of African-American and other students enrolled at Fullerton College. We accomplish this through monthly workshops, academic counseling, and mentoring. Our aim is to develop a sense of "community" among African-American students, other students, faculty, staff and administrators.

The Umoja Program provides:

- Motivation by offering inspirational workshops and events throughout the semester
- Connection to campus resources and other support services
- Academic help through study groups and tutoring
- Cultural understanding by providing educational forums and events that reflect and discuss African-American culture and history


## Veterans Resource Center

## 500 Bldg, Room 518 - (714) 992-7102 veterans.fullcoll.edu

## Veterans Military Service Connected Benefit Programs

Fullerton College is approved as a degree-granting institution for the attendance of veterans under Title 38, United States Code. This includes the programs covered in Chapters 30, 31, 32, 33, 35,1606 , and 1607. The College is also approved for the attendance of California veterans' dependents under the State Fee Waiver program. Veterans who plan to enroll in the College and need assistance with their education benefits are urged to contact the Veterans Resource Center (VRC).

## Veterans Academic Progress

A veteran student whose GPA falls below a 2.0 for one semester will be placed on Academic Probation. A veteran student is eligible to receive benefits until they are academically dismissed from the college. Please contact the Veterans Resource Center for more information.

## Transcripts

Veteran students must submit official transcripts (civilian) of all postsecondary coursework for evaluation. Military credit will be applied upon graduation only.

## Approved Majors and Transfer

Unless otherwise notified by SAA, all programs (majors) in this catalog are approved for the training of veteran students. Transfer programs are approved contingent upon Fullerton College having current articulation agreements with the universities offering the transfer programs. Contact the Cadena/Transfer Center for Fullerton College's approved transfer programs.

## Military Credit for PE (AA/AS)

Students who wish to receive unit credit for prior military service are encouraged to contact the Veterans Resource Center. Fullerton College will grant prior credit for the 1 unit PE requirement for graduation if the Veteran completed Basic Training.

Veterans are still eligible to take additional PE coursework as desired, however it may not be required for graduation and thus it may not be certified by the Veterans Resource Center nor paid for by the Department of Veterans Affairs (VA).

- Veteran students cannot be certified if they become Academically Dismissed by the Admissions and Records Office (see Probation and Dismissal Policy).


## Student Activities

## Associated Students

## College Center，Room 222，2nd Floor－（714）992－7118－ as．fullcoll．edu

Since virtually all major decisions that are made on the Fullerton College campus affect students in some way，student input to the various decision－making bodies has become increasingly relevant， necessary，and welcomed．The Associated Students Senate is the recognized＂student voice＂in the shared governance process of the campus community．

Associated Students（A．S．）consists of elected and appointed members including the Associated Students President，Vice Presi－ dent，Treasurer，Senators，Senate Members，and Inter－Club Council （I．C．C．）President，Vice President，Secretary and Treasurer．The Student Trustee may also attend and report at the Associated Students Senate meetings．A．S．elections are held in the fall for the current year and in the spring for the following year．

Associated Students Senate holds business meetings every Tuesday at $1: 30 \mathrm{pm}$ in Room 227，College Center，2nd Floor． All students and guests are welcome to attend．Times subject to change．

Associated Students and Inter－Club Council provide a compre－ hensive student activities and club program．Events are planned with sufficient variety and provide an opportunity for all to participate．

Inter－Club Council meetings are every other 2nd and 4th Mondays at $1: 30 \mathrm{pm}$ in Room 227，College Center，2nd Floor． All students and guests are welcome to attend．Times subject to change．

Check the Associated Students Office（Room 222，College Center，2nd Floor）or the Student Activities Office（Room 223， College Center，2nd Floor）for times and locations of all other AS， ICC，and club meetings．

## Associated Students Legal Clinic

The Associated Students Legal Clinic Attorney assists Fullerton College students，staff and senior citizens with legal concerns． This free service is provided by the Associated Students．For an appointment，call（714）992－7118．

## Associated Students ＂Benefits Member Validation＂

Associated Students Benefits Validation－$\$ 8.50$（Per Semester； Summer Benefits Validation — \＄4．25）．

The Fullerton College Campus Photo Identification Card，properly validated by the Associated Students，shall allow students to receive a wide variety of valuable activities and services．The A．S． Benefits Member Validation may be purchased during registration at the Admissions and Records payment window（2000 Bldg）， Campus IDs（Room 214），and in Student Activities（Bldg 200， Room 223／College Center，2nd Floor）．For more information on services and benefits offered，please see＂Student Activities．＂ NOTE：Services subject to change．
－Art shows and displays
－Campus publicity and handouts
－Child Development Center support
－Day－to－day business operations of the Associated Students offices
－Discounts at over 70 local businesses（detailed listing in the A．S．Student Handbook and Academic Planner）
－Discounts to local entertainment areas and amusements
－Free A．S．Student Handbook，while available
－Free admission（or discount）at Fullerton College Music and Art events
－Free admission（or discount）to all Fullerton College A．S． sponsored events including food event days，Homecoming activities，comedy shows，college hours，educational programs， cultural events and more
－Free admission（or discount）to all Fullerton College Mainstage Theatre events
－Free admission（or discount）to all home Fullerton College athletic events（excluding tournaments）
－Free Legal assistance
－Fullerton College Bookstore discounts as listed in the A．S． Student Handbook
－Fullerton College＂FC Days＂discounts on ticket sales for a variety of amusements（\＄2 per ticket service charge savings）
－Fullerton College＂FC Days＂discounts on tickets sales for AMC and Edwards／Regal Cinemas
－Fullerton College Cosmetology discounts，as listed in the A．S． Student Handbook
－Instructional Funding，when available
－Inter－Club Council（ICC）and club involvement
－Membership in any Associated Students funded club and organization（does not include clubs not choosing to be funded）
－Music group activities－bands，choirs，ensembles
－Out－of－class learning programs－e．g．，workshops，seminars， symposiums，trips

- Participation in the Campus newspaper and other student publications beyond the basic class requirements, subject to change
- Pep Band, subject to change
- Pep Squad/Dance Team, subject to change
- Play pool, check out cue sticks, cue ball and board games in the Student Center Lounge
- State and regional student representation
- Student banquets, awards, and recognition programs
- Student Body (A.S.) Elections
- Student Center improvements
- Student Government - A.S. Senate membership
- Student research and effort toward improving Food Services, Bookstore services, bus service and parking facilities, instructor accountability, environmental clean-up, and service abroad


## Services Offered and/or Supported by the Associated Students for all Students

- "FC Days" discount tickets
- A.S. CareBank - emergency assistance
- A.S. Co-sponsorship funding
- A.S. Legal Clinic - free legal assistance
- Art shows and displays
- Athletics
- Campus newspaper and other student publications beyond the basic class requirements, subject to change
- Campus Photo Identification Cards
- Campus publicity, marketing and outreach
- Child Development Center support
- Day-to-day business operations of the A.S. offices
- Instructional funding opportunities, when available
- Inter-Club Council/Club involvement
- Music group activities - bands, choirs, ensembles
- Pep Band, subject to change
- Pep Squad, subject to change
- Programs and Special Events - featuring interesting speakers, seminars, plays and entertainment
- Ski discounts at participating ski resorts
- State and regional student representation
- Student banquets, awards and recognition programs
- Student Body (A.S.) Elections
- Student Center operations
- Student Government leadership opportunities
- Student research for campus improvements
(Services subject to change)


## Athletics

## History and Tradition

Fullerton College has fielded athletic teams since the founding of the College in 1913 and since that time has developed an overall sports and intercollegiate athletic program with 20 teams that rank with the very best in nationwide community college circles.

Nicknamed the "Hornets," Fullerton College teams have won more than their share of conference, state, and national championships in a variety of sports. Winning teams have become a tradition at Fullerton in both men's and women's sports.

Community support for intercollegiate athletics at Fullerton has been outstanding. The caliber of coaching, the quality of uniforms and equipment, the training and medical facilities, and the opportunity to play against good competition are superior. Every year scores of Fullerton College graduates are offered scholarships to complete their education and athletic careers at four-year colleges and universities throughout the country.

## Athletic Conference Membership

Fullerton College is a member of the Southern California Football Association. Other association members include: Bakersfield, Canyons, Cerritos, Chaffey, Citrus, College of the Desert, El Camino, Glendale, Grossmont, Hancock, Long Beach, Moor Park, Mt. Sac, Orange Coast, Palomar, Pasadena, Riverside, Saddleback, Santa Ana and Ventura. The Southern California Football Association consists of two divisions: American and National. Fullerton is in the Southern Conference of the National Division along with Grossmont, Long Beach, Orange Coast, Palomar, Saddleback and Santa Ana. Competition will be against teams in the National Division along with teams from the American Division.

Fullerton College is a member of the Orange Empire Conference in the following sports: Men's and Women's basketball, baseball, cross country, soccer, swimming, tennis, track and field, water polo; Women's fast pitch softball, volleyball, golf, and badminton. Members in the Orange Empire Conference consist of Cypress, Fullerton, Irvine, Golden West, Orange Coast, Riverside, Saddleback, Santa Ana, and Santiago Canyon. Conference competition is offered in nine sports for men and eleven sports for women. Each team plays a full schedule of non-conference, as well as conference games, in each sport. Each sport's season concludes with state tournament competition for teams and individuals that have won conference championships or otherwise qualify.

## Athletic Eligibility Rules

Both men's and women's athletics are governed by uniform eligibility rules adopted by the California Community College Athletic Association.

In general, eligibility rules require that all candidates for a team be enrolled in and pass 12 or more units through the semester of competition. Of the 12 credit units, at least nine shall be attempted in courses counting towards the associate degree, remediation, transfer, and/or certification as defined by the college catalog, and are consistent with the student athlete's educational plan. A full-time student returning for his/her second season of competition must have 1) passed a minimum of 24 units between seasons of that sport, 2) achieved a 2.00 GPA, and 3) an educational plan on file (Fall: October 15; Spring: March 1). A student's previous academic record in college does not apply to the student trying out for the first time for an intercollegiate sport.

Students transferring to Fullerton College from another California community college who competed in athletics at that college must complete 12 or more units at Fullerton before gaining athletic eligibility at Fullerton.

Any prospective student athlete with questions about his or her eligibility for sports is advised to confer with the Athletic Director or with the athletic academic counselor.

## Intercollegiate Athletics for Men

Sports in which Fullerton College fields teams for men include baseball, basketball, cross country, football, soccer, swimming and diving, tennis, track and field, and water polo. Winning is a tradition as teams participate in OEC and the SCFA Conferences.

## Intercollegiate Athletics for Women

Women's teams at Fullerton College include badminton, basketball, cross country, golf, softball, soccer, swimming and diving, tennis, track and field, volleyball, and water polo. These teams excel in the Orange Empire Conference.

## Aid to Athletes

Athletic scholarships, grants-in-aid, and special inducements or privileges for athletes do not exist at Fullerton College in accordance with State rules governing community college athletics. Student athletes are attracted to Fullerton College for its excellent educational opportunities, its tradition for winning teams, the outstanding coaching staff, and the opportunity to participate and compete as freshmen and sophomores on a level that often leads to athletic scholarship offers from four-year colleges after graduation from Fullerton.

The college provides the student athlete with uniforms and equipment, meals, lodging, travel expenses on team trips, and banquets and awards concluding the season. The college maintains a placement office as a service to any student seeking parttime or full-time employment.

## Pep Squad

In the Spring of each year, open-competition tryouts are held to select a Pep Squad and dance team from incoming firstsemester students and returning sophomores. The Pep Squad members rehearse during the summer in preparation for performances at school athletic events and events in a variety of local and national performances. These performances, as well as enrollment in PE 179 F Intercollegiate Spirit Squad, are mandatory. For information, contact the Physical Education/Athletics Division at (714) 992-7045.

## Admission to Athletic Events

Students with a Fullerton College Photo Identification Card, properly validated by the Associated Students, will be admitted free of charge to all scheduled athletic events played at home.

Gate receipts from the intercollegiate athletic program, including facility rentals, are used to help offset the cost of the athletic program.

## Campus Photo Identification (ID) Card

Campus Photo IDs may be obtained in the Student Center/Room 214 of the College Center during the advertised hours. Areas/ Services that prefer to have a Fullerton College Campus Photo ID Card are as follows:

- Academic Services Center, including Tutoring Center, Skills Center and Writing Center
- Associated Students, Student Activities and Student Center
- Bursar's Office for general purposes
- FC Bookstore, to purchase items by check or credit card
- FC Library, to check out books
- Financial Aid for general purposes
- Labs: Computer Labs, Circuit Labs, Fitness Labs, Fine Arts Labs and Math \& Computer Science Labs

The Campus Photo Identification Card is only \$3.50 and is purchased only once during a student's tenure at Fullerton College. There is a $\$ 3.50$ charge to replace a lost Campus Photo Identification Card. A valid photo identification and current FC Schedule Bill is required to obtain the Campus Photo ID Card and semester validation. A free A.S. Student Handbook will be provided, upon the first-time purchase of the Campus Photo ID Card, as available.

For "Refund/Credit Information and the Required Deadline for Requests," please see the current semester's "Fees and Refunds" page in the Class Schedule and the "Quick Guide."

## College Center

## College Center, 200 Bldg

The focus of student life at Fullerton College is located at the College Center. The College Center contains the following:

First Floor:

- Cadena/Transfer Center (Room 212)
- FC Dining Hall
- Large Restrooms
- Student Center Lounge (Room 214)
- Three Patio Areas (East, North and West)


## Second Floor

- Associated Students/Student Government Offices (Room 222)
- Club Room (Room 222)
- International Student Center (Room 220)
- Large Restrooms
- Office of Special Programs (Room 225)
- Student Activities Office (Room 223)
- Facilities for Meetings and Events


## Honor Societies

## Alpha Gamma Sigma

Alpha Gamma Sigma, California Community College Scholarship Honor Society, was founded in 1926 through the efforts of William T. Boyce, then Dean of the College. Among the first to be chartered, the college's chapter is designated Epsilon.

Permanent membership in Alpha Gamma Sigma is awarded to students who meet either of the following criteria:

1. Cumulative 3.25 GPA or higher with 60 units completed (30 units at Fullerton College) and active membership in Alpha Gamma Sigma for two (2) or more semesters; or,
2. Cumulative 3.50 GPA or higher with 60 units completed (30 units at Fullerton College) with one (1) semester of active membership in Alpha Gamma Sigma.

Requirements subject to change.
Students may pick up an application for permanent membership in the Student Activities Office. See section on Honors for Scholarship.

## Lambda Epsilon Chi (LEX)

Lambda Epsilon Chi (LEX) is a national honor society established to recognize students who demonstrate superior academic performance in an established program of paralegal and law-related studies. LEX derives from the Latin root meaning "pertaining to the law" or "legal."

Students in the Fullerton College Paralegal Studies Program qualify for membership if they have:

- Completed two-thirds of their required coursework; and
- A cumulative G.P.A. of 3.5 in their required coursework.

Applications for consideration may be obtained in the Business \& CIS Division Office.

## Phi Theta Kappa

Phi Theta Kappa Honor Society is the national scholastic honor organization for community colleges. In order to be eligible for Lifetime Membership in Phi Theta Kappa International Honor Society, a student must have completed 12 units of coursework that may be applied to a degree, be enrolled in at least three units in the current term, and maintain a 3.25 GPA. For more information, contact the current Phi Theta Kappa officers at ptk.fullcoll@gmail.com or go to the chapter website, PTK.fullcoll. edu. Requirements subject to change.

## Men and Women of Distinction

Each year the Student Activities Office, through the assistance of a campus wide committee, selects up to 15 "Women of Distinction" and a "Woman of the Year" and up to 15 "Men of Distinction" and a "Man of the Year." During this awards program, the top 30 students are honored for their outstanding achievement in such diverse fields as music, communications, theatre, intercollegiate athletics, club activities, student government, individual service to the college and or community, and outstanding scholarship within a given department. Additionally, two outstanding service awards shall be granted to one Man of Distinction finalist and one Woman of Distinction finalist from the Associated Students. Requirements are subject to change.

The Awards Program is held in the spring and represents the highest honor a student may receive while at Fullerton College. The Women of Distinction receive honorary membership in Alpha Gamma Eta, and the Men of Distinction receive honorary membership in Mu Omicron Delta.

For more information, contact the Student Activities Office, Room 223, College Center, 2nd Floor, (714) 992-7095.

## Student Activities

College Center, Room 223, 2nd Floor - (714) 992-7095 -
stuaff.fullcoll.edu
The office of Student Activities provides leadership opportunities and practical learning experiences beyond the classroom. Student Activities provides "hands on" experiences which complement students' educational, personal and professional goals, thus enhancing student success. Through a warm and welcoming atmosphere, Student Activities offers meaningful opportunities for campus and community involvement, recognition of student achievement and a variety of specialized services of benefit to the campus community. Additionally, Student Activities is a major catalyst of college information and direction regarding procedures and events.

Information regarding campus events scheduling, student rights, student government, clubs and organizations, student discounts, "FC Days" ticket sales and a wide variety of programs are coordinated by the Student Activities staff. Some of these programs include Commencement, Men and Women of Distinction, the Student Activities Marketplace, "Teacher of the Year" process, and campus tours. Literature to be distributed must be approved by the Director of Student Activities. Hours vary; please check with the office.

## Student Center

College Center, Room 214, 1st Floor - (714) 992-7118
The Student Center Lounge allows students to play video games, shoot pool, watch big screen TV, study or just relax with friends. The Student Center Lounge is open from 8:00 am to 7:00 pm Monday through Thursday and is closed Friday through Sunday. Campus Photo ID Cards are produced and validated in the Student Center Lounge during specific hours. NOTE: Hours are always subject to change.

Announcements are posted in this complex concerning student housing, transportation, student activities, club activities, general information of interest to students, upcoming events and many other services available to students and staff.

## Student Offices Eligibility Requirements

Student leadership is recognized as a most important facet of decision-making at Fullerton College whether it be for planning Associated Student projects or participation with administrators and faculty in shared governance or overall college development. It is important to the student body, the college and the individual student that student leaders do satisfactory work in their courses of study and are able to carry sufficient units to be true representatives of their constituents. There are three phases to be considered for establishing and maintaining one's eligibility. They are:
I. Previous School Record
II. The Semester of Candidacy
III. The Semester While In Office

To review the complete minimum eligibility requirements, please contact the Office of Student Activities (714) 992-7095, stop by Room 223 of the College Center, 2nd Floor, or visit the Student Activities website: www.stuaff.fullcoll.edu.

## Student Publications

The Hornet newspaper, an award-winning publication, is published weekly by journalism students. The newspaper is entirely written, edited, designed and desk-top published by students. Photographs, illustrations, graphs, and cartoons, which appear in the newspaper, are all student efforts. Students also sell and design advertising.

The Torch Magazine is published each semester by journalism students. All phases of magazine production - writing, editing, layout/design, and photography, line illustration and advertising, are accomplished by students. Articles and photos combine to publicize the positive aspects of Fullerton College. The magazine is used on and off campus as an informative, marketing tool.

The Hornet has won many state and national awards, including the Gold Crown, the top national honor presented by Columbia University's Scholastic Press Association, as well as honors from the Journalism Association of Community Colleges (JACC).

Torch Magazine has also received numerous awards from the JACC for outstanding journalism.

La Antorcha is the first student-produced, online Spanish language publication in the California Community College system. This publication was created to cover the growing population of Spanish speakers in the region and to address parts of the community and regional culture that were not being properly addressed. The online aspect makes it possible to reach a global audience and share information reported by Fullerton College students.

## Academic Requirements

## Advanced Placement Fullerton College Associate Degree General Education

Fullerton College grants General Education (GE) credit for successful completion of the College Board Advanced Placement (AP) examinations. Students who completed AP examinations with a score of 3, 4, or 5 may receive General Education credit in the appropriate Fullerton College Associate Degree GE and major if applicable. It is the student's responsibility to petition for credit through the Admissions and Records Office. Once AP credit is posted to the student's transcript, it cannot be removed.

NOTE: The posting of AP credit for courses on the Fullerton College transcript does not ensure their transferability to four-year schools. Each college and university grants AP credit according to its own policy. In some cases, Fullerton College will grant more units of credit (in other cases, fewer units of credit) for transfer admission purposes. AP credit for the major frequently requires higher scores or may not be accepted at all. Students planning to transfer should consult the catalog(s) of the transfer institution(s) to determine how AP credit is granted for the purpose of admission, general education and the specific major prior to petitioning for credit.

## AP Examination

Art History
Art (Studio Art: Drawing)
Biology
Chemistry
Chemistry (Score of 5)
Chinese Language and Culture
Economics - Micro
Economics - Macro
English Language and Composition
English Literature and Composition
Environmental Science
French Language and Culture
German Language and Culture
Government and Politics (U.S.)
Government and Politics (Comparative)
History (U.S.)
History (European)
History (World)
Human Geography
Italian Language and Culture
Japanese Language and Culture

## Latin

Mathematics (Calculus AB)
Mathematics (Calculus BC)
Mathematics (Statistics)

## AP Examination

Physics 1
Physics 2
Physics (C: Mechanics) (Score of 5)
Physics (C: Electricity and Magnetism) (Score of 5)
Psychology
Spanish Language and Culture
Spanish Literature and Culture

## CLEP Examination

College Composition Exam (Score of 50 or higher)

## Credit Allowed

ART 112 F and 113 F
ART 182 F
BIOL 101 F
CHEM 107 F
CHEM 111AF
CHIN 101 F and 102 F
ECON 101 F
ECON 102 F
ENGL 100 F
ENGL 100 F and 102 F


FREN 101 F and 102 F
GERM 101 F and 102 F
POSC 100 F
POSC 215 F
HIST 170 F and 171 F
HIST 110 F and 111 F
HIST 112 F and 113 F

## -

ITAL 101 F and 102 F 10
JAPN 101 F and 102 F 10

- 3

MATH 150AF 4
MATH 150AF and 150BF 8
MATH 120 F 4
Credit Allowed Units

## -

- 

PHYS 210 F or 221 F
PHYS 211 F or 222 F
PSY 101 F
SPAN 101 F and 102 F
SPAN 205 F and 206 F
Credit Allowed
ENGL 100 F

Units
6
3
5
5 5 10

AA/AS GE
(Fullerton College does not accept the College Composition-Modular exam)
Equivalency for courses not listed above will be determined by the appropriate academic department.

## Using Advanced Placement to Satisfy CSU Eligibility and CSU GE

Transfer students may earn general education or lower division major credits by taking an AP in place of a course. The CSU faculties have determined the passing scores, minimum units of credit earned, and certification area (for General Education Breadth and/ or U.S. History, Constitution, and American Ideas) of AP.

Note that each campus in the California State University system determines how it will apply external examinations toward credit in the major. For students not already certified in GE and/or American Institutions, the campus also determines how to apply credit from such exams toward the local degree requirements.

## Using Advanced Placement to Satisfy UC Eligibility and IGETC

The University of California grants credit for all College Board AP Tests on which a student scores 3, 4, or 5 . Students should be aware that college courses taken may duplicate the content of AP examinations. The University may not award credit for both the course and the AP exam.

Each exam listed below may be used in lieu of one course to satisfy one UC "a-g" Freshman Subject Area, one UC Transfer Subject Area replacement or one Intersegmental General Education Transfer Curriculum (IGETC) area and the area 6A (Language other than English) proficiency level as listed. In some cases, satisfaction of requirements or credit toward specific requirements is also awarded by the campuses. Consult www.assist.org or the campus regarding issues about how AP credit is granted for each major in each department. New AP exams will be reviewed as they are developed and included on the chart where appropriate.

The AP information on this page is for credit towards Fullerton College Associate Degree General Education. AP information for IGETC and CSU GE are located in the following pages.

Advanced Placement Exams that Satisfy UC Freshmen and Transfer Admission and IGETC
（Updated May 3，2016）

| AP Subject Area | $\begin{gathered} \text { AP } \\ \text { Score } \end{gathered}$ | UC Eligibility | Applicability （3 sem／4 qtr） | Total Quarter Units Awarded | Total Semester Units Awarded | Limitations of Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ART：Art History | 3，4，5 | UC－H | 3A or 3B | 8 | 5.3 |  |
| STUDIO ART：2－D Design | 3，4，5 |  |  | 8 | 5.3 | 8 quarter／5．3 semester units max for all Studio Art exams． |
| 3－D Design | 3，4，5 |  |  | 8 | 5.3 |  |
| Drawing | 3，4，5 |  |  | 8 | 5.3 |  |
| BIOLOGY | 3，4，5 | UC－S | 5B and lab | 8 | 5.3 |  |
| CHEMISTRY | 3，4，5 | UC－S | 5A and lab | 8 | 5.3 |  |
| COMPUTER SCIENCE A | 3，4，5 |  |  | 2 | 1.3 | 4 quarter／2．7 semester units max for Computer Science A． |
| ECONOMICS：Macroeconomics | 3，4，5 | UC－B | 4B | 4 | 2.7 |  |
| Microeconomics | 3，4，5 | UC－B | 4B | 4 | 2.7 |  |
| ENGLISH：Language and Composition | 3，4，5 | UC－E | 1A | 8 | 5.3 | 8 quarter／5．3 semester units for both |
| Literature and Composition | 3，4，5 | UC－E／UC－H | 1 A or 3B | 8 | 5.3 | English Lang／Comp and Lit／Comp |
| ENVIRONMENTAL SCIENCE | 3，4，5 | UC－S | 5A and lab | 4 | 2.7 |  |
| GOVERNMENT and POLITICS： |  |  |  |  |  |  |
| Comparative | 3，4，5 | UC－B | 4 H | 4 | 2.7 |  |
| U．S． | 3，4，5 | UC－B | 4 H | 4 | 2.7 |  |
| HISTORY：European | 3，4，5 | UC－H／UC－B | 3 B or 4F | 8 | 5.3 |  |
| U．S． | 3，4，5 | UC－H／UC－B | 3 B or 4F | 8 | 5.3 |  |
| World | 3，4，5 | UC－H／UC－B | 3 B or 4F | 8 | 5.3 |  |
| HUMAN GEOGRAPHY | 3，4，5 | UC－B | 4 E | 4 | 2.7 |  |
| LANGUAGE OTHER THAN ENGLISH： |  |  |  |  |  |  |
| Chinese Language and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| French Language and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| German Language and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| Italian Language and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| Japanese Language and Culture | 3，4，5 | UC－H | $6 A$ and $3 B$ | 8 | 5.3 |  |
| Latin | 3，4，5 | UC－H | 6 A and 3B | 4 | 2.7 |  |
| Spanish Language and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| Spanish Literature and Culture | 3，4，5 | UC－H | 6 A and 3B | 8 | 5.3 |  |
| MATH：Calculus AB／AB Subscore | 3，4，5 | UC－M | 2A | 4 | 2.7 | 8 quarter／5．3 semester units max for both exams， 4 quarter／2．7 semester units max between $A B$ and $A B$ subscore |
| Calculus BC | 3，4，5 | UC－M | 2A | 8 | 5.3 |  |
| MUSIC THEORY | 3，4，5 | UC－H |  | 8 | 5.3 |  |
| PHYSICS：Physics 1 |  | UC－S | 5A and lab | 8 | 5.3 | 8 quarter／5．3 semester units maximum for all physics exams <br> Physics 1 \＆Physics 2 replaced Physics B in 2014－2015． |
| Physics 2 | 3，4，5 | UC－S | 5A and lab | 8 | 5.3 |  |
| Physics C Mechanics | 3，4，5 | UC－S | 5A and lab | 4 | 2.7 |  |
| Physics C Electricity and Magnetism | 3，4，5 | UC－S | 5A and lab | 4 | 2.7 |  |
| PSYCHOLOGY | 3，4，5 | UC－B | 41 | 4 | 2.7 |  |
| STATISTICS | 3，4，5 | UC－M | 2A | 4 | 2.7 |  |

CSU Systemwide Credit for External Examinations (as of May 3, 2016)

| College Board Advanced Placement (AP) | Passing Score | Minimum <br> Semester Credits Earned ${ }^{1}$ | Semester Credits Toward GE Breadth Certification | American Institutions and/or GE Breadth Area ${ }^{2}$ | Removal Date for GE Breadth ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Art History | 3 | 6 | 3 | C1 or C2 |  |
| Biology | 3 | 6 | 4 | B2 and B3 |  |
| Calculus $\mathrm{AB}^{4}$ | 3 | 3 | 3 | B4 |  |
| Calculus BC ${ }^{4}$ | 3 | 6 | 3 | B4 |  |
| Calculus BC/AB Subscore ${ }^{4}$ | 3 | 3 | 3 | B4 |  |
| Chemistry | 3 | 6 | 6 | B1 and B3 | F'09 |
| Chemistry | 3 | 6 | 4 | B1 and B3 |  |
| Chinese Language and Culture | 3 | 6 | 3 | C2 |  |
| Comparative Government and Politics | 3 | 3 | 3 | D8 |  |
| Computer Science $\mathrm{A}^{4}$ | 3 | 3 | 0 | N/A |  |
| Computer Science $\mathrm{AB}^{4}$ | 3 | 6 | 0 | N/A |  |
| English Language and Composition | 3 | 6 | 3 | A2 |  |
| English Literature and Composition | 3 | 6 | 6 | A2 and C2 |  |
| Environmental Science ${ }^{5}$ | 3 | 4 | 4 | B2 and B3 | F'09 |
| Environmental Science ${ }^{5}$ | 3 | 4 | 4 | B1 and B3 |  |
| European History | 3 | 6 | 3 | C2 or D6 |  |
| French Language | 3 | 6 | 6 | C2 | F'09 |
| French Language | 3 | 6 | 3 | C2 | F'11 |
| French Language and Culture | 3 | 6 | 3 | CS |  |
| French Literature | 3 | 6 | 3 | C2 | F'09 |
| German Language | 3 | 6 | 6 | C2 | F'09 |
| German Language | 3 | 6 | 3 | C2 | $\mathrm{F}^{\prime} 11$ |
| German Language and Culture | 3 | 6 | 3 | C2 |  |
| Human Geography | 3 | 3 | 3 | D5 |  |
| Italian Language and Culture | 3 | 6 | 3 | C2 |  |
| Japanese Language and Culture | 3 | 6 | 3 | C2 |  |
| Latin Literature | 3 | 6 | 3 | C2 | F'09 |
| Latin | 3 | 6 | 3 | C2 |  |
| Latin: Vergil | 3 | 3 | 3 | C2 | F'12 |
| Macroeconomics | 3 | 3 | 3 | D2 |  |
| Microeconomics | 3 | 3 | 3 | D2 |  |
| Music Theory | 3 | 6 | 3 | C1 | F'09 |
| Physics ${ }^{6}$ | 3 | 6 | 6 | B1 and B3 | F'09 |
| Physics B6 | 3 | 6 | 4 | B1 and B3 | F'13 |
| Physics $1^{6}$ | 3 | 4 | 4 | B1 and B3 |  |
| Physics $2^{6}$ | 3 | 4 | 4 | B1 and B3 |  |
| Physics C (electricity/magnetism) ${ }^{6}$ | 3 | 4 | 4 | B1 and B3 |  |
| Physics C (mechanics) ${ }^{6}$ | 3 | 4 | 4 | B1 and B3 |  |
| Psychology | 3 | 3 | 3 | D9 |  |
| Seminar | 3 | 3 | 0 | N/A |  |
| Spanish Language | 3 | 6 | 6 | C2 | F'09 |
| Spanish Language and Culture | 3 | 6 | 3 | C2 |  |
| Spanish Literature | 3 | 6 | 6 | C2 | F'09 |
| Spanish Literature and Culture | 3 | 6 | 3 | C2 |  |
| Statistics | 3 | 3 | 3 | B4 |  |
| Studio Art - 2D Design | 3 | 3 | 0 | N/A |  |
| Studio Art - 3D Design | 3 | 3 | 0 | N/A |  |
| Studio Art - Drawing | 3 | 3 | 0 | N/A |  |
| U.S. Government \& Politics | 3 | 3 | 3 | D8 and US-2 |  |
| U.S. History | 3 | 6 | 3 | (C2 or D6) and US-1 |  |
| World History | 3 | 6 | 3 | C2 or D6 |  |

${ }^{1}$ These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.
${ }^{2}$ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at assist.org
${ }^{3}$ Student seeking certification in GE Breadth prior to transfer must have passed the test before this date.
${ }^{4}$ If a student passes more than one AP exam in calculus or computer science, only one examination may be applied to the baccalaureate.
${ }^{5}$ Students who pass AP Environmental Science earn 4 units of credit. Tests prior to Fall 2009 may apply to either B1+B3 or B2+B3 of GE Breadth. Fall of 09 or later, those credits may only apply to B1+B3.
${ }^{6}$ If a student passes more than one AP exam in physics, only six units of credit may be applied to the baccalaureate, and only four units of credit may be applied to a certification in GE Breadth.

CSU Systemwide Credit for External Examinations (as of May 3, 2016)

| College Level Examination Program (for CSU only) | Passing Score | Minimum Semester Credits Earned ${ }^{1}$ | Semester Credits Toward GE Breadth Certification | American Institutions and/or GE Breadth Area ${ }^{2}$ | Removal Date for GE Breadth ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| American Government | 50 | 3 | 3 | D8 |  |
| American Literature | 50 | 3 | 3 | C2 |  |
| Analyzing and Interpreting Literature | 50 | 3 | 3 | C2 |  |
| Biology | 50 | 3 | 3 | B2 |  |
| Calculus | 50 | 3 | 3 | B4 |  |
| Chemistry | 50 | 3 | 3 | B1 |  |
| College Algebra | 50 | 3 | 3 | B4 |  |
| College Algebra - Trigonometry | 50 | 3 | 3 | B4 |  |
| College Composition | 50 | 0 | 0 | N/A |  |
| College Composition - Modular | 50 | 0 | 0 | N/A |  |
| College Mathematics | 50 | 0 | 0 | N/A |  |
| English Composition (no essay) | 50 | 0 | 0 | N/A |  |
| English Composition with Essay | 50 | 0 | 0 | N/A |  |
| English Literature | 50 | 3 | 3 | C2 | F'11 |
| Financial Accounting | 50 | 3 | 0 | N/A |  |
| French ${ }^{3}$ Level I | 50 | 6 | 0 | N/A |  |
| French ${ }^{3}$ Level II | 59 | 12 | 3 | C2 | F'15 |
| French ${ }^{3}$ Level II | 59 | 9 | 3 | C2 |  |
| Freshman College Composition | 50 | 0 | 0 | N/A |  |
| German ${ }^{3}$ Level I | 50 | 6 | 0 | N/A |  |
| German ${ }^{3}$ Level II | 60 | 12 | 3 | C2 | F'15 |
| German ${ }^{3}$ Level II | 60 | 9 | 3 | C2 |  |
| History, United States I | 50 | 3 | 3 | D6 and US-1 |  |
| History, United States II | 50 | 3 | 3 | D6 and US-1 |  |
| Human Growth and Development | 50 | 3 | 3 | E |  |
| Humanities | 50 | 3 | 3 | C2 |  |
| Information Systems and Computer Applications | 50 | 3 | 0 | N/A |  |
| Introduction to Educational Psychology | 50 | 3 | 0 | N/A |  |
| Introductory Business Law | 50 | 3 | 0 | N/A |  |
| Introductory Psychology | 50 | 3 | 3 | D9 |  |
| Introductory Sociology | 50 | 3 | 3 | D0 |  |
| Natural Sciences | 50 | 3 | 3 | B1 or B2 |  |
| Pre-Calculus | 50 | 3 | 3 | B4 |  |
| Principles of Accounting | 50 | 3 | 0 | N/A |  |
| Principles of Macroeconomics | 50 | 3 | 3 | D2 |  |
| Principles of Management | 50 | 3 | 0 | N/A |  |
| Principles of Marketing | 50 | 3 | 0 | N/A |  |
| Principles of Microeconomics | 50 | 3 | 3 | D2 |  |
| Social Sciences and History | 50 | 0 | 0 | N/A |  |
| Spanish ${ }^{3}$ Level I | 50 | 6 | 0 | N/A |  |
| Spanish ${ }^{3}$ Level II | 63 | 12 | 3 | C2 | F'15 |
| Spanish ${ }^{3}$ Level II | 63 | 9 | 3 | C2 |  |
| Trigonometry | 50 | 3 | 3 | B4 | F'06 |
| Western Civilization I | 50 | 3 | 3 | C2 or D6 |  |
| Western Civilization II | 50 | 3 | 3 | D6 |  |

[^0]CSU Systemwide Credit for External Examinations (as of May 3, 2016)

| International Baccalaureate Exam (CSU and IGETC) | Passing Score | Minimum <br> Semester Credits Earned ${ }^{1}$ | Semester Credits Toward CSU GE Breadth Certification | American Institutions and/or CSU GE Breadth Area ${ }^{2}$ | IGETC <br> Semester/ Quarter Units Earned | IGETC Area (Passing score of 5,6 or 7) | Removal Date for GE Breadth ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Biology HL | 5 | 6 | 3 | B2 | 3 sem/4 qrt | 5B <br> (without lab) |  |
| Chemistry HL | 5 | 6 | 3 | B1 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 5A (without lab) |  |
| Economics HL | 5 | 6 | 3 | D2 | 3 sem/4 qrt | 4B |  |
| Geography HL | 5 | 6 | 3 | D5 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 4 E |  |
| History (any region) HL | 5 | 6 | 3 | C2 or D6 | 3 sem/4 qrt | 3 B or $4 \mathrm{~F}^{5}$ |  |
| Language A1 (any language) HL | 4 | 6 | 3 | C2 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 3 B and 6A | F'13 |
| Language A2 (any language) HL | 4 | 6 | 3 | C2 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 3 B and 6A | F'13 |
| Language A Literature HL | 4 | 6 | 3 | C2 | 3 sem/4 qrt | 3B |  |
| Language A Language and Literature HL | 4 | 6 | 3 | C2 | 3 sem/4 qrt | 3B |  |
| Language B (any language) HL ${ }^{4}$ | 4 | 6 | 0 | N/A | 3 sem/4 qrt | 6A |  |
| Mathematics HL | 4 | 6 | 3 | B4 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 2A |  |
| Physics HL | 5 | 6 | 3 | B1 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 5A (without lab) |  |
| Psychology HL | 5 | 3 | 3 | D9 | 3 sem/4 qrt | 41 |  |
| Theater HL | 4 | 6 | 3 | C1 | $3 \mathrm{sem} / 4 \mathrm{qrt}$ | 3A |  |

${ }^{1}$ These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.
${ }^{2}$ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at assist.org.
${ }^{3}$ Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.
${ }^{4}$ The IB Curriculum offers language at various levels for the native and non-native speakers. Language B courses are offered at the intermediate level for non-natives. Language A1 and A2 are advanced courses in literature for native and non-native speakers, respectively.
${ }^{5}$ IB exam may be used in either area of IGETC regardless of where the certifying CCC's discipline is located.

## Catalog Rights

The requirements for degrees may change during the time a student attends Fullerton College.

Catalog rights are established when a student first takes classes at Fullerton College, and they are maintained through continual enrollment at the college. These rights protect students from being held responsible for changes made to their academic programs in the years that follow their initial enrollment.

Students maintain catalog rights by maintaining continuous enrollment at Fullerton College - that is, by receiving a grade of "A," "B," "C," "D," "F," "CR," "P," "NC," "NP," "RD," "W," or "I" on their transcripts for at least one course per academic year. Documented military or medical leave during the academic year will not be considered an interruption of enrollment. This policy supersedes all previous catalog rights provisions and applies only to programs at Fullerton College.

## General Education Statement of Philosophy

General Education Requirements at Fullerton College are designed to introduce students to the variety of means through which people comprehend the modern world. They reflect the conviction of this College that those who receive their degrees must possess in common certain basic principles, concepts, and methodologies both unique to and shared by the various disciplines. College-educated persons should be able to use this knowledge when evaluating and appreciating the physical environment, the culture, and the society in which they live. Most importantly, these requirements should lead to better self-understanding and active involvement in examining values inherent in proposed solutions to major social problems.

The subject matter presented in General Education courses at Fullerton College is designed to be general, broad, and frequently introductory rather than specialized, narrow, or advanced. These General Education courses form a pattern of learning experiences designed to provide educational opportunities that:

1. Offer instruction and training in the scientific method of problem solving while gaining knowledge in the biological, physical, and environmental sciences.
2. Provide an atmosphere for the understanding of self and the desire to pursue self-development through the use of the social, political, economic, historical, and behavioral components of human interaction.
3. Foster an appreciation of the cultural heritage as illustrated in language, literature, philosophy, and fine arts.
4. Develop reading, writing, speaking, listening, analytical thinking, mathematics, and computational and technical skills necessary for the acquisition and use of knowledge.

## Graduation/Commencement

To earn an Associate Degree and to participate in the current year's commencement ceremony, students must apply for graduation by the deadline posted in the current class schedule. Applications for graduation are available online or in the Admissions and Records Office, and at the Counseling Center.

If a student has taken courses at other colleges and wants to use those courses towards graduation, official transcripts must be on file in the Admissions and Records Office by the graduation application deadline.

A maximum of 9 upper division units can be counted as elective units. Units will not be counted toward the major or general education. Grades from upper division courses will not be used when calculating the GPA.

Commencement exercises are held each year at the end of the Spring term. Detailed information about the ceremony will be sent to all graduation candidates in early May by Student Activities. Diplomas are mailed approximately three months after graduation.

## General Education Mathematics Requirement

Students may fulfill the mathematics general education requirement for an Associate Degree at Fullerton College in any of the following ways:
a. successfully completing a course in area B2 on the Fullerton College General Education Pattern
b. successfully completing an equivalent course from a regionally accredited college or university
c. scoring at an appropriate level on the mathematics portion of the Fullerton College Placement Test

No units are given for passing the Placement Test, no units are posted to the student's permanent record, nor is the total number of units required to complete the AA or AS degree lowered. If mathematics proficiency is granted under the guidelines, three additional units from Areas $A, B, C$, or $D$ are needed to meet the 24-unit minimum general education requirement.

In addition, students who satisfy the General Education Area B, B2 category requirement by the proficiency examination are still required to satisfy the 60-unit requirement for graduation.

The Placement Test may be taken only once in an attempt to waive the graduation requirement. Students wishing to take this examination should contact the Assessment Center.


## ASSOCIATE DEGREE GENERAL EDUCATION REQUIREMENT FULLERTON COLLEGE 2016-2017

## Multicultural Education Requirement

Beginning Fall Semester 1996, to meet this requirement, every student must complete one course from the following:
AJ $278 \mathrm{~F} \quad$ Multicultural Issues in Administration of Justice
ANTH 102 F or
ANTH 102HF
ANTH 105 F
ANTH 107 F
BUS 131 F
BUS 242 F
CDES 201 F
CDES 210 F
CRTV 126AF
CRTV 126BF
COUN 152 F
DANC 210 F
ENGL 224 F or
ENGL 224HF
ENGL 225 F or
ENGL 225HF
ENGL 239 F
ENGL 243 F or
ENGL 243HF
ENGL 249 F
ETHS 101 F
ETHS 118 F
ETHS 160 F
FASH 244 F
FOOD 130 F
GEOG 100 F or
GEOG 100HF
GEOG 160 F
GEOG 170 F
HIST 110 F or
HIST 110HF
HIST 111 F or
HIST 111HF
HIST 112 F or
HIST 112HF
HIST 113 F or
HIST 113HF
HIST 154 F
HIST 165 F or
HIST 165HF
HIST 191 F
MKT 205 F
PE 250 F
PHIL 105 F or
PHIL 105HF
PHIL 270 F
POSC 200 F
PSY 131 F
SOC 101 F or
SOC 101HF
SOC 102 F
SOC 275 F or
SOC 275HF
SOC 277 F or
SOC 277HF
SOC 290 F
SPAN 206 F
SPCH 120 F
THEA 108 F
Cultural Anthropology or
Honors Cultural Anthropology (beg F 06)
Language and Culture (beg F 99)
The Anthropology of Magic, Witchcraft and Religion
Principles of International Business (beg F 98)
International Business Law
Child in Home and Community (beg F 99)
Anti-Bias Perspective/Diversity Seminar (beg F 14)
World Cinema to 1945 (beg F OO)
World Cinema to 1946 to the Present (beg F OO)
Diversity in the World of Work
Multicultural Dance in the U.S. Today (beg F O3)
World Literature through the Early Modern Period (beg F 09) or
Honors World Literature through the Early Modern Period
World Literature since the Early Modern Period (beg F 09) or
Honors World Literature since the Early Modern Period
Survey of Children's Literature (beg F 97)
Folklore and Mythology or
Honors Folklore and Mythology (beg F 06)
Survey of Chicano/a Literature (beg F 10)
American Ethnic Studies
Introduction to Bilingual - Crossculturalism
History of Native Americans
Ethnic Costume
Cultural Aspects of Food
Global Geography or
Honors Global Geography (beg F 97)
Cultural Geography
Urban Geography: Introduction to the City (beg F 12)
Western Civilization I (beg F00) or
Honors Western Civilization I (beg F 06)
Western Civilization II (beg F00) or
Honors Western Civilization II (beg F 06)
World Civilizations I (beg F 99) or
Honors World Civilizations I (beg F 99)
World Civilizations II (beg F 99) or
Honors World Civilizations II (beg F 99)
Ancient Egypt (beg F 11)
Introduction to the Middle East (beg F 12) or
Honors Introduction to the Middle East (beg F 13)
History of the Americas II
Multicultural Marketing in USA (beg F O3)
Sport and the United States Society (beg F 99)
World Religions (beg F 98) or
Honors World Religions (beg F 98)
Introduction to Asian Religions (beg F 98)
Introduction to the Study of Politics (beg F 11)
Cross-Cultural Psychology (beg F 03)
Introduction to Sociology or
Honors Introduction to Sociology (beg F 03)
Social Problems (beg F 99)
Marriage and Family (beg F 10) or
Honors Marriage and Family (beg F 10)
Sociology of Religion or
Honors Sociology of Religion
Sociology of Race and Ethnicity (beg F 14)
Introduction to Latin American Literature (beg F 03)
Intercultural Communication
Multicultural Perspectives in American Theatre (beg F O3)

## A student may use the Multicultural Education course listed above to also meet a major or general education requirement for the Associate degree.

## Graduation Reading Requirement

Proficiency in reading may be satisfied by one of the following:

1) A score indicating a placement into READ 142 F or a reading proficiency test approved by the Reading Department;
2) A passing grade in READ 096 F (formerly READ 056BF), READ 142 F , any course in the IGETC (1B) or CSU (A3) Critical Thinking category;
3) A passing grade in ESL 185 F or 189 F . $\quad 5 / 2016$ (Dr. Lee/KTran)
"Equivalent Disclaimer" - Courses taken at another college must be equivalent to courses offered at Fullerton College.


## PARALEGAL STUDIES 2016-2017

## ASSOCIATE IN SCIENCE (AS) DEGREE

The Fullerton College's ABA-approved curriculum leads to an Associate in Science (AS) Degree and entry-level employment in a paraprofessional capacity as an assistant to an attorney in private practice, in a governmental agency, or in private industry. This degree requires $\mathbf{2 7}$ units, of which $\mathbf{2 4}$ are in required courses. An additional $\mathbf{3}$ units must be chosen from the restrictive electives listed below. A minimum grade of " $\mathbf{C}$ " is required in all required and restrictive elective courses.
Paralegals may perform many tasks under the supervision of a licensed attorney including preparation of forms and pleadings, interviewing clients, researching and writing legal documents, managing in a law office, and preparing word processing forms and documents. This program is not intended to prepare students for the practice of law. The Paralegal Studies program is approved by the American Bar Association (ABA).

## PARALEGAL STUDIES CERTIFICATE

The Paralegal Studies Certificate requires the completion of $\mathbf{3 0}$ units of which $\mathbf{2 4}$ are in the required courses below. An additional $\mathbf{6}$ units must be chosen from the restrictive electives listed below. A minimum grade of " C " is required in each course. All required courses must be completed at Fullerton College. Students must possess an AA, AS, BA, BS or higher degree from a regionally accredited college. Only students with an Associate Applied Science (AAS) degree must have their transcripts evaluated for General Education requirements as listed in the GE requirements for an AS in Paralegal Studies.

Because this is an American Bar Association approved program, students who wish to transfer in Paralegal Studies units, a maximum of six (6) Restrictive Electives, must obtain prior permission from the Paralegal Department Coordinator or the Business Division Dean.

## Required Courses

| PLEG 101 F | Introduction to Paralegal Studies (3) |
| :---: | :---: |
| PLEG 104 F | Introduction to Legal Research and Terminology (3) (formerly PLEG 103 F) |
| PLEG $105 \mathrm{~F}^{*}$ | Introduction to Legal Writing (3) (formerly PLEG 102 F) |
| PLEG 116 F | Computers in the Law Office (3) |
| PLEG 201 F* | Civil Litigation I (3) |
| PLEG 202 F* | Civil Litigation II (3) |
| PLEG 207 F* | Computer Assisted Legal Research (3) |
| PLEG 216 F | Computers in the Law Office II (3) |
| Restrictive Electives |  |
| PLEG 090 F* | Contemporary Issues in the Law (1-3) |
| PLEG 203 F * | Personal Injury (3) |
| PLEG 204 F* | Family Law (3) |
| PLEG 205 F* | Probate, Wills, and Trusts (3) |
| PLEG 206 F* | Bankruptcy Law and Procedure (3) |
| PLEG 208 F* | Workers' Compensation Law (3) |
| PLEG 209 F* | Criminal Law and Procedure (3) |
| PLEG 210 F* | Paralegal Internship (1-4) |
| PLEG 211 F* | Real Property Law and Procedure (3) |
| PLEG 212 F* | Medical Records Review (1.5) |
| PLEG 213 F* | Employment and Labor Law (3) |
| PLEG $214 \mathrm{~F}^{*}$ | Contract Law and Procedure (3) |
| PLEG 215 F* | Discovery in Electronic Age (3) |
| PLEG 217 F* | Immigration Law (3) |
| PLEG 218 F | Entertainment and Sports Law (3) |
| PLEG 219 F* | Intellectual Property (3) |
| PLEG 220 F* | Elder Law (1.5) |
| PLEG 221 F | Ethics (2) |
| PLEG 225 F | Law Office Management (3) |
| Recommended Electives |  |
| BUS 241AF | Business Law (3) |
| CIS 100 F | Introduction to Personal Computer Applications (4) |
| * Requires co | of prerequisites before enrollment. |

The Paralegal Studies major requires restricted general education.
See the reverse side of this sheet for a list of the general education courses approved by the ABA.

## PARALEGAL STUDIES 2016-2017 <br> ASSOCIATE IN SCIENCE DEGREE FULLERTON COLLEGE

PROGRAM CODE: 2 S08434

## ** Program plan will depend on placement test results. This program could be adjusted. ** PLEASE NOTE: Students commencing their education at Fullerton College with or after Fall 2011 are required to take PLEG 207 F and PLEG 216 F. PLEG 207 F should be taken during the third or fourth semester and PLEG 216 F should be taken when offered as neither class is offered every semester. Additionally, 200-level required courses are not offered every semester.

## DEGREE-ORIENTED PARALEGAL STUDENTS

## FIRST SEMESTER <br> UNITS

PLEG 101 F Introduction to Paralegal Studies 3
PLEG 104 F Introduction to Legal Research and Terminology 3
ENGL 100 F College Writing
4
Beginning Computer (if necessary) 3
Area B1 (Physical Sciences and Life Sciences) 3-4
Area C1 (Visual Arts, Music, Theatre, and Dance) 3
Total:
19-20
SECOND SEMESTER UNITS
PLEG 105 F Introduction to Legal Writing (1) 3
PLEG 116 F Computers in the Law Office 3
Area A2 (Analytical Thinking) 3
Area D1 (Social, Political and Economic Institutions) 3
MATH 40 F Intermediate Algebra 4
Total: 16
THIRD SEMESTER UNITS

PLEG 201 F Civil Litigation I (2) 3
PLEG 207 F* Computer-Assisted Legal Research (if offered) (2) 3
PLEG 216 F Computers in Law Office II (if offered) 3
Area C2 (Literature, Philosophy, Religion, and Foreign Language) 3-5

* All 200 F level classes (except PLEG 216 F, PLEG 218 F, PLEG 221 F \& PLEG 225 F) require the successful completion of PLEG 101 F \& 104 F. PLEG 105 F requires a minimum completion of PLEG 101 F, 104 F, \& ENGL 100 F before a student is allowed to register.
Please Note: PLEG 210 F has additional requirements.
$\qquad$
FOURTH SEMESTER UNITS
PLEG 202 F Civil Litigation II (3) 3
P.E. Activity 1

3 Units of Paralegal Restrictive Electives 3
Area D2 (Social Behavior and Self-Understanding) 3
Optional: Students are encouraged to take
1-4 units of PLEG 210 F (Internship Course)
Total:
10 or 11-14
(1) Upon successful completion of prerequisites: ENGL 100 F, PLEG 101 F, \& PLEG 104 F.
(2) Upon successful completion of prerequisites: PLEG 101 F and PLEG 104 F with a grade of ' C ' or better.
(3) Upon successful completion of prerequisites: PLEG 101 F, PLEG 104 F and PLEG 201 F.

In choosing General Education courses, make sure one course meets the Multicultural Requirement.
Note: Students must have a minimum of 27 Paralegal Studies units for the degree.

## PARALEGAL STUDIES 2016-2017 CERTIFICATE PROGRAM FULLERTON COLLEGE

** Program plan will depend on placement test results. This program could be adjusted. **
PLEASE NOTE: Students commencing their education at Fullerton College with or after Fall 2011 are required to take PLEG 207 and PLEG 216. PLEG 207 should be taken during the third or fourth semester and PLEG 216 should be taken when offered as neither class is offered every semester. Additionally, 200-level courses are not offered every semester.

## CERTIFICATE-ORIENTED PARALEGAL STUDENTS

| FIRST SEMESTER | UNITS |
| :---: | :---: |
| PLEG 101 F Introduction to Paralegal Studies | 3 |
| PLEG 104 F Introduction to Legal Research and Terminology | 3 |
| ENGL 100 F College Writing | 4 |
| Beginning Computer (if necessary) | 3 |
| Total: | 13 |
| SECOND SEMESTER | UNITS |
| PLEG 105 F Introduction to Legal Writing (1) | 3 |
| PLEG 116 F Computers in the Law Office | 3 |
| Total: | 6 |
| THIRD SEMESTER | UNITS |
| PLEG 201 F Civil Litigation I (2) | 3 |
| PLEG 207 F* Computer-Assisted Legal Research (if offered) (2) | 3 |
| PLEG 216 F Computers in the Law Office II (if offered) | 3 |
| 3 Units of Paralegal Restrictive Electives (090 F \& 200 F* level courses) | 3 |

* All 200 F level classes (except PLEG 216 F, PLEG 218 F, PLEG 221 F and PLEG 225 F) require the successful completion of PLEG 101 F and 104 F. PLEG 105 F requires a minimum completion of PLEG 101 F, 104 F, and ENGL 100 F before a student is allowed to register.
Please Note: PLEG 210 F has additional requirements.
$\qquad$


## FOURTH SEMESTER

PLEG 202 F Civil Litigation II (3)
3 Units of Paralegal Restrictive Electives (090 F \& 200 F* level courses)
Optional: Students are encouraged to take
1-4 units of PLEG 210 F (Internship Course)

Total:
6
(1) Upon successful completion of prerequisites: ENGL 100 F, PLEG 101 F, \& PLEG 104 F.
(2) Upon successful completion of prerequisites: PLEG 101 F and PLEG 104 F with a grade of a " C " or better
(3) Upon successful completion of prerequisites: PLEG 101 F, PLEG 104 F and PLEG 201 F.

NOTE: Students must have a minimum of 30 Paralegal Studies units for the certificate.

## Graduation Requirements

The Associate in Arts or the Associate in Science degree may be granted upon the completion of 60 degree applicable units of work and fulfillment of the following specific requirements:

## 1. Scholarship Requirement

A cumulative grade-point average of 2.00 ("C") in all coursework attempted.

## 2. Residence Requirement

a. A minimum of 24 units accumulated during two or more semesters must be completed at Fullerton College; or
b. The last 12 units prior to awarding the degree must be completed at Fullerton College.

## 3. Major Requirement

a. A student must achieve a grade of "C" or better in each course attempted that is counted for the major or area of emphasis.

## 4. General Education Requirements

a. 24 units as stipulated by the Fullerton College graduation requirements - a minimum of three (3) units in each of the eight (8) sub-categories; or
b. 39 units as stipulated by the CSU general education certification requirements; or
c. 37-39 units as stipulated by the IGETC (Intersegmental General Education Transfer Curriculum) requirements.
d. Courses appearing in more than one area may only be counted in one area.
NOTE: General Education courses taken at either Fullerton or Cypress College will satisfy Associate Degree General Education Graduation requirements regardless of the college within the District from which he/she graduates.

## 5. Physical Education Requirement

a. One unit of Physical Education Activity; or
b. Completion of PE 243 F Stress Management through Physical Activity; or PE 266 F Physical Fitness as a Lifelong Concept.
c. Veterans who completed Basic Training may be eligible for one unit of P.E. Credit to meet this requirement. Please see the Veterans Services section for more information.
6. Multicultural Education Requirement

Beginning Fall Semester 1996, to meet this requirement every student must complete one course from the "Multicultural Education Requirement" on the Associate Degree General Education Requirement sheet. A student may use the Multicultural courses to also meet a major or general education requirement for the Associate Degree. All students graduating after the year 2001 will be required to complete the Multicultural graduation component, no matter how their previous catalog rights were defined.

## 7. Reading Requirement

Beginning Fall 1997, students must satisfy the following reading proficiency requirement. Proficiency in reading may be satisfied by one of the following:
a. A score indicating a placement into READ 142 F or a reading proficiency test approved by the Reading Department or
b. A passing grade in READ 096 F OR READ 142 F OR any course in the IGETC (1B) or CSU (A3) critical thinking category OR ESL 185 F.

All students graduating with an AA or AS degree after the year 2002 will be required to complete the reading requirement, regardless of how their previous catalog rights were defined.

## Credit for Courses Completed at Other Colleges

A course completed at another regionally-accredited college or university may be used to satisfy a Fullerton College degree and/ or certificate requirement if it is determined to be "equivalent" to a course in the Fullerton College catalog. Equivalency is determined through the evaluation of official college transcripts.

In addition to course-to-course equivalency, Fullerton College will also accept courses that meet a CSU GE or IGETC requirement at the college where they are completed to satisfy Fullerton College Associates Degree general education (or "GE") requirements in the related GE area on the Fullerton College AA/AS GE pattern.

The Fullerton College graduation requirements described above (in items 1-7) apply for traditional Associate in Arts (AA) and Associate in Science (AS) degrees. These graduation requirements do not apply to the Associate Degrees for Transfer, called "AA-T" and "AS-T" degrees.

## Credit for Military Training:

In alignment with the practice of the CSU Chancellor's Office, Fullerton College certifies 3 units of transferable credit and full completion of Area E on the CSU GE pattern for students who submit the DD Form 214, Certificate of Release or Discharge from Active Duty (DD-214) indicating the completion of basic training. The intention is to award credit for the "Lifelong Learning" experience veterans get in Basic Training, which is documented on the DD-214 form.

Students with a DD-214 who apply for a Fullerton College Associates Degree using the FC AA GE pattern or IGETC instead of CSU GE will be awarded 3 units of degree-applicable elective credit.

## CSU GE and IGETC credit for General Education courses completed at another college/university:

Lower division general education courses completed with a passing grade at a California State University (CSU) prior to enrolling at a California community college will be accepted to meet requirements on the CSU GE pattern in the GE area for which they were approved at the CSU where the course was completed.

The Articulation Office will determine if these courses may be accepted to meet the IGETC requirements that parallel the CSU GE areas, if a grade of $C$ or better is reflected on the transcript.

A general education course completed at a University of California (UC) campus, a regionally accredited independent college or university in California that does not maintain a CSU GE-B certification list or a regionally accredited out-of-state institution of higher education (under one of the following regional institutional accrediting organizations: MSA, NASC, NCA, NWCCU, NEASC-CIHE, SACS, WASC), may be reviewed by the Articulation Office to determine applicability to a specific CSU GE and/or IGETC requirement.

The Articulation Office will determine comparability for standard general education courses through consideration of the GE pattern and specific course objectives at the institution where the course was completed.

If the course is substantially comparable in content, scope, and rigor to a course that is currently on the CSU GE-B certification list for any community college it may be "passed along" in that it will be used to satisfy a requirement in the appropriate GE area.

PLEASE NOTE: credit will not be awarded for Fullerton College major requirements or used to fulfill requisites unless the course completed is determined to be equivalent to the course required for a major or the course requisite respectively (see explanation of equivalency on previous page).

## Associate in Arts and Associate in Science Degrees for Transfer

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 6674666749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) degrees are intended for students who plan to complete a bachelors 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:

1. a minimum of 60 semester units of CSU-transferable coursework
2. a minimum GPA of 2.0

This 60 units includes completion of:
a. the CSU GE or IGETC pattern, and
b. 18 or more units in an AA-T or AS-T major with a grade of "C" or better (major requirements for each AA-T and AS-T degree provided in this catalog alphabetically by discipline).
3. 12 units in residence

There are no additional graduation requirements for AA-T or AS-T degrees.

Students transferring to a CSU campus that does accept the specific AA-T or AS-T earned as preparation for a similar major will be granted priority admission, and 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, see specific degree requirements for more information where this applies).

These degrees may not be the best option for students intending to transfer to a particular CSU campus or to a university or college 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.

## Pass Along for Students with Baccalaureate and/or Associates Degrees

## Multiple Degrees:

Students may earn a traditional Associate Degree (AA/AS) from Fullerton College after receiving a baccalaureate degree or an associate degree from another accredited U.S. Institution (under one of the following regional institutional accrediting organizations: MSA, NASC, NCA, NWCCU, NEASC-CIHE, SACS, WASC) upon completion of the following:

1. a minimum of 12 units in residence (in any subject area unless there are residency requirements for the specific major, see major requirements in the Fullerton College Catalog for details)
2. all requirements in the major field of study, with a grade of $C$ or better
3. other Fullerton College graduation requirements for which equivalents have not been completed, including Physical Education, Multicultural, and Reading requirements
4. a cumulative GPA of 2.0 or better, and

## 5. Title 5 Minimum Requirements for an Associate Degree

There will be no additional local General Education requirements as long as all Title 5 Requirements have been met through prior educational experience at a regionally accredited U.S. institution and documented on official transcripts.

## Title 5 Minimum Requirements for an Associate Degree include:

A) Completion of an English composition course with a grade of C or better at the level of Freshman Composition (minimum of 3 semester units)
B) Completion of a mathematics course with a grade of C or better at or above the level of Intermediate Algebra (minimum of 3 semester units) or by achieving an assessment test score determined to be comparable to satisfactory completion of Intermediate Algebra or a college level math course (please note: no units are awarded if this requirement is met using an assessment test score).
C) An additional 15 semester units of General Education Requirements including at least 3 semester units in each of the GE areas below:
(3 units) Natural Sciences
(3 units) Social and Behavioral Sciences
(3 units) Humanities
(3 units) Communication and Analytical Thinking (this may be satisfied through completion of a math course at or above the level of Intermediate Algebra)

## Multiple Associate Degrees

1. Students may earn a traditional Associate Degree (AA/AS) from Fullerton College after having received a baccalaureate degree or an associate degree from another accredited US institution (under one of the following regional institutional accrediting organizations: MSA, NASC, NCA, NWCCU, NEASC-CIHE, SACS, WASC) upon completion of the following:
a. a minimum of 12 units in residence (in any subject area unless there are residency requirements for the specific major, see major requirements in the Fullerton College Catalog for details),
b. all requirements in the major field of study, and
c. general education and graduation requirements for which equivalents have not been completed.
2. Students may earn more than one traditional Associate Degree (AA and/or AS) from Fullerton College upon completion of the following:
a. at least 12 units unique to each degree are earned in residence in any subject area unless there are residency requirements for the specific major, see major requirements in the Fullerton College Catalog for details (a minimum of 60 degree applicable units is required for the first degree, plus an additional 12 units unique to the second degree equals a minimum of 72 units for two degrees).
b. all major requirements for each degree to be earned, and
c. all general education and graduation requirements.

The requirement of an additional 12 units in residency for multiple degrees does not apply to an Associate Degree for Transfer (AA-T or AS-T). Each Associate's Degree from Fullerton College will be awarded on a separate diploma.

Effective for Fall 2007 and thereafter, grades of "C" or better are required for all courses to be counted towards a major (students with "Ds" in major courses who were admitted prior to Fall 07 and continuously enrolled each year since should consult a counselor about catalog rights).

## Transferability of Courses

Community colleges, including Fullerton, offer curriculums paralleling the first two years of Bachelors degree programs as well as those preparing for employment at the completion of the AA/AS degree. These categories are not mutually exclusive, however, as many courses included in occupational programs are also transferable to four-year colleges. For this and other reasons the definition of a transfer course is somewhat complicated.

First it needs to be said that each four-year institution decides for itself on the acceptance of courses from other colleges. In general, the policy, whether liberal or restrictive, will apply equally to entrants from community colleges and from other four-year colleges with two exceptions. All four-year colleges impose a ceiling (between 60 and 70 units) on the acceptance of community college credit, and all recognize that community colleges offer remedial and vocational courses usually not intended for transfer.

In this context a community college course can be "transferable" in any one of the following ways:

1. As meeting lower-division requirements in the major. To be accepted for this purpose, the course must correspond almost exactly to the comparable course at the four-year college in content, prerequisites, and unit value.
2. As applying to general education requirements. Some fouryear institutions are fairly flexible in accepting courses for this purpose, provided they are in the proper category; e.g. physical science, social science, fine arts. In many cases, however, the institution will accept only courses paralleling its own lowerdivision offerings. A special case here is the 39-unit block of general education which a community college certifies to the California State University System. In this case any course listed for this purpose by the community college will be accepted by any California State University as applicable to the 39-unit block, provided the applicable category (natural science, social science, humanities, basic subjects) has been completed and the student has requested general education certification on transcript request.
3. As elective credit. A course not acceptable as part of a major, support for the major, or as general education may be accepted as elective credit. This signifies that it will apply to the total-unit requirement for the Bachelors degree. Fouryear institutions are generally liberal in accepting courses for elective credit, but almost certainly will exclude avowedly vocational courses or specialized courses which they do not offer.
4. For subject credit only. Acceptance of a course for subject credit only, without unit credit, usually takes place in one of the following situations:
a. The student has accumulated as many units as the fouryear college will accept from a community college.
b. The corresponding course in the four-year college is upperdivision.
c. The course is a prerequisite for a course in the student's major, but the prerequisite is normally completed in high school.

In summary, then, the question of whether a course is transferable can be accurately answered only with reference to a particular four-year college and the purpose for which the course will be used. Checking the four-year college catalog in the Fullerton College Counseling Resource Center or the Cadena/Transfer Center as well as consultation with a counselor are recommended. A counselor can give you up-to-date information.

## Transfer Courses for the California State University

The campuses of the California State University system have agreed to accept, for the purposes of determining eligibility for upper-division transfer status, those courses classified by each community college as transferable. See "Announcement of Courses" section for transfer number and designation of course information.

It should be noted that acceptance of these courses by a CSU campus does not signify that they will necessarily be applied to the requirements of a particular major or to general education requirements. Courses may be accepted as electives only toward the Bachelors degree. Students should consult a counselor for information on major requirements and the following pages for courses applicable to CSU and UC general education requirements.

# General Education Breadth Requirements for College and University 

THE INFORMATION CONTAINED IN THIS SECTION OF THE CATALOG IS CORRECT TO THE BEST OF OUR KNOWLEDGE AT THE TIME OF PRINTING. IT IS STRONGLY RECOMMENDED THAT STUDENTS CONSULT WITH A COUNSELOR BEFORE MAKING FINAL ACADEMICNOCATIONAL DECISIONS. FOR TRANSFER INFORMATION REGARDING SPECIFIC SCHOOLS OR PROGRAMS, EITHER A FULLERTON COLLEGE COUNSELOR OR THE COLLEGE OR UNIVERSITY IN QUESTION CAN BE CONSULTED FOR MORE DETAILED INFORMATION.

## General Education Certification

Fullerton College is authorized to offer two general education certification patterns. The CSU Certification is a 39 unit pattern which fulfills the lower division general education requirements for the Bachelor Degree at the California State University.

The IGETC (Intersegmental General Education Transfer Curriculum) is a 37-39 unit pattern which fulfills the lower division general education requirements for the Bachelor Degree at either the University of California or the California State University.

Certification means Fullerton College has determined these requirements have been met and a notation is made on the transcript. If the student transfers without certification, the university may require the student to complete additional lower division general education.

There are no catalog rights for certification. A course must be on the appropriate general education list at the time it is successfully completed.

Important Note: Selecting a general education plan is an issue that must be planned carefully. Certification is not always advantageous to all students. It is critical that all students planning to transfer to a university seek guidance from an academic counselor. Students not seeking guidance may complete inappropriate courses, thus complicating or delaying transfer to the university.

Students who complete either general education certification requirements need to request an evaluation to be included with the transcript when it is sent to the university. (Refer to Transcript of Record for additional information.)

## California State University and University of California Campus Specific General Education/ Breadth Requirements


#### Abstract

There are several ways that a transfer student may fulfill the CSU and UC lower-division general education requirements prior to transfer. Depending on a student's major and field of interest, the student may find it better to take courses fulfilling those of the transfer campus or college to which the student plans to transfer. Students pursuing majors that require extensive lower-division preparation may not find the Intersegmental General Education Transfer Curriculum or the CSU General Education Certification option to be advantageous.


Students are urged to consult the CSU or UC campus catalog; consult with their FC academic counselor; and use the FC Counseling Resource Center or the Cadena/Transfer Center to obtain additional information regarding CSU and UC campus specific transfer general education course patterns and lists.

## California State University Transfer Admission Requirements

Students who did not meet the CSU Admission eligibility index in high school may qualify for admission as a transfer student with a grade point average of 2.00 ("C") or better in all college transferable units attempted. They must also be in good standing at the last college or university attended, have 60 or more semester units, and meet the following:

1. 1987 or earlier high school graduates: complete the CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3 semester units), with a "C" or better in each course;
2. 1988 and later high school graduates: complete a minimum of 30 semester ( 45 quarter) units, with a "C" or better in each course, to be chosen from courses in English, arts and humanities, social science, science, and mathematics of at least equivalent level to courses that meet general education or transfer curriculum requirements. You must complete all CSU general education requirements in communication in the English language (at least 9 semester units) and mathematics (usually 3-4 semester units) as part of the 30 unit requirement.

| CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS FULLERTON COLLEGE 2016-2017 |  |  |  |
| :---: | :---: | :---: | :---: |
| Legend: C = Completed; IP = In Progress; R = Remaining | C | IP | R |
| AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (9 semester or 12-15 quarter units). One 3 unit course is required from each section. Grades of " C " or better are required. <br> 1. ORAL: SPCH $100 \mathrm{~F}, 105 \mathrm{~F}, 124 \mathrm{~F}, 135 \mathrm{~F}^{*}$ |  |  |  |
| 2. WRITTEN: ENGL 100 F or 100HF |  |  |  |
| 3. CRITICAL THINKING: ENGL 103 F or 103HF, $104 \mathrm{~F}, 201 \mathrm{~F}$; PHIL 170 F, 172 F; READ 142 F; SPCH 135 F* |  |  |  |
| AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING (9 semester or 12-15 quarter units min.). One lecture course is required from each section. One matching lab must be included for Physical Science or Life Science if lecture and lab are taken separately. <br> NOTE: Some colleges may require two lab courses if student is not fully certified. <br> 1. PHYSICAL SCIENCE: <br> CHEM $100 \mathrm{~F}, 101 \mathrm{~F}, 103 \mathrm{~F}, 107 \mathrm{~F}, 111 \mathrm{AF}$, 111BF (beg F 15) <br> ESC 100 F, 101 F, $103 \mathrm{~F}, 104 \mathrm{~F}, 105 \mathrm{~F}, 116 \mathrm{~F}$ or $116 \mathrm{HF}, 120 \mathrm{~F}, 130 \mathrm{~F}$ or $130 \mathrm{HF}, 190 \mathrm{~F}$ <br> GEOG 102 F or 102 HF <br> PHYS 120 F (beg F 13 ) $, 130 \mathrm{~F}, 205 \mathrm{~F}, 206 \mathrm{~F}, 210 \mathrm{~F}, 211 \mathrm{~F}, 221 \mathrm{~F}$ or $221 \mathrm{HF}, 222 \mathrm{~F}, 223 \mathrm{~F}$ |  |  |  |
| 2. LIFE SCIENCE: <br> ANAT $231 \mathrm{~F}, \underline{240 \mathrm{~F}}$ <br> ANTH 101 F or 101HF <br>  274 F <br> ENVS 105 F, 106 F, 126 F <br> HORT $152 \mathrm{~F}, \underline{205 \mathrm{~F}, \underline{207 \mathrm{~F}} \mathrm{~F}}$ <br> MICR $220 \mathrm{~F}, 262 \mathrm{~F}$ |  |  |  |
| 3. LABORATORY ACTIVITY: ANTH 101LF; BIOL 102LF, 190LF; ESC 100LF, 101LF, 116LF, 130LF; ENVS 105LF; GEOG 102LF Underlined courses from Area B. 1 and B. 2 also satisfy the Area B3 Laboratory requirement. |  |  |  |
| ```4. MATHEMATICS/QUANTITATIVE REASONING: (Grade of "C" or better required). MATH 100 F, 120 F or 120HF, 129 F, 130 F, 141 F or 141HF, 142 F, 150AF, 150BF, 150HF, 170 F, 171 F, 172 F, 250AF, 250BF, 255 F, 260 F PSY 161 F or 161HF (beg F 13) SOSC 120 F``` |  |  |  |
| AREA C: ARTS AND HUMANITIES ( $\mathbf{9}$ semester or 12-15 quarter units min.). At least one course is required from section 1 and section 2. <br> 1. ART 110 F, 112 F, 113 F, 114 F, 116 F, 117 F, 118 F, 120 F, 121 F, 153 F, 154 F, 160 F (beg F 13), 174 F, 179 F, 182 F, 184 F, 196HF~, 212 F, 213 F <br> CRTV 120 F, 121 F, 126AF, 126BF, 131 F <br> DANC 120 F, 200 F, 210 F <br> ENGL 208 F <br> MUS 101 F, 102 F, 106 F, 107 F, 110 F, 113 F, 116 F, 118 F, 119 F, 120 F, 196HF~ <br> PHOT 100 F, 101 F, 111 F (beg F 14) <br> THEA 100 F, 104 F, 105 F, 127 F, 196HF~ <br> $\sim$ ART 196HF, MUS 196HF, THEA 196HF count as one course |  |  |  |
| 2. CDES 242 F (beg F 13); <br> ENGL 102 F or 102HF, 105 F, 203 F, 204 F, 207 F, 210 F (beg F 12) 211 F or $211 \mathrm{HF}, 212 \mathrm{~F}$ or 212 HF , $214 \mathrm{~F}, 221 \mathrm{~F}$ or $221 \mathrm{HF}, 222 \mathrm{~F}$ or $222 \mathrm{HF}, 224 \mathrm{~F}$ or 224 HF , 225 F or $225 \mathrm{HF}, 234 \mathrm{~F}$ or $234 \mathrm{HF}, 239 \mathrm{~F}$, 243 F or $243 \mathrm{HF}, 245$ F, 246 F, 248 F, 249 F, 251 F <br> ETHS 130 F* $^{*}$ (beg F 02) <br> Foreign Language 101 F or 101HF, 102 F or 102HF, 201 F, 203 F, 204 F, 205 F, 206 F, 207 F <br>  $113 \mathrm{~F}^{*}$ (beg F 02) or 113HF*, $154 \mathrm{~F}^{*}, 170 \mathrm{HF}^{*}, 171 \mathrm{HF}^{*}, 270$ F* $^{*}$ (beg Spr 06) <br> PHIL 100 F or $100 \mathrm{HF}, 101 \mathrm{~F}, 105 \mathrm{~F}$ or $105 \mathrm{HF}, 135 \mathrm{~F}, 160$ F, 195 F, $200 \mathrm{~F}, 201 \mathrm{~F}, 202 \mathrm{~F}, 210 \mathrm{~F}$, 220 F, 250 F, 270 F <br> THEA 109 F |  |  |  |

[^1]| CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS FULLERTON COLLEGE 2016-2017 |  |  |  |
| :---: | :---: | :---: | :---: |
| Legend: C = Completed; IP = In Progress; $\mathbf{R}$ = Remaining | C | IP | R |
| AREA D: SOCIAL SCIENCES (9 semester or 12-15 quarter units min.). Coursework taken in fulfillment of this requirement must be taught from more than one disciplinary perspective. Courses in Italics may be used to meet the U.S. History, Constitution and American Ideals Requirement. <br> ANTH 102 F or $102 \mathrm{HF}, 103$ F, 105 F, 107 F, 209 F, 211 F <br> CDES 120 F*; <br> ECON 101 F or $101 \mathrm{HF}, 102 \mathrm{~F}$ or 102 HF <br> ETHS 101 F, 129 F, $130 F^{*}, 131$ F, 140 F, 141 F, 142 F, 160 F, 170 F, 171 F; <br> GEOG 100 F or $100 \mathrm{HF}, 120$ F, 130 F (beg F 13), 160 F, 262 F (beg F 14) <br> HIST $110 \mathrm{~F}^{*}$ or $110 \mathrm{HF}^{*}, 111 \mathrm{~F}^{*}$ or $111 \mathrm{HF}^{*}, 112 \mathrm{~F}^{*}$ or $112 \mathrm{HF}^{*}, 113 \mathrm{~F}^{*}$ or $113 \mathrm{HF}^{*}, 127$ F, 151 F , 152 F, $154 \mathrm{~F}^{*}, 160 \mathrm{~F}, 161 \mathrm{~F}, 165 \mathrm{~F}$ or 165HF*, 170 For $170 \mathrm{HF}^{*}$, <br> 171 For 171HF*, 190 F, 191 F, 270 F*, $^{*} 275$ F <br> JOUR 110 F <br> PE 250 F <br> POSC 100 F or $100 \mathrm{HF}, 110$ F or $110 \mathrm{HF}, 120$ F, 150 F, 200 F, 215 F, 216 F, 220 F (beg Spr 07), 230 F, 275 F <br> PSY 101 F or 101HF, $131 \mathrm{~F}, 145 \mathrm{~F}, 202 \mathrm{~F}$ or 202HF, $221 \mathrm{~F}, 222 \mathrm{~F}, 251 \mathrm{~F}$ or 251 HF <br> SOC 101 F or 101HF, $102 \mathrm{~F}, 201 \mathrm{~F}, 225 \mathrm{~F}$ or 225HF, 230 F or 230HF, 250 F (beg F 12), <br> 275 F or $275 \mathrm{HF}, 277 \mathrm{~F}$ or $277 \mathrm{HF}, 285$ F, 290 F (beg F 14), 292 F <br> SOSC 125 F <br> WMNS 100 F or 100HF |  |  |  |
| AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT (3 semester or 4-5 quarter units min.). BUS 101 F (beg F 10); CDES 120 F*; CIS 100 F (beg F 13); COUN 135 F (beg F 15), 151 F, 163 F; DANC 100 F (beg F 13); HED 140 F; NUTR 210 F; PSY 120 F, 139 F; PE 243 F, 244 F, 247 F, 248 F, 266 F; SPCH 120 F; WELL 200 F, 220 F, 230 F <br> One unit maximum: All Physical Education Activity courses including 1 unit maximum from: DANC 101 F (beg F 14), 102 F, 103 F, 104 F, 111 F, 113 F, 114 F, 115 F, 116 F, 119 F, 121 F, 122 F (beg F 08), 130 F, 132 F, 140 F, 141 F, 142 F, 143 F, 150 F (beg F 08), 151 F (beg F 08), 160 F, 161 F, 162 F, 163 F, 202 F, 203 F (beg F 08), 214 F; REC 107 F, 108 F; WELL 242 F |  |  |  |

THE UNITED STATES HISTORY, CONSTITUTION AND AMERICAN IDEALS CSU GRADUATION REQUIREMENT may be met by completing $\mathbf{6}$ semester or 8-10 quarter units from the following two categories:
(1) U.S. History (1 course required from the following): ETHS $101 \mathrm{~F}, 130 \mathrm{~F}+, 131 \mathrm{~F}, 160 \mathrm{~F}$; HIST $127 \mathrm{~F}, 170 \mathrm{~F}$ or $170 \mathrm{HF}+, 171 \mathrm{~F}$ or $171 \mathrm{HF}+, 190 \mathrm{~F}$, 191 F (beg F 15), $270 \mathrm{~F}+$ (These units may also be used to meet 6 of the 9 -unit AREA C and AREA D requirements if applicable) and
(2)
U.S. Government: POSC $100 \mathrm{~F}++$ or $100 \mathrm{HF}++$ (required)
$+=$ Courses are also listed in Area C2.
$++=$ Courses are also listed in Area D.
Students who took an out-of-state Political Science course, please see a counselor.

## FULLERTON COLLEGE

-2016-2017 California State University General Education
IMPORTANT NOTE: Courses on this list are approved for the academic year 2016-2017 which begins with Fall Semester, 2016. This list is valid through Summer 2017. New courses for -2016-2017 are listed in Bold.
Students wishing to use a course to meet a CSU General Education requirement must be sure that the course is approved for the academic year in which it is taken. Courses on this list are approved by the CSU Chancellor's Office for the -2016-2017 academic year. There are no catalog rights for CSU certification.

Previous CSU General Education Approved Course Lists are available at www.assist.org. Information is also available at the Fullerton College Counseling Resource Center and the Cadena/Transfer Center, or you may request verification from a counselor.

Fullerton College will certify courses taken at other California community colleges in the areas designated by the offering college. Courses taken at California four year colleges or accredited out-of-state two year or four year colleges will be certified if they are equivalent to courses on the CSU GE course list. Courses from foreign institutions cannot be used in the certification process.

Certification is not automatic and must be requested after the completion of the last term prior to transfer. This request should be made in the Admissions and Records Office and will occur when final transcripts are sent to the CSU. Students requesting CSU GE "pass along" certification must complete at least 12 transferable units at FC.

4/2017 (Dr. Lee/KTran)

[^2]
## University of California Transfer Admission Requirements

Admission eligibility requirements for transfer students enrolling at the University of California are similar to the previous year. These requirements apply to students who were not eligible to attend the University as freshmen because they did not meet the freshman Scholarship Requirement. Students in this category must:
A. Complete 60 semester units or 90 quarter units of transferable college coursework with a grade point average of at least 2.40, and
B. Complete a course pattern requirement (with at least a "C" grade in each course) to include:

1. Two transferable college courses (3 semester or 4-5 quarter units each) in English Composition; and
2. One transferable college course (minimum 3 semester or 4-5 quarter units) in Mathematical Concepts and Quantitative Reasoning; and
3. Four transferable college courses (3 semester or 4-5 quarter units each) chosen from at least two of the following subject areas: Arts and Humanities; Social and Behavioral Sciences; or Physical and Biological Sciences.

The above transfer requirements do not affect students who were eligible for admission to the University when they graduated from high school. In other words, students who have satisfied the Subject Requirement ("a-f" courses), Scholarship Requirement (GPA), and Examination Requirement (SAT I/ACT and SAT II) - all required for freshman admission - are still eligible to transfer if they have a "C" (2.00) average in their transferable college coursework.

Students who met the Scholarship and Examination Requirements but who did not satisfy the Subject Requirement based on their high school record must take transferable college courses in the subjects they are missing, earn a grade of "C" or better in each of these required courses, and earn an overall "C" (2.00) average in all transferable college coursework to be eligible to transfer. This means that students entering the University Fall 1998 and thereafter cannot use non-transferable college courses to make-up "a-f" subject omissions. The only way to satisfy this requirement is to use transferable college courses.

Students who met the Subject and Scholarship Requirements, but who did not meet the Examination Requirement, must complete a minimum of 12 semester ( 18 quarter) units of transferable work and earn an overall "C" (2.00) average in all transferable college coursework completed. Thus, under these requirements, students need not take the examinations required of freshmen.

It is advisable that students make counseling appointments to review the UC transfer requirements and obtain an educational course plan. Students may contact the Fullerton College Counseling Resource Center or the Cadena/Transfer Center for further University of California transfer information. Many UCs are not currently accepting lower division transfer students.

## LANGUAGE OTHER THAN ENGLISH

(UC requirement only)

- Complete 2 years of the same foreign language of high school level work with a grade of "C" or better; OR
- Earn a score of 3 or higher in the College Board Advanced Placement exams in language other than English; OR
- Satisfactory score in the SAT II: Subject Test in languages other than English
Before May 1995, use the first score; if taken after May
1995, use the second score. Chinese with Listening 500/520
French/French with Listening 500/540
German/German with Listening 500/510
Hebrew (Modern) 500/470
Italian 500/520
Japanese with Listening 500/510
Korean/Korean with Listening 500
Latin 500/530
Spanish/Spanish with Listening 500/520;
OR
- Satisfactory score of 5 or higher in the International Baccalaureate Higher Level Examinations in languages other than English; OR
- Complete 1 course from the courses below:

| ARAB | 102 F | 5 units |
| :--- | :--- | :--- |
| CHIN | 102 F | 5 units |
| FREN | 102 F | 5 units |
| GERM | 102 F | 5 units |
| ITAL | 102 F | 5 units |
| JAPN | 102 F | 5 units |
| PORT | 102 F | 5 units |
| SPAN | 102 F | 5 units or |
| SPAN | 102 HF | 5 units |
| SPAN | 201 F | 5 units |

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM 2016-2017 "IGETC" WORKSHEET

Completion of the IGETC will permit a student to complete their lower division G.E. requirements to either the California State University (CSU) or University of California (UC) system. Courses on this list are approved for the academic year 2016-2017 which begins Fall Semester, 2016. This list is valid through Summer 2017. It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division general education requirements of the CSU or UC prior to transfer. A grade of "C" or higher is required in ALL coursework used for IGETC certification.

Legend: C = Completed; IP = In Progress; $\mathbf{R}=$ Remaining
AREA 1 - ENGLISH COMMUNICATION: CSU 3 courses $=9$ semester units / 12-15 quarter units UC 2 courses $=\mathbf{6}$ semester units / 8-10 quarter units
1 English Composition: ENGL 100 F or 100HF (1 course required)
1B Critical Thinking - Enqlish Composition: ENGL 103 F or 103HF, 104 F, 201 F; PHIL 172 F (1 course required)
1C Oral Communication: SPCH 100 F, 124 F, 135 F
(1 course required for CSU; students transferring to UC do not have to meet the Oral Communication requirement)
AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING: 1 course = $\mathbf{3}$ semester units/4-5 quarter units
2A MATH 100 F (beg F 04), $120 \mathrm{~F} \bullet$ or $120 \mathrm{HF} \bullet, 130 \mathrm{~F}+, 141 \mathrm{~F}$ or $141 \mathrm{HF}, 150 \mathrm{AF}+$ or $150 \mathrm{HF}+$ (beg F 13), 150BF, 171 F, 172 F (beg F 07), 250AF, 250BF; PSY 161 F• (beg F 07) or 161HF• (beg F 13); SOSC 120 F•

- If MATH 120 F or 120 HF , SOSC 120 F, PSY 161 F or 161 HF combined: maximum UC credit allowed $=1$ course.
+ If MATH 130 F combined with MATH 150AF or MATH 150HF: maximum UC credit allowed $=1$ course.
AREA 3 - ARTS AND HUMANITIES: At least $\mathbf{3}$ courses = 9 semester units / 12-15 quarter units. One course is required from each area.
3A Arts:
ART 110 F, 112 F, 113 F, 114 F, 116 F, 117 F, 196HF+, 212 F, 213 F
CRTV 126AF, 126BF, 131 F
DANC 120 F, 200 F (beg F 13), 210 F
ENGL 208 F
MUS 113 F, 116 F, 118 F, 119 F, 120 F, 196HF+
THEA 100 F, 104 F, 105 F, 196HF+
+ Maximum UC credit one course from ART 196HF, MUS 196HF, THEA 196HF.
3B Humanities:
CDES 242 F
CHIN 203 F (beg F 11), 204 F (beg F 13); FREN 203 F, 204 F; GERM 203 F, 204 F; ITAL 203 F, 204 F; JAPN 203 F, 204 F; SPAN 201 F+, 203 F+, 204 F, 205 F, 206 F
ENGL 102 F or $102 \mathrm{HF}, 203 \mathrm{~F}, 204 \mathrm{~F}, 207 \mathrm{~F}, 211 \mathrm{~F}$ or $\mathbf{2 1 1 H F}, 212 \mathrm{~F}$ or $\mathbf{2 1 2 H F}, 214 \mathrm{~F}, 221 \mathrm{~F}$ or $\mathbf{2 2 1 H F}$, 222 F or $\mathbf{2 2 2 H F}, 224$ F or 224HF, 225 F, 234 F (beg F 08) or $234 \mathrm{HF}, 239 \mathrm{~F}, 243 \mathrm{~F}$ or $243 \mathrm{HF}, 245 \mathrm{~F}$, 246 F, 248 F, 249 F, 251 F
ETHS $130 \mathrm{~F}^{*}, 160 \mathrm{~F}$
HIST 110 F or $110 \mathrm{HF}, 111 \mathrm{~F}$ or $111 \mathrm{HF}, 112 \mathrm{~F}^{*}$ or $112 \mathrm{HF}^{*}, 113 \mathrm{~F}^{*}$ or $113 \mathrm{HF}^{*}, 127 \mathrm{~F} \mathrm{\sim}, 151 \mathrm{~F}, 152 \mathrm{~F}$, $154 \mathrm{~F}, 160 \mathrm{~F}, 161 \mathrm{~F}, 165 \mathrm{~F}$ or 165 HF (beg F 13), $170 \mathrm{~F} \sim$ or $170 \mathrm{HF} \mathrm{\sim}, 171 \mathrm{~F} \sim$ or $171 \mathrm{HF} \mathrm{\sim}, 190 \mathrm{~F}$, 191 F, 270 F* (beg Spr 06), 275 F
PHIL 100 F or 100HF, 101 F, 105 F or 105HF, 135 F (beg F 12), 160 F, 195 F, 210 F (beg F 11), 220 F, 250 F (beg F 11), 270 F (beg F 11)
* Course can only be used in one area (AREA 1 to 5).
~ Credit will be granted for either (HIST 127 F) OR (HIST 170 F and HIST 171 F) OR (HIST 170 F and HIST 171HF) OR (HIST 170HF and HIST 171 F) OR (HIST 170HF and HIST 171HF).
+ If SPAN 201 F and SPAN 203 F combined; maximum credit, one course (per college).
AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES: At least 3 courses $=9$ semester units / 12-15 quarter units. Select from at least two (2) disciplines:
4A ANTH 102 F or $102 \mathrm{HF}, 103$ F, 105 F, 107 F, 209 F, 211 F
4B ECON 101 F or 101HF, 102 F or 102HF

4D WMNS 100 F or 100 HF (beg F 13)
4E GEOG 100 F or $100 \mathrm{HF}, 120 \mathrm{~F}, 130 \mathrm{~F}, 160 \mathrm{~F}, 262 \mathrm{~F}$
4F HIST $112 \mathrm{~F}^{*}$ (beg Spr 06) or 112HF* (beg Spr 06), $113 \mathrm{~F}^{*}$ (beg Spr 06) or 113HF* (beg Spr 06), $270 \mathrm{~F}^{*}$
4H POSC 100 F or $100 \mathrm{HF}, 110 \mathrm{~F}$ or 110 HF (beg F 13), $120 \mathrm{~F}, 200 \mathrm{~F}, 215 \mathrm{~F}, 216 \mathrm{~F}, 230 \mathrm{~F}$
4 I PSY 101 F or 101HF, 131 F, 139 F, 145 F, 202 F or 202HF (beg F 13), 221 F, 222 F, 251 F or 251 HF
4J SOC 101 F or 101HF, 102 F, 201 F (beg F 09), 225 F (beg F 11) or 225HF (beg F 11),
230 F (beg F 13) or $\mathbf{2 3 0 H F}, 250$ F, 275 F or $275 \mathrm{HF}, 277$ F or $277 \mathrm{HF}, 285 \mathrm{~F}, 290 \mathrm{~F}, 292 \mathrm{~F}$; SOSC 125 F
* Course can only be used in one area (AREA 1 to 5).



## Educational Objective - Transfer

Many students attend a California Community College with the intention of transferring to a four-year college or university. A considerable number of courses offered at Fullerton College are transferable to four-year colleges and universities. In addition, Fullerton College has established a plan of coursework in certain majors that transfer as core preparation at various universities. These courses are referred to as major prep courses which articulate to the four-year universities. It is advisable for students planning to transfer to seek assistance from the Counseling Center and/or the Transfer Center since transfer institution requirements vary significantly. Transfer Students are encouraged to meet with a counselor each semester to review any possible changes in transfer admission, general education, major and/or major support course requirements.

Fullerton College transfers many students to the California State University (CSU) and University of California (UC) systems as well as private and out-of-state universities. To access Fullerton College articulation agreements, please reference www.assist.org.

The following is a list of the most frequently requested transfer majors by Fullerton College students. More information is available regarding each of these transfer majors in the Counseling Center. Additional transfer majors are available and may be found at www.assist.org.

Please see a counselor for additional assistance.
Transfer Guide to Major materials are available in the Counseling Center for the following programs leading to Transfer:

Administration of Justice (Criminal Justice)
Anthropology
Architecture
Art (Ceramics)
Art (Crafts or 3-D Media)
Art (Drawing and Painting)
Art (General)
Art (Graphic Design)
Art (History)
Art (Illustration)
Art (Photography)
Art (Printmaking)
Art (Sculpture)
Art (Studio Art)
Art (Teaching)
Biochemistry
Biological Sciences
Business Administration
Chemistry
Child Development
Communications (Advertising)
Communications (Film, Radio-TV, Telecommunication)
Communications (General)
Communications (Journalism/Broadcast)
Communications (Public Relations)

Computer Science
Dance
Economics
Engineering
Engineering Technology
English
Ethnic Studies
Fashion (Merchandising/Textiles)
French
Geography
Geological Science
German
Health Science
History
Hotel and Restaurant Management
Interior Design
International Relations
Kinesiology
Mathematics
Music
Music Technology
Nutrition/Food (Dietetics)
Philosophy
Physics
Plant Science/Horticulture
Political Science
Pre-Chiropractic
Pre-Dental Hygiene
Pre-Dentistry
Pre-Medicine
Pre-Nursing
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Veterinarian Science
Psychology
Recreation
Religious Studies
Social Work/Human Services/Social Ecology Sociology
Spanish
Theatre Arts (General)
Theatre Arts (Musical)
Theatre Arts (Performance/Playwriting)
Theatre Arts (Teaching)
Theatre Arts (Technical Production \& Design)
Women's Studies

## Degrees and Certificates

Listed on the following pages are programs of study offered by Fullerton College and requirements for specific certificates and degrees． Students are encouraged to meet with an academic counselor for individual education planning．
（0）Certificates with less than a total of 18 units will not appear on college transcripts．
（■）Certificates with more than a total of 18 units will be noted on transcript as Certificate of Achievement．
Any request for a course substitution or waiver may be discussed with a counselor and must be submitted for approval to the Admissions and Records Office．

NOTE：For students wanting to transfer to a university，see the＂Transferability of Courses＂section in this catalog and schedule an appointment with a counselor．Students may also reference www．assist．org．Degrees and certificate programs are listed below by Instructional Divisions．


## Business and Computer Information Systems

| （ACCT） | Accounting |  | － |  | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| （BUS） | Business Administration | ■ |  | － |  |
|  | Business Management |  | $\square$ |  | $\square$ |
|  | Business \＆Technology Skills |  |  |  | $\square$ |
|  | Entrepreneurship |  | $\square$ |  | $\square$ |
|  | International Business Skills |  |  |  | 0 |
|  | International Business Management |  | － |  | $\square$ |
| （MKT） | Marketing Management |  | $\square$ |  |  |
| （CIS） | Computer Information Systems |  | $\square$ |  | $\square$ |
|  | Networking Skills |  |  |  | 0 |
|  | Programming Skills |  |  |  | 0 |
|  | Web Scripting Skills |  |  |  | 0 |
| （CISG） | Computer Information Systems－ Gaming |  |  |  |  |
|  | Gomputer Game Design Skills |  |  |  | － |
|  | Computer Game Program Skills |  |  |  | 0 |
| （OT） | Office Technology |  |  |  |  |
|  | Legal Office Administration |  | $\square$ |  |  |
| （PLEG） | Paralegal Studies |  | $\square$ |  | $\square$ |
| （RE） | Real Estate Management |  | $\square$ |  | $\square$ |
|  | Real Estate Sales Skills |  |  |  | 0 |

## Counseling

| （INDS）Interdisciplinary Studies |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Arts and Human Expression | $\boxed{ }$ |  |  |  |
| Science and Math | $\boxed{ }$ |  |  |  |
| Social Behavior and Self－Dev． | $\boxed{ }$ |  |  |  |
| Social Sciences | $\boxed{ }$ |  |  |  |

## Fine Arts

| （ART）$\quad$ Art | ■ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Advertising and Graphic Design | ■ |  |  | ■ |
| Advertising and Graphic Design <br> Level I |  |  |  | $\mathbf{0}$ |
| Art History Associate in Arts |  |  | ■ |  |
| Illustration |  |  |  | ■ |
| Studio Arts Associate in Arts |  |  | ■ |  |
| Art－Digital Arts |  |  |  | ■ |
| Computer Animation／Multimedia |  |  |  | ■ |
| Desktop Publishing |  |  |  | $\mathbf{\square}$ |
| 3D Animation Certificate — Level II |  |  |  | $\mathbf{0}$ |


| Listing of Instructional Division | A．A． Degree | A．S． Degree | AA－T／ <br> AS－T <br> Degree | Voc Cert Prog |
| :---: | :---: | :---: | :---: | :---: |
| Fine Arts（cont＇d） |  |  |  |  |
| （MUS）Music | ■ |  | － |  |
| Piano Teaching |  |  |  | $\square$ |
| Commercial Music | ■ |  |  |  |
| Music Recording／Production |  |  |  | $\square$ |
| （THEA）Theatre Arts |  |  | $\square$ |  |
| Theatre Arts（Drama） | $\square$ |  |  |  |
| Assistant Costume Designer |  |  |  | $\square$ |
| Costume Cutter／Draper |  |  |  | $\square$ |
| Costume Stitcher |  |  |  | $\square$ |
| Costume Wardrobe |  |  |  | 0 |
| Lighting Technician |  |  |  | $\square$ |
| Musical Theatre |  |  |  | $\square$ |
| Scenic Artist |  |  |  | $\square$ |
| Sound Technician |  |  |  | $\square$ |
| Stage Management |  |  |  | $\square$ |
| Technical Theatre |  |  |  | $\square$ |


| （ENGL） | English | ■ | － |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Foreign Language | $\square$ |  |  |
| （SPAN） | Spanish |  | $\square$ |  |
| （SPCH） | Speech | $\square$ |  |  |
|  | Communication Studies |  | $\square$ |  |

## Mathematics and Computer Science

| （CSCI） | Computer Science |  | ■ |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| （MATH） | Mathematics |  | $■$ | $■$ |  |

Natural Sciences

| （ESC） | Astronomy | $\square$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Earth Science |  | ■ |  |  |
| （BIOL） | Biology | $\square$ |  |  |  |
|  | Biological Technician |  | $\square$ |  |  |
| （CHEM） | Chemistry | ■ | $\square$ |  |  |
| （ENVS） | Environmental Science | － | $\square$ |  |  |
|  | Geology |  | $\square$ | $\square$ |  |
| （FOOD） | Foods and Nutrition | ■ |  | $\square$ |  |
| （HORT） | Horticulture |  |  |  |  |
|  | Greenhouse \＆Nursery Production |  |  |  | $\square$ |
|  | Landscape Management |  | $\square$ |  |  |
|  | Landscape Design／Management |  |  |  | $\square$ |


|  | Listing of Instructional Division | A.A. Degree | $\begin{array}{\|c\|} \hline \text { A.S. } \\ \text { Degree } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { AA-T/ } \\ \text { AS-T } \\ \text { Degree } \end{array}$ | Voc <br> Cert <br> Prog |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Natural Sciences (cont'd) |  |  |  |  |  |
|  | Landscape Irrigation |  |  |  | $\square$ |
|  | Nursery Management | $\square$ |  |  |  |
|  | Ornamental Horticulture |  | ■ |  |  |
|  | Pest Management |  |  |  | $\square$ |
|  | Industrial Technology | $\square$ |  |  |  |
|  | Medical Technology | $\square$ |  |  |  |
| (MICR) | Microbiology |  | $\square$ |  |  |
| (PHYS) | Physics |  |  | $\square$ |  |
|  | Pre-Nursing | $\square$ |  |  |  |
| (PE) | Physical Education | $\square$ |  |  |  |
|  | Aquatic Specialist |  |  |  | $\square$ |
|  | Athletic Coach |  |  |  | $\square$ |
|  | Kinesiology Associate in Arts |  |  | ■ |  |
|  | Personal Trainer |  |  |  | $\square$ |
|  | Physical Education - Fitness |  | $\square$ |  |  |
|  | Pilates |  |  |  | $\square$ |
|  | Therapeutic and Sports Massage Level I Therapist |  |  |  | $\square$ |
| (DANC) | Dance | - |  |  |  |
|  | Dance Teaching |  |  |  | 0 |
| (REC) | Outdoor Recreation and Safety Skills |  |  |  | 0 |
| Social Sciences |  |  |  |  |  |
| (ANTH) | Anthropology | $\square$ |  | ■ |  |
| (CDES) | Child Development and Ed Studies | $\square$ |  |  |  |
|  | ECE Administration |  |  |  | $\square$ |
|  | ECE Teacher |  |  |  | $\square$ |
|  | Infant/Toddler Caregiver |  |  |  | $\square$ |
|  | Special Education |  |  |  | $\square$ |
|  | Early Childhood Education | $\square$ |  | $\square$ |  |
|  | Elementary Teacher Education Associate in Arts Degree for Transfer |  |  | ■ |  |
| (ECON) | Economics | $\square$ |  | $\square$ |  |
| (ETHS) | Ethnic Studies | $\square$ |  |  |  |
|  | Chicano/Chicana Studies | $\square$ |  |  |  |
| (GEOG) | Geography | $\square$ |  | $\square$ |  |
| (HIST) | History | $\square$ |  | $\square$ |  |
|  | Latin American Studies | $\square$ |  |  |  |
| (PHIL) | Philosophy | $\square$ |  | $\square$ |  |
|  | Religious Studies | $\square$ |  |  |  |
| (POSC) | Political Science | $\square$ |  | $\square$ |  |
| (PSY) | Psychology | $\square$ |  | $\square$ |  |
| (SOC) | Sociology | $\square$ |  | $\square$ |  |


|  |  |  | AA-T/ | Voc |
| :---: | :---: | :---: | :---: | :---: |
| Listing of Instructional Division | A.A. | A.S. | AS-T | Cert |
| Degree | Degree | Degree | Prog |  |

## Technology and Engineering

| (AJ) | Administration of Justice | ■ | - | - | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Crime Scene Investigation |  |  |  | 0 |
|  | Law Enforcement Skills Development Skills |  |  |  | 0 |
| (ARCH) | Architecture |  | - |  |  |
|  | Architectural CAD Technology |  |  |  | $\square$ |
| (AUTO) | Automotive |  |  |  |  |
|  | Automotive Chassis Specialist |  |  |  | 0 |
|  | Automotive Management |  |  |  | $\square$ |
|  | Automotive Service Advisor |  |  |  | - 0 |
|  | Automotive Technology |  | ■ |  | $\square$ |
|  | Emission Control Specialist |  |  |  | 0 |
|  | Engine Performance Specialist |  |  |  | 0 |
|  | Manual Drive Train Specialist |  |  |  | 0 |
|  | Carpentry | ■ |  |  |  |
| (COSM) | Cosmetology |  | ■ |  | $\square$ |
|  | Cosmetology Instructor |  | $\square$ |  |  |
|  | Esthetician Certificate |  |  |  | $\square$ |
| (CRTV) | Communications - General | $\square$ |  |  |  |
|  | Radio Broadcast News | ■ |  |  | $\square$ |
|  | Radio Broadcasting | $\square$ |  |  | $\square$ |
|  | Radio Production | $\square$ |  |  |  |
|  | Radio \& Television/Video Prod |  |  |  | $\square$ |
|  | Sports Broadcasting |  |  |  | $\square$ |
|  | Television/Film | $\square$ |  |  |  |
|  | Television/Film Production |  |  |  | $\square$ |
| (CSTR) | Construction |  |  |  |  |
|  | Construction Estimating Skills |  |  |  | 0 |
|  | Construction Inspection |  | $\square$ |  | $\square$ |
|  | Construction Management |  | $\square$ |  |  |
|  | Construction Technology |  | $\square$ |  | $\square$ |
| (DRAF) | Industrial Drafting Technology |  | - |  |  |
|  | Industrial Drafting Level I |  |  |  | $\square$ |
|  | Industrial Drafting Level II |  |  |  | $\square$ |
| (ENGR) | Engineering |  | ■ |  |  |
| (FASH) | Fashion Design | ■ |  |  | $\square$ |
|  | Advanced Fashion Design |  |  |  | $\square$ |
|  | Dressmaking-Alterations |  |  |  | $\square$ |
|  | Fashion Illustration |  |  |  | $\square$ |
|  | Fashion Journalism | ■ |  |  |  |
|  | Fashion Merchandising | $\square$ |  |  | $\square$ |
|  | Image Consultant |  |  |  | $\square$ |
|  | Product Development for Apparel Industries Skills |  |  |  | 0 |
|  | Textiles and Clothing | $\square$ |  |  |  |
|  | Industrial Arts | $\square$ |  |  |  |



| Listing of Instructional Division |  | A.A. Degree | A.S. Degree | $\begin{gathered} \hline \text { AA-T/ } \\ \text { AS-T } \\ \text { Degree } \end{gathered}$ | $\begin{array}{\|l\|} \hline \text { Voc } \\ \text { Cert } \\ \text { Prog } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Technology and Engineering (cont'd) |  |  |  |  |  |
| (PHOT) | Photography | $\square$ |  |  |  |
|  | Professional Photography |  |  |  | $\square$ |
| (PRNT) | Printing Technology |  | $\square$ |  |  |
|  | Advanced Sheetfed Offset Presswork |  |  |  | $\square$ |
|  | Customer Service Training Skills |  |  |  | 0 |
|  | Electronic Imaging |  |  |  | $\square$ |
|  | Flexography Skills |  |  |  | 0 |
|  | Graphic Communications Skills |  |  |  | 0 |
|  | Offset Duplicator Training Skills |  |  |  | 0 |
|  | Printing Technology (General) |  |  |  | $\square$ |
|  | Quick Print/In-Plant Graphics |  |  |  | $\square$ |
|  | Screen Printing |  |  |  | $\square$ |
| (WELD) | Welding Technology |  |  |  | $\square$ |

## ACCOUNTING

## Accounting Associate in Science Degree PROGRAM CODE: 2503824

The Accounting Associate in Science Degree is designed to prepare students for employment in the field of bookkeeping and/or accounting. This degree requires the completion of 32-36 units of which 29-31 must be chosen from the required courses listed below. An additional 3-5 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Recognize revenues and expenses in the proper period as required in accrual basis accounting and Generally Accepted Accounting Principles (GAAP), and make adjustments to ledger accounts accordingly.
Outcome 2: Develop and use accounting information for daily recording of business financial transactions in a manufacturing environment, and develop and use operational budgets for a manufacturing company.
Outcome 3: Use the computer to input routine cash and credit transactions involving sales, purchases, expenses and employees into a computerized general ledger accounting software program.
Outcome 4: Prepare, comprehend, and analyze the basic accounting financial statements: Income Statement, Retained Earnings Statement, Balance Sheet, Statement of Cash Flows and the related notes to the financial statements.
Required Courses (29-31 units) ..... Units
ACCT 100BF Financial Accounting Principle or ..... 3
ACCT 101AF Financial Accounting or ..... 5
ACCT 102HF Honors Financial Accounting ..... 5
ACCT 101BF Managerial Accounting ..... 5
ACCT 104 F Computerized Accounting or ..... 2
ACCT 107 F QuickBooks ..... 2
ACCT 112 F Income Tax Procedure ..... 3
ACCT 201AF Intermediate Accounting ..... 5
ACCT 201BF Intermediate Accounting ..... 5
BUS 111 F Business Communications or ..... 3
BUS 211 F Writing for Business ..... 3
BUS 240 F Legal Environment of Business or ..... 3
BUS 241AF* Business Law ..... 3
Restricted Electives (3-5 units) Units
ACCT 001 F Accounting for Small Business ..... 3
ACCT 011 F Payroll Accounting ..... 2
ACCT 100AF Financial Accounting Principle ..... 3
ACCT 202 F Introduction to Cost Accounting ..... 4
ACCT 203 F Auditing ..... 3
ACCT 204 F Analysis of Financial Statements ..... 3
BUS 151 F Business Mathematics ..... 3
CIS 106 F Beginning Spreadsheet (MS Excel) ..... 3
Total Units ..... 32-36
*(See counselor for determination of correct course)

## Accounting Certificate <br> PROGRAM CODE: 2C21255

The Accounting Certificate is designed to prepare students for entry-level positions in accounting in public and private sector areas such as manufacturing, small business, financial service, wholesale trades, and government. Specialized training in accounting and finance principles and practices enables students to maintain accounting records and develop financial reports and make effective use of financial information for analysis and decision making. Entry-level employment opportunities include positions in accounts receivable/payable, payroll, income tax preparation, cost accounting, and a number of trainee/internship positions. The Accounting Certificate requires the completion of 32-35 units of which 27-29 are in required courses. An additional 5-6 units must be chosen from the list below.

## Program Level Student Learning Outcomes

Outcome 1: Recognize revenues and expenses in the proper period as required in accrual basis accounting and Generally Accepted Accounting Principles (GAAP), and make adjustments to ledger accounts accordingly.
Outcome 2: Develop and use accounting information for daily recording of business financial transactions in a manufacturing environment, and develop and use operational budgets for a manufacturing company.
Outcome 3: Use the computer to input routine cash and credit transactions involving sales, purchases, expenses and employees into a computerized general ledger accounting software program.
Outcome 4: Prepare, comprehend, and analyze the basic accounting financial statements: Income Statement, Retained Earnings Statement, Balance Sheet, Statement of Cash Flows and the related notes to the financial statements.

## Required Courses (27-29 units)

Units
ACCT 100BF Financial Accounting Principle or
3
ACCT 101AF Financial Accounting or
5
ACCT 102HF Honors Financial Accounting
5
ACCT 101BF Managerial Accounting
ACCT 104 F Computerized Accounting
ACCT 201AF Intermediate Accounting
ACCT 201BF Intermediate Accounting 2

ACCT 202 F Introduction to Cost Accounting
BUS 111 F Business Communications or
BUS 211 F Critical Reasoning and Writing for Business

| Restricted Electives (5-6 units) | Units |  |
| :--- | :--- | ---: |
| ACCT 001 F | Accounting for Small Business | 3 |
| ACCT 011 F | Payroll Accounting | 2 |
| ACCT 112 F | Income Tax Procedure | 3 |
| ACCT 090 F | Current Topics in Taxation | $0.5-3$ |
| ACCT 100AF | Financial Accounting Principle | 3 |
| ACCT 107 F | Computerized Accounting with |  |
|  | QuickBooks | 3 |
| ACCT 203 F | Auditing | 3 |
| ACCT 204 F | Analysis of Financial Statements | 3 |
| BUS 240 F | Legal Environment of Business or | 3 |
| BUS 241AF | Business Law | 3 |
| CIS 106 F | Beginning Spreadsheet (MS Excel) | 3 |
| Total Units |  | $\mathbf{3 2 - 3 5}$ |

Restricted Electives (5-6 units)3
ACCT 011 F Payroll Accounting ..... 20.5-3
ACCT 100AF Financial Accounting Principle ..... 3
ting3
BUS 240 F Legal Environment of Business or ..... 3
CIS 106 F Beginning Spreadsheet (MS Excel)3
Total Units ..... 32-35

## ADMINISTRATION OF JUSTICE

## Administration of Justice Associate in Science Degree for Transfer

PROGRAM CODE: 2531527

The Associate in Science in Administration of Justice for
Transfer, also called the Administration of Justice AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Administration of Justice or Criminal Justice. Ed Code Section 66746-66749 states that students earning the Administration of Justice AS-T Degree will be granted priority for admission as an Administration of Justice or Criminal Justice major to a local CSU, as determined by the CSU campus to which the student applies. These courses offer transfer students a choice of three tracks: Criminal Justice, Criminology, or Forensics. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title $V$ requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. This program is designed to be transferable and job oriented. Students seeking employment with a local, state or federal law enforcement agency should specialize in Administration of Justice. The Administration of Justice AS-T Degree requires a total of 18 units of required courses and restricted electives from the categories below as indicated.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of criminal law and the judicial process
Outcome 2: Demonstrate an understanding of forensics and criminology.

| Required | Courses: (6 units) | Units |
| :---: | :---: | :---: |
| AJ 100 F | Introduction to Law Enforcement | 3 |
| AJ 110AF | Criminal Law | 3 |
| List A (12 |  | Units |
| AJ 102 F | Introduction to Probation and Parole | 3 |
| AJ 140 F | Juvenile Procedures | 3 |
| AJ 220 F | Criminal Procedure | 3 |
| AJ 222 F | Rules of Evidence | 3 |
| AJ 223 F | Criminal Investigation | 3 |
| AJ 230 F | Crime Scene Techniques | 3 |
| Total Units |  | 18 |

## Administration of Justice Associate in Arts Degree <br> PROGRAM CODE: 2A15305

The Administration of Justice Associate in Arts Degree Program requires a total of 18-19 units of which 12-13 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Apply theoretical frameworks to understanding the causes and prevention of crime, the processes of criminalization, and crime enforcement.
Outcome 2: Evaluate legal problems in law enforcement, the courts, and corrections and effectively communicate solutions to varied audiences.
Outcome 3: Apply effective communication skills to a diversity of interactions with victims, witnesses, and suspects.

## Required Courses (12-13 units) Units

AJ 100 F Introduction to Law Enforcement 3
AJ 110AF Criminal Law 3
AJ 223 F Criminal Investigation
3
MATH 120 F Introductory Probability and Statistics or 4
PSY 161 F Elementary Statistics for Behavioral Science
Restricted Electives (6 units) Units
AJ 222 F Rules of Evidence
3
AJ 278 F Multicultural Issues within AJ 3
PSY 101 F General Psychology 3
SOC 101 F Introduction to Sociology
Total Units

## Administration of Justice <br> Associate in Science Degree

PROGRAM CODE: 2503876
Curriculum leads to the Administration of Justice Associate
in Science Degree and employment in the field of law enforcement. This degree requires a total of 24 units of which 9 units are in required courses. An additional 15 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of the laws, Constitutional requirements, and legally defined procedures that criminal justice professionals have to adhere to when practicing within the field of criminal justice.
Outcome 2: Analyze contemporary issues in law enforcement and their impact on day to day operations of a law enforcement agency.
Outcome 3: Prepare and compose organized written reports that include proper fact patterns and appropriate administrative actions by law enforcement officers.

Required Courses (9 units) Units
AJ 100 F Introduction to Law Enforcement 3
AJ 110AF Criminal Law 3
AJ 151 F Police Report Writing 3
Restricted Electives (15 units) Units
AJ 102 F Introduction to Probation and Parole 3
AJ 110BF* Advanced Criminal Law 3
AJ 135 F Weaponless Defense 1
AJ 137 F Firearms 1
AJ 140 F Juvenile Procedures 3
AJ 220 F Criminal Procedure 3
AJ 222 F Rules of Evidence 3
AJ 223 F Criminal Investigation 3
AJ 226 F Narcotics \& Vice Control 3
AJ 230 F Crime Scene Techniques 3
AJ 252 F Police Patrol 3
AJ 276 F Investigation of Homicidal Behavior 3
AJ 278 F Multicultural Issues within AJ 3
AJ 279 F Contemporary Issues in Law Enforcement 3
AJ 901 F Organized Crime and the Criminal Justice $\quad 3$
Total Units

NOTE: Completion of the Administration of Justice Certificate fulfills the requirements of the major.

## Administration of Justice Certificate <br> PROGRAM CODE: 2 C08437

The Administration of Justice Certificate Program is commonly referred to as the Police Academy. Consisting of approximately 1100 hours of instruction, the basic extended course is delivered over a 38 -week period, as an alternative to a full-time basic academy. This certificate requires the completion of 52 units from the courses listed below with a minimum grade point average of 3.0.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate basic competency in core law enforcement job knowledge/skill areas, including criminal law and procedure, investigations, police operations, and community-centered policing.
Outcome 2: Assess the importance of ethics and ethical decision-making at all levels and processes within the criminal justice system.
Outcome 3: Apply legal definitions, tactical field concepts, and investigative principles covered in the POST Learning Domains to law enforcement.

| Completion | of: | Units |
| :--- | :--- | ---: |
| AJ 059AF | Basic Police Academy-Extended Format I | 26 |
| AJ 059BF | Basic Police Academy-Extended Format II | $\mathbf{2 6}$ |
| Total Units |  | $\mathbf{5 2}$ |

## Crime Scene Investigation Skills Certificate PROGRAM CODE: 2 C00054

The Crime Scene Investigation Skills Certificate Program prepares students for entry-level employment as a crime scene investigator or field evidence technician in the law enforcement field. The program requires the completion of 17 units with a minimum grade point average of 3.00 or better for courses offered in the certificate program.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate crime scene investigation techniques and understanding of how to prepare follow-up reports.
Outcome 2: Demonstrate knowledge of the techniques used in DNA, quantification (fingerprinting) and demonstrate understanding of the applications and limitations of DNA casework.
Outcome 3: Identify the use of police reports as well as the importance of taking thorough notes and record a series of events in chronological order.
Outcome 4: Demonstrate criminal investigation techniques as they relate to particular offenses and basic characteristics, which the criminal investigator must process so that he/she may cope with the criminal offender.
Outcome 5: Identify and discuss the two broad types of evidence encountered by law Enforcement officers and compare the differences between direct and circumstantial evidence.
Required Courses (17 units)

AJ 092 F Crime Scene Investigation 1
AJ 093 F DNA Genetic Fingerprinting 0.5
AJ 096 F CAD/Crime Scene Application 0.5
AJ 151 F Police Report Writing 3
AJ 222 F Rules of Evidence 3
AJ 223 F Criminal Investigation 3
AJ 230 F Crime Scene Techniques 3
PHOT 101 F Introduction to Photography 3

## Total Units

## Law Enforcement Skills Development Skills Certificate

PROGRAM CODE: 2 C00057
The Law Enforcement Skills Development Skills Certificate Program requires the completion of 17 units, of which 9.5 units are in required courses. An additional 7.5 units must be taken from the restricted electives listed below. This certificate is intended to meet the basic requirements of California Penal Code 13510 in raising the competence level of current and aspiring law enforcement personnel. All restricted electives are certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.). A minimum grade of "C" is needed for each required course taken, with the exception of AJ 079 F (CR/NC). At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Correctly identify four important responsibilities related to the peace officer function and devise personal action plans to effectively prepare for future law enforcement test or hiring inquiries.
Outcome 2: Discuss the history of law enforcement from the Anglo-Saxon period to the present and understand the organization of a typical police department according to modern concepts.
Outcome 3: Formulate basic legal theory using the principles of act, intent, concurrence and causation.
Outcome 4: Identify the use of police reports as well as the importance of taking thorough notes and record a series of events in chronological order.

## Required Courses (9.5 units) <br> Units

AJ 079 F Law Enforcement Career Preparation 0.5
AJ 100 F Introduction to Law Enforcement 3
AJ 110AF Criminal Law 3
AJ 151 F Police Report Writing

| Restricted | Electives (7.5 units) | Units |
| :--- | :--- | ---: |
| AJ 068 F | Parolee Contacts | 1.5 |
| AJ 069 F | Drug Influence | 0.5 |
| AJ 070 F | Emergency Management | 1.5 |
| AJ 071 F | Preventing Racial Profiling | 0.5 |
| AJ 072 F | Investigating Domestic Terrorism | 1 |
| AJ 075 F | Cultural Diversity | 1 |
| AJ 077 F | Organized Crime | 1 |
| AJ 078 F | Multi-Agency Task Forces | 0.5 |
| AJ 080 F | Lifetime Fitness/Law Enforcement | 2 |
| AJ 084 F | Domestic Violence | 0.5 |
| AJ 085 F | Police Vehicle Pursuits | 2 |
| AJ 089 F | Child Abuse/Child Pornography | 0.5 |
| AJ 091 F | Law Enforcement Instructor Development | 2 |
| AJ 092 F | Crime Scene Investigation | 1 |
| AJ 093 F | DNA Genetic Fingerprinting | 0.5 |
| AJ 095 F | Preventing Sexual Harassment | 0.5 |
| AJ 096 F | CAD/Crime Scene Application | $\underline{0.5}$ |
| Total Units |  | $\mathbf{1 7}$ |

## ANTHROPOLOGY

## Anthropology Associate in Arts Degree for Transfer

PROGRAM CODE: 2A33680

The Associate in Arts for Transfer Degree in Anthropology, also called the Anthropology AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in anthropology. Ed Code Section 66746-66749 states students earning the Anthropology AA-T degree will be granted priority for admission as an Anthropology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 18-23 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The Anthropology AA-T Degree is designed to provide students with a holistic introduction to Anthropology. This degree will provide the background knowledge needed by undergraduate Anthropology majors for university transfer and coursework, while emphasizing the practical applications of anthropological skills and knowledge in a diversity of careers and the utility of anthropological perspectives as a lifelong learning tool for interpreting world events. The Anthropology AA-T Degree requires 18-23 units, of which 9 units are in required "core" courses, and the remaining 9-14 units are chosen from restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Identify and apply the key terminology, theories, theoretical orientations, methods and perspectives used in anthropology.
Outcome 2: Compare and contrast scientific knowledge with other ways of knowing, and be able to apply scientific knowledge to the study of humans.
Outcome 3: Apply cultural relativism to an analysis of globalization and its effects on the general characteristics of culture in the modern world.

Core Courses:
Select 9 units from the following: Units
ANTH 101 F Physical Anthropology or 3
ANTH 101HF Honors Physical Anthropology and 3
ANTH 102 F Cultural Anthropology or 3
ANTH 102HF Honors Cultural Anthropology and 3
ANTH 103 F Introduction to Archaeology 3

## List A

Select 3 to 5 units minimum from the following: Any courses that are articulated as lower division major preparation for the anthropology major at a CSU.

ANTH 107 F Anthropology of Magic, Witchcraft, and Religion

MATH 120HF Honors Introductory Probability and Statistics or
SOSC 120 F Introduction to Probability and Statistics 4

## List B

Select 3 to 5 units from the following:
Any courses not selected from List A: and/or any combination of coursework from List B
(the courses do not have to be from two areas). Units
ANAT 231 F General Human Anatomy or 4
ESC 100 F Physical Geology and 3
ESC 100LF Physical Geology Lab or 1
ESC 101 F Earth Science Survey and 3
ESC 101LF Earth Science Survey Lab or 1
ESC 190 F Environmental Geology or 3
GEOG 281AF Introduction to Geographic Information Systems or
PSY 202 F Research Methods in Psychology
List C
Select 3 to 4 units from the following:
Any courses not selected from List A or B; and/or any anthropology course; and/or any other non-anthropology course from the humanities or social sciences on cultural diversity.
ANTH 209 F Cultures of Latin America or
ANTH 211 F Celtic Cultures or
PSY 131 F Cross Cultural Psychology or
PHIL 105 F World Religions or
GEOG 100 F Global Geography or
SOC 101 F Introduction to Sociology or SOC 290 F Sociology of Race and Ethnicity Total Units

## Anthropology Associate in Arts Degree <br> PROGRAM CODE: 2A03880

The Associate in Arts Degree in Anthropology is designed to provide students with a holistic introduction to Anthropology. This degree will provide the background knowledge needed by undergraduate Anthropology majors for university transfer and coursework, while emphasizing the practical applications of anthropological skills and knowledge in a diversity of careers and the utility of anthropological perspectives as a lifelong learning tool for interpreting world events. The Anthropology Associate in Arts Degree requires 19-21 units of which 6 units are in required courses, and the remaining 13-15 units are chosen from restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Identify and apply the key terminology, theories, theoretical orientations, methods and perspectives used in anthropology.
Outcome 2: Compare and contrast scientific knowledge with other ways of knowing, and be able to apply scientific knowledge to the study of humans.
Outcome 3: Apply cultural relativism to an analysis of globalization and its effects on the general characteristics of culture in the modern world.

## Required Courses ( 6 units)

## Units

ANTH 101 F Physical Anthropology 3
ANTH 102 F Cultural Anthropology

## Restricted Electives (13-15 units)

## Units

ANTH 101LF Physical Anthropology Lab 1
ANTH 103 F Introduction to Archaeology
ANTH 105 F Language and Culture
ANTH 107 F Anthropology of Magic, Witchcraft and Religion
and Religion
ANTH 109 F Primate Behavior
ANTH 199 F Anthropology Independent Study
ANTH 209 F Cultures of Latin America
ANTH 211 F Celtic Cultures
ANTH 231 F Field Course in Archaeology
Total Units

## ARCHITECTURE

## Architecture Associate in Science Degree PROGRAM CODE: 2503819

The Architecture Associate in Science Degree courses are designed to develop skills necessary to help facilitate transfer to a university for a Bachelor of Architecture Degree (B.Arch.). Placement is based on a portfolio review. The curriculum is also designed to prepare students for employment in the architectural profession. The program requires a minimum of 32-34 units.

## Program Level Student Learning Outcomes

Outcome 1: Qualify for entry-level intern positions within the architecture field and/or transfer to a 5 year B.Arch. program at a university.

| Required Courses (32-34 units) | Units |
| :--- | ---: |
| ARCH 111 F | Introduction to Architecture |
| ARCH 113 F | Architectural Drawing I |
| ARCH 114 F | Architectural Materials and Methods |
| ARCH 124 F | Architectural CAD I |
| ARCH 125 F | Design Studio I |
| ARCH 215 F | Design Studio II |
| ARCH 225 F | Design Studio III |
| ARCH 227 F | Internship in Architecture |
| ARCH 924 F | Architectural CAD II |
| ARCH 934 F | Architectural CAD III |
| Total Units |  |

## Architectural CAD Technology Certificate <br> PROGRAM CODE: 2 C21253

The Architectural CAD Technology Certificate Program is designed to prepare students for employment in the architectural field as a CAD drafter. The CAD drafter prepares construction documents for the contractor. Upon completion of this program, the student will have these skills. The program requires the completion of minimum of 27-29 units, of which 20-22 are in required courses. An additional 7 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Utilize the 3D Building Information Modeler and renderer in order to solve complex design problems yielding a variety of solutions.
Outcome 2: Synthesize an array of command structures and incorporate them into design and drafting techniques.

Required Courses (20-22 units)

Units

ARCH 111 F Introduction to Architecture 3

ARCH 124 F Architectural CAD I 3
ARCH 924 F Architectural CAD II 3
ARCH 934 F Architectural CAD III 3
ARCH 114 F Architectural Materials and Methods 3
ARCH 227 F Internship in Architecture 2-4
BUS 180 F Small Business Management

## Restricted Electives (7 units)

## Units

CSTR 036 F Uniform Building Code - Residential or
CSTR 037 F Uniform Building Code -
Commercial/Industrial and
SPCH 135 F Essentials of Argumentation

## ART COMPUTER GRAPHICS

## 3-D Animation Skills Certificate - Level II PROGRAM CODE: 2 C00065

3D Animation Skills Certificate - Level II is a continuation of the Computer Graphics Certificate with emphasis in 3D animation software. This certificate provides the skill set required for entrylevel employment in the 3-D animation and modeling industry. The program requires a total of 15 units of which 9 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below. Units earned from the Computer Graphics Certificate may not be used for the Level II certificate. Any advanced DART course may replace the introductory course DART 104 F if this course was completed as part of the Computer Graphics Certificate.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.
Outcome 2: Devise solutions to 3D design problems using digital media tools.
Outcome 3: Devise solutions to 3D modeling problems using digital media tools, and be able to demonstrate basic competence in the use of computer hardware and software for 3D modeling.

## Required Courses (9 units)

Units
DART 104 F Introduction to Maya 3D 3
DART 120 F 3D Modeling
DART 150 F 3D Computer Animation
Restricted Electives (6 units)
Units
ART 120 F Basic Design
ART 182 F Basic Drawing
ART 121 F Three-Dimensional Design
ART 186 F Beginning Life Drawing
Total Units

## Computer Animation/Multi Media Certificate <br> PROGRAM CODE: 2 C10610

The Computer Animation/Multi Media Certificate Program provides the skills necessary to create animated and/or interactive projects for distribution on a variety of media, including DVD, web pages, videotape, and CD-ROM. This certificate requires a total of 30-32 units of which 20 units are in required courses, and an additional 10-12 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.
Outcome 2: Apply the terminology of computer graphics to communications within the field of digital media.
Outcome 3: Devise solutions to gain an understanding of computer technology vital to web designers.
Outcome 4: Devise solutions to visual problems using principles of form, design, and color.
Outcome 5: Create projects that demonstrate specialized knowledge of 2D computer animation and multi-media projects from initial design concept through project completion that clearly illustrates the student's solutions.
Outcome 6: Create effective documents by effectively using the concepts of design, such as: color, style, typography and composition.

Select one of the Introduction classes (3 units) Units
DART 100 F Introduction to Digital Art 3
DART 102 F Introduction to Web Graphics 3
DART 104 F Introduction to Maya 3D 3
DART 106 F Intermediate Maya 3
Required Art Introduction class (3 units) Units
ART 118 F Color Theory 3
ART 120 F Basic Design 3
Required Advanced Courses (14 units) Units
ART 144 F Fundamentals of Cartooning 2
DART 120 F 3D Modeling 3
DART 150 F 3D Computer Animation 3
DART 162 F 2D Computer Animation 3
DART 164 F Interactive Multimedia Design 3

| Restricted Electives (10-12 units) | Units |  |
| :--- | :--- | ---: |
| ART 123 F | Business Practices in Art | 3 |
| ART 180 F | Rendering | 3 |
| ART 182 F | Basic Drawing | 3 |
| ART 299 F | Art Independent Study | 1 |
| DART 112 F | Vector Graphics | 3 |
| DART 132 F | Digital Imaging I | 3 |
| DART 140 F | Digital Publishing I | 3 |
| DART 146 F | Digital Publishing II | 3 |
| DART 170 F | Digital Photo Editing I | 3 |
| DART 180 F | Digital Video | 3 |
| MUS 124 F | Recording Lab I: Beginning Techniques | 3 |
| CRTV 150 F | Television Studio Production | 3 |
| CRTV 245AF | Digital Editing, Graphics and Effects | 3 |
| Total Units |  | $\mathbf{3 0 - 3 2}$ |

## Computer Graphics Certificate <br> PROGRAM CODE: 2C10609A

The Computer Graphics Certificate Program provides the skills necessary to create digital drawings, paintings and illustrations, building a portfolio representative of the student's artistic talents and technical proficiency. This certificate is designed to help students find employment in occupations that desire entry-level skills in computer-aided art and design. This certificate requires a total of 28-30 units of which 24 units are in required courses, and an additional 4-6 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate basic use of computer graphics software and hardware, and be able to demonstrate basic competence in selected image-making techniques.
Outcome 2: Apply the terminology of computer graphics to communications within the field of digital media.
Outcome 3: Create effective documents by effectively using the concepts of design, such as: color, style, typography and composition.
Outcome 4: Create projects that demonstrate specialized knowledge of 2D computer animation and multi-media projects from initial design concept through project completion that clearly illustrates the student's solutions.

Required computer graphics introduction class
(3 units), select one from a list below:
Units
DART 100 F Introduction to Digital Art
DART 102 F Introduction to Web Graphics
DART 104 F Introduction to Maya 3D
3
DART 106 F Iraductiat May 3D
DART 106 F Intermediate Maya
DART 108 F Digital Drawing-Dynamic Sketching
Required art introduction class (3 units),
select one from the list below:

## Units

ART 118 F Color Theory
3
ART 120 F Basic Design
Required Advanced classes (12 units) ..... Units
ART 182 F Basic Drawing ..... 3
DART 112 F Vector Graphics ..... 3
DART 132 F Digital Imaging I ..... 3
DART 140 F Digital Publishing I ..... 3
Required Additional computer graphics classes
( 6 units), select two from the list below: Units
DART 146 F Desktop Publishing II ..... 3
DART 170 F Digital Photo Editing I ..... 3
Restricted Electives: (4-6 units) ..... Units
ART 123 F Business Practices in Art ..... 3
ART 145 F Publication Design ..... 3
ART 146 F Advertising Design ..... 3
ART 147 F Production Techniques for Graphic Designers ..... 3
ART 180 F Rendering ..... 3
ART 299 F Art Independent Study ..... 1-2
DART 120 F 3D Modeling ..... 3
DART 150 F 3D Computer Animation ..... 3
DART 162 F 2D Computer Animation ..... 3
DART 164 F Interactive Multimedia Design ..... 3
DART 180 F Digital Video ..... 3
PRNT 101 F Introduction to Printing ..... 3
Total Units ..... 28-30

## Desktop Publishing Certificate

PROGRAM CODE: 2 C10611
The Desktop Publishing Certificate program requires a total of 28-36 units of which 26-30 units are in required courses. An additional 2-6 units must be chosen from the restricted units listed below. This certificate program teaches digital publication design, building a portfolio representative of the student's artistic talents and technical proficiency.

## Program Level Student Learning Outcomes

Outcome 1: Apply the terminology of computer graphics to communications within the field of digital media.
Outcome 2: Demonstrate basic use of computer graphics software and hardware.
Outcome 3: Devise solutions to gain an understanding of computer technology vital to web designers.
Outcome 4: Develop digital artwork that clearly illustrates the student's solutions.
Outcome 5: Evaluate digital media tools for their suitability to different areas of visual communications.
Outcome 6: Create a new document incorporating text and images, using page layout software.

| Required computer graphics introduction class (3 units), select one from the list below: |  | Units |
| :---: | :---: | :---: |
| DART 100 F | Introduction to Digital Art | 3 |
| DART 102 F | Introduction to Web Graphics | 3 |
| DART 104 F | Introduction to Maya 3D | 3 |
| DART 108 F | Digital Drawing-Dynamic Sketching | 3 |
| Required art and printing classes (5-9 units), select two from the list below: |  | Units |
| ART 120 F | Basic Design | 3 |
| PRNT 070 F | Quick Print and In-Plant Graphics | 2 |
| PRNT 075 F | Electronic Prepress I | 6 |
| Required Advanced classes: (18 units) |  | Units |
| ART 140 F | Introduction to Advertising and Graphic Design | 3 |
| ART 145 F | Publication Design | 3 |
| DART 112 F | Vector Graphics | 3 |
| DART 132 F | Digital Imaging I | 3 |
| DART 140 F | Digital Publishing I | 3 |
| DART 146 F | Digital Publishing II | 3 |
| Restricted Electives: (2-6 units) |  | Units |
| ART 118 F | Color Theory | 3 |
| ART 120 F | Basic Design | 3 |
| ART 123 F | Business Practices in Art | 3 |
| ART 146 F | Advertising Design | 3 |
| ART 147 F | Production Techniques for Graphic Designers | 3 |
| ART 148 F | Packaging Design | 3 |
| ART 180 F | Rendering | 3 |
| ART 182 F | Basic Drawing | 3 |
| DART 120 F | 3D Modeling | 3 |
| DART 150 F | 3D Computer Animation | 3 |
| DART 162 F | 2D Computer Animation | 3 |
| DART 164 F | Interactive Multimedia Design | 3 |
| DART 170 F | Digital Photo Editing I | 3 |
| DART 180 F | Digital Video | 3 |
| PRNT 070 F | Quick Print and In-Plant Graphics | 2 |
| PRNT 075 F | Electronic Prepress I | 6 |
| PRNT 101 F | Introduction to Printing | 3 |
| Total Units |  | 28-36 |

## ART

## Art History Associate in Arts Degree for Transfer PROGRAM CODE: 2A31529

The Art History Associate in Arts Degree for Transfer, also called the Art History AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Art History. This degree requires students to complete 60 CSU transferable units including completion of CSU or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. Students earning the Art History AA-T will be granted priority for admission as an Art History major to a local CSU, as determined by the CSU campus to which the student applies. A B.A. in Art History prepares students for employment in curatorial work for the gallery and museum system. In addition, a B.A. in Art History provides a solid foundation for advanced training in the more technical areas of art restoration and conservation, as well an introduction to art theory, methodology, and criticism - areas of study which are key to studies of art at the post-graduate level. The Art History AA-T Degree program requires 18 total units of which 9 units are in required core courses. In addition, a total of 9 units are required from lists of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Identify key architectural and sculptural works from ancient Mesopotamia, Egypt, Greece, and Rome, and understand their significance within a social-political context.
Outcome 2: Recognize key sculptures and paintings by master artists from the Italian Renaissance; the Dutch and Spanish Baroque; and the French Neoclassical period.
Outcome 3: Identify important works of art from the mid-19th century until the early 21st century, particularly from the following artistic movements: Impressionism, Cubism, Surrealism, Abstract Expressionism, and Post-modernism.

## Required Core Courses (9 Units) Units

ART 112 F Art History: Ancient to Medieval 3
ART 113 F Art History: Renaissance to Modern 3
ART 182 F Basic Drawing 3
List A (3 units) Select one: Units
ART 212 F Art History: The Art of Asia 3
ART 116 F Art History: The Art of Mexico 3
List B (3 units) Select one: Units
ART 120 F Basic Design 3
ART 153 F Ceramics: Beginning Handbuilding 3
ART 186 F Beginning Life Drawing
PHOT 101 F Introduction to Photography
ART 121 F Three-Dimensional Design
DART 100 F Introduction to Digital Art
DART 170 F Digital Photo Editing I

## List C (3 units) Select one:

Any course from List A or List B not already used or ART 114 F Art History: Impressionism to Present

Total Units

## Studio Arts Associate in Arts Degree for Transfer PROGRAM CODE: 2A31520

The Associate in Arts in Studio Arts for Transfer (AA-T), also called the Studio Arts AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Studio Art. Students earning the Studio Arts AA-T will be granted priority for admission as a Studio Arts major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 24 units in the major with a cumulative GPA of 2.0 or better. Title V requires that students earn a grade of " C " or better in all major coursework. There are no additional graduation requirements. This degree is designed to prepare students to understand and appreciate various art forms and art media, and guide them in choosing an appropriate path for them to follow for the demonstration of their creativity. While a baccalaureate degree is recommended for a possible career in gallery and museum presentation, Art Criticism, Commercial Art, Art Education, and many other Art-related careers, completion of this curriculum will demonstrate commitment to the serious study of Art in practice and in theory, and provide comprehensive preparation for upper-division work. The Studio Arts AA-T Degree program requires 24 total units of which 12 units are in required core courses. In addition, a total of 12 units are required from a list of restricted electives: 3 units in restricted electives required in Art History, and 9 units from a list of Studio Arts restricted elective courses.

## Program Level Student Learning Outcomes

Outcome 1: Analyze and arrange visual components according to recognized design standards.
Outcome 2: Create work in two-dimensions and three-dimensions in a variety of different disciplines and media.
Outcome 3: Recognize artworks of ancient and/or modern Art History and demonstrate an understanding of their significance within a social-political context.

## Core Courses (12 units) Complete the following courses to total 12 units <br> Units <br> ART 113 F Art History: Renaissance to Modern <br> ART 120 F Basic Design 3 <br> ART 121 F Three-Dimensional Design 3 <br> ART 182 F Basic Drawing 3

## List A: Art History Restricted Electives (3 units) Select one course

## Units

ART 112 F Art History: Ancient to Medieval
3
ART 212 F Art History: The Art of Asia 3
ART 117 F Art History: American Art

List B: Studio Arts Restricted Electives (9 units) Select 3 courses

Units
ART 186 F Beginning Life Drawing 3
ART 189 F Beginning Painting 3
ART 131 F Introduction to Printmaking 3
ART 153 F Ceramics: Beginning Handbuilding 3
ART 160 F Fundamentals of Sculpture 3
ART 118 F Color Theory 3
ART 173 F Jewelry Casting 3
ACG 100 F Introduction: Computer Graphics/MAC 3
ACG 170 F Digital Photography 3
Total Units 24

## Advertising and Graphic Design Associate in Arts Degree

PROGRAM CODE: 2 A03852
The Advertising and Graphic Design Associate in Arts Degree is designed for students seeking employment in the advertising and graphic design industry. It is recommended that students seeking employment in these areas should also complete a total of 18 units with 12 units of required courses and 6 units of restricted electives. A minimum grade of "C" or better is required for each course taken. Students are guided through presentation and portfolio creation process throughout the program. This program is not designed to transfer to a UC or CSU institution, but may transfer to a private four year school of art with specialized focus upon Advertising and Graphic Arts.

## Program Level Student Learning Outcomes

Outcome 1: Create computer generated, comprehensive, publication designs that are suitable for inclusion in a student's portfolio.
Outcome 2: Demonstrate an advanced understanding of electronic prepress, typography, paper specification, and commercial printing methods.
Outcome 3: Apply the terminology of computer graphics to communications within the field of digital media.
Outcome 4: Demonstrate a beginning knowledge of contemporary and historical graphic design.

Required Courses (12 units) Units
ART 140 F Introduction to Advertising and
Graphic Design
ART 145 F Publication Design 3
ART 147 F Production Techniques for Graphic Designers
DART 100 F Introduction to Digital Art

## Restricted Electives: (6 units)

ART 123 F Business Practices in Art
ART 146 F Advertising Design
ART 148 F Packaging Design
DART 132 F Digital Imaging I
DART 140 F Digital Publishing I
DART 146 F Digital Publishing II
DART 112 F Vector Graphics
Total Units
Units
3
3
3
3
3
3
3
18

## Art Associate in Arts Degree <br> PROGRAM CODE: $2 A 03847$

Curriculum leads to the Associate in Arts Degree. This degree is designed to prepare students for possible careers in the different fields of Fine Arts, including Gallery presentation, Sculpture, Painting, and Ceramics. It is also very good preparation for possible transfer to a four-year public or private Art Institute or university. This degree requires 18 units from the following:

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of, and show proficiency in, the fundamentals of art making with various tools and materials.
Outcome 2: Demonstrate an understanding of the fundamental elements in art and be able to identify a variety of medias within the context of Art History.
Outcome 3: Formulate conceptual considerations as they relate to the creation of art and design.
Outcome 4: Determine artistic solutions to visual design problems in multiple genres.
Outcome 5: Recognize and describe excellence in art.

| One Art History course (3 units) |  | Units |
| :---: | :---: | :---: |
| ART 112 F | Art History: Ancient to Medieval or | 3 |
| ART 113 F | Art History: Renaissance to Modern or | 3 |
| ART 114 F | Art History: Impressionism to Present or | 3 |
| ART 116 F | Art History: The Art of Mexico or | 3 |
| ART 212 F | Art History: The Art of Asia | 3 |
| One course required from: (3 units) |  | Units |
| ART 120 F | Basic Design or | 3 |
| ART 182 F | Basic Drawing | 3 |
| One course required from: (3 units) |  | Units |
| ART 121 F | Three-Dimensional Design | 3 |
| ART 153 F | Ceramics: Beginning Handbuilding | 3 |
| ART 160 F | Fundamentals of Sculpture | 3 |
| ART 174 F | Beginning Jewelry Fabrication | 3 |
| ART 176 F | Stained Glass | 3 |
| ART 185 F | Life Sculpture | 3 |
| ART 189 F | Beginning Painting | 3 |
| And required: 9 units <br> Any ART course except ART 110 F, ART 179 F, ART 187 F, ART 190 F, or ART 194 F |  | Units |
|  |  | 9 |
| Total Units |  | 18 |

## Advertising and Graphic Design Certificate

PROGRAM CODE: 2 C35894
The Advertising and Graphic Design Certificate prepares a student for an entry level position in the professions of advertising, graphic design or allied profession. The hands-on classes allow a student to create professional quality designs suitable for inclusion in a portfolio. The certificate requires 40-41 units in which 34-35 are in required courses. An additional 6 units must be chosen from the restricted units listed below. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Create computer generated publication designs that are suitable for inclusion in a student's portfolio.
Outcome 2: Demonstrate an understanding of electronic prepress, typography, paper specification, and commercial printing methods.
Outcome 3: Apply the terminology of computer graphics to communications within the field of digital media.
Required Courses (34-35 Units) ..... Units
ART 123 F Business Practices in Art ..... 3
ART 140 F Introduction to Advertising and Graphic Design ..... 3
ART 145 F Publication Design ..... 3
ART 146 F Advertising Design ..... 3
ART 147 F Production Techniques for
Graphic Designers ..... 3
ART 148 F Packaging Design ..... 3
ART 299 F Art Independent Study ..... 1-2
DART 100 F Introduction to Digital Art ..... 3
DART 112 F Vector Graphics ..... 3
DART 132 F Digital Imaging I ..... 3
DART 140 F Digital Publishing I ..... 3
DART 146 F Digital Publishing II ..... 3
Restricted Electives (6 Units)ART 118 F Color Theory3
ART 120 F Basic Design ..... 3
ART 144 F Fundamentals of Cartooning ..... 2
ART 182 F Basic Drawing ..... 3
PRNT 101 F Introduction to Printing ..... 3
DART 170 F Digital Photo Editing I ..... 3
PHOT 101 F Introduction to Photography ..... 3

## Advertising and Graphic Design Level I Certificate <br> PROGRAM CODE: 2 C00035

The Advertising and Graphic Design - Level I Certificate Program requires a total of 16 units in required courses. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Create computer generated publication designs that are suitable for inclusion in a student's portfolio.
Outcome 2: Demonstrate an understanding of electronic prepress, typography, paper specification, and commercial printing methods.
Outcome 3: Apply the terminology of computer graphics to communications within the field of digital media.
Required Courses: (16 units) Units
DART 100 F Introduction to Digital Art ..... 3
DART 140 F Digital Publishing I or ..... 3
DART 146 F Digital Publishing II ..... 3
ART 140 F Introduction to Advertising and Graphic Design ..... 3
ART 145 F Publication Design ..... 3
ART 147 F Production Techniques for Graphic Designers ..... 3
COUN 141 F Career Exploration ..... 1
Total Units16

## Illustration Certificate

PROGRAM CODE: 2C18742
The Illustration Certificate Program is designed to emphasize concepts, strategies and skill development in order to facilitate the student's portfolio presentation, which may be appropriate for a variety of careers in the Commercial Arts field, including editorial and advertising illustration, concept design and illustration for products, conceptual art for the game and entertainment industry, and illustration for the toy and theme park industries. The Illustration Certificate Program consists of 40-43 units. There are a total of 31-32 required units and a total of 9-11 restricted elective units. A minimum grade of $C$ or better is required for each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate evidence of proficiency in a variety of creative areas, including: Sketching skills/rapid visualization, two-dimensional design and color, and draftsmanship of accurate human anatomy, digital illustration programs.
Outcome 2: Demonstrate an understanding of the expectations of the field of Illustration, relating to interaction with peers and project leaders in a creative situation or environment.
Required Art Courses: 25-26 units ..... Units
ART 120 F Basic Design ..... 3
ART 157 F Sketching for Animators and Illustrators ..... 3
ART 137 F Basic Drawing for Entertainment Arts or ..... 3
ART 182 F Basic Drawing ..... 3
ART 180 F Rendering or ..... 3
ART 243 F Applied Perspective ..... 3
ART 186 F Beginning Life Drawing ..... 3
ART 244 F Illustration ..... 3
ART 246 F Advanced Illustration ..... 3
ART 290 F Portfolio Preparation and Artwork Presentation ..... 3
ART 294 F Independent Study: Illustration ..... 1-2
Required Digital Arts (DART) courses: 6 units ..... Units
DART 107 F Digital Drawing ..... 3
DART 135 F Introduction to Digital Painting ..... 3
Restricted electives:
Choose 9-11 units from this list ..... Units
ART 123 F Business Practices in Art ..... 3
ART 139 F Fashion Sketching ..... 2
ART 144 F Fundamentals of Cartooning ..... 2
ART 156 F Animal Drawing ..... 3
ART 181 F Drawing from the Masters ..... 3
ART 183 F Representational Drawing ..... 3
ART 188 F Watercolor Painting ..... 3
ART 189 F Beginning Painting ..... 3
ART 195 F Anatomical Drawing ..... 3
ART 298 F Arts Internship ..... 1
Total Units ..... 40-43
AUTOMOTIVE TECHNOLOGY

## Automotive Technology Associate in Science

 PROGRAM CODE: 2503838Curriculum leads to the Associate in Science Degree and employment in automotive specialties: tune-up and electrical, engine repair, automatic transmissions, brakes and suspensions, power trains, air conditioning, service writing, parts control.

## Program Level Student Learning Outcomes

Outcome 1: Identify and describe the components and their operation of the following automotive systems:

- Engine Repair
- Engines (Internal Combustion and Hybrid Technology)
- Automatic Transaxles/Transmissions
- Manual Drivetrain and Axles
- Suspension and Steering
- Brakes
- Electrical and Electronic Systems
- Heating and Air Conditioning
- Engine Performance

Outcome 2: Demonstrate the proper safety procedures and techniques required in an automotive repair facility.
Outcome 3: Perform Inspection and diagnostic procedures needed to assess the following automotive systems:

- Engine Repair Engines (Internal Combustion and Hybrid Technology)
- Automatic Transaxles/Transmissions
- Manual Drivetrain and Axles
- Suspension and Steering
- Brakes
- Electrical and Electronic Systems
- Heating and Air Conditioning
- Engine Performance

Outcome 4: Demonstrate automotive service and repair procedures following manufacturer's specifications.
Outcome 5: Identify and demonstrate proper documentation of automotive repairs.

## Complete 24 units from the following list:

 UnitsAny Automotive course
MACH 116 F Machine Tools 2
TECH 081 F Technical Mathematics I 3
WELD 121AF Introduction to Welding 2
Total Units

## Automotive Chassis Specialist Skills Certificate PROGRAM CODE: 2 C00037

The Automotive Chassis Specialist Certificate Program requires a total of 15 units of which 15 units are in required courses.

## Program Level Student Learning Outcomes

Outcome 1: Describe the procedure to do an engine-compression test.
Outcome 2: Describe the procedure for replacing the exhaust gas - recirculation valve.

## Required Courses (15 units)

Units
AUTO 050 F Automotive Specialty Practice 2
AUTO 065 F Auto Electrical and Electronic Systems
AUTO 083 F Brake and Suspension Systems Repair
Total Units

## Automotive: Emission Control Specialist Certificate

PROGRAM CODE: 2 C00040
The Emission Control Specialist Certificate Program requires a total of 16 units in required courses. This program will help the student become employed as an automotive emissions testing and repair specialist and provide opportunities to study toward National Institute of Automotive Excellence (ASE) certification and toward the State of California emission control license examination.

## Program Level Student Learning Outcomes

Outcome 1: Replace the manifold absolute pressure (MAP) sensor.
Outcome 2: Replace the throttle position (TP) sensor.

| Required Courses (16 units) | Units |  |
| :--- | :--- | ---: |
| AUTO 050 F | Automotive Specialty Practice | 2 |
| AUTO 082 F | Automotive Engine Performance and <br>  <br> Drivability | 8 |
| AUTO 090 F | Emission Control Systems and Advanced <br>  <br> Diagnosis | $\underline{6}$ |
| Total Units |  | $\mathbf{1 6}$ |

## Automotive: Engine Performance Specialist Skills Certificate <br> PROGRAM CODE: 2 C00041

The Engine Performance Specialist Certificate Program requires a total of 17 units in required courses. This provides preparation for advanced entry level employment as an automotive technician who will specialize in engine performance diagnosis and drivability problem repair, and will also qualify the student to take the National Institute for Automotive Service Excellence (ASE) A6 Electrical and Electronics and A8 Engine Performance examinations.

Program Level Student Learning Outcomes
Outcome 1: Pressure test the fuel system.
Outcome 2: Replace oxygen sensors.

| Required Courses (17 units) | Units |  |
| :--- | :--- | ---: |
| AUTO 065 F | Auto Electrical and Electronic Systems | 5 |
| AUTO 082 F | Automotive Engine Performance and <br>  <br> Drivability | 8 |
| AUTO 088 F | Fuel Systems and Advanced Drivability <br>  <br> Diagnosis | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 7}$ |

## Automotive Management Certificate PROGRAM CODE: 2 C12007

The Automotive Management Certificate Program leads to entry-level employment in dealerships, service establishments, or automotive centers. The certificate also assists students who will be starting self-employment in the auto industry. The emphasis is on automotive management rather than automotive repair. The Automotive Management Certificate Program requires a total of 60-61 units of which 55 units are in required courses. An additional 5-6 units must be chosen from restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Describe the procedure for retrieving diagnostic trouble codes (DTCs).
Outcome 2: Describe the procedure to properly perform an engine-compression test.

## Required Courses (55 units)

## Units

AUTO 055 F Automotive Business Management 5
AUTO 060 F Automotive Powertrains 5
AUTO 065 F Auto Electrical and Electronic Systems 5
AUTO 081 F Engine Rebuilding and Repair 8
AUTO 082 F Automotive Engine Performance and Drivability
AUTO 083 F Brake and Suspension Systems Repair 8
AUTO 084 F Automatic Transmissions 8
AUTO 086 F Automatic Transmission Fundamentals 3
AUTO 089 F Automotive Air Conditioning 4
COUN 141 F Career Exploration

## Restricted Electives (5-6 units)

## Units

AUTO 051 F Internship in Automotive 1-4
BUS 151 F Business Mathematics
3
BUS 180 F Small Business Management 3
BUS 266 F Human Relations in Business 3
CIS 100 F Introduction to Personal Computers 4
MACH 116 F Machine Tools
TECH 081 F Technical Mathematics I
Total Units

## Automotive: Manual Drive Train Specialist Skills Certificate

PROGRAM CODE: 2 C00044
The Manual Drive Train Specialist Program requires a total of 12 units of which all units are in required courses. This program will help provide skills necessary to obtain employment in the area of manual transmission, transaxle, driveline, and axle repair. Students will study the material necessary to take the National Institute for Automotive Service Excellence (ASE) examinations in Manual Drive Train Axle repair and in Automotive Electricity and Electronics.
Program Level Student Learning OutcomesOutcome 1: Replace a driveshaft.Outcome 2: Replace the clutch assembly.
Required Courses (12 units) Units
AUTO 050 F Automotive Specialty Practice ..... 2
AUTO 060 F Automotive Powertrains ..... 5
AUTO 065 F Auto Electrical and Electronic Systems ..... 5
Total Units ..... 12
Automotive-Service Advisor Skills Certificate
PROGRAM CODE: 2 C0005zThe Automotive Service Advisor Certificate Program requiresa total of 16 units of which 11 units are in required courses. Anadditional 5 units must be chosen from the restricted units listedbelow.
Program Level Student Learning-Outcomes
Outcome 1: Describe the procedure for properly replacing a fuet injector.
Outcome 2: Describe the procedure for properly handling an angry customer.
Required Courses (11 units) ..... Units
AUTO 055 F Automotive Business Management ..... 5
EIS 100 F Introduction to Personal Computers ..... 3
Restricted Electives (5 units) ..... Units
AUTO 050 F Automotive Specialty Practice ..... $z$
BUS 266 F Human Relations in Business ..... 3
FotalUnits ..... 16

## Automotive Technology Certificate <br> PROGRAM CODE: 2C21270

The Automotive Technology Certificate Program requires a total of 32 units of which 28 units are in required courses. An additional 4 units must be chosen from the restricted units listed below. A minimum grade of "C" is required in each course taken. At least half the units toward the certificate must be taken at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Replace the timing belt.
Outcome 2: Replace the engine-head gasket.

| Select 28 units from the following: |  | Units |
| :---: | :---: | :---: |
| AUTO 050 F | Automotive Specialty Practice | 2 |
| AUTO 060 F | Automotive Powertrains | 6 |
| AUTO 065 F | Auto Electrical and Electronic Systems | 5 |
| AUTO 070 F | Engine Reconditioning | 7 |
| AUTO 072 F | Automotive Engine Performance | 7 |
| AUTO 073 F | Brake Systems Repair | 7 |
| AUTO 081 F | Engine Rebuilding and Repair | 8 |
| AUTO 082 F | Automotive Engine Performance and Drivability | 8 |
| AUTO 083 F | Brake and Suspension Systems Repair | 8 |
| AUTO 084 F | Automatic Transmissions | 8 |
| AUTO 086 F | Automatic Transmission Fundamentals | 3 |
| AUTO 088 F | Fuel Systems and Advanced Drivability Diagnosis | 5 |
| AUTO 089 F | Automotive Air Conditioning | 3 |
| AUTO 090 F | Emission Control Systems and Advanced Diagnosis | 6 |
| AUTO 091 F | Cylinder Head Repair | 4 |
| Restricted Electives (4 units) |  | Units |
| MACH 116 F | Machine Tools | 2 |
| DRAF 070 F | Blueprint Reading for the Metal Trades | 2 |
| WELD 121AF | Introduction to Welding | 2 |
| WELD 121BF | Fundamentals of Inert Gas Welding | 2 |
| Total Units |  | 32 |

## BIOLOGY

## Biology Associate in Arts Degree <br> PROGRAM CODE: 2A03820

The Biology Associate in Arts Degree Program requires a total of 18 units of which 7-10 units are in required courses. An additional 8-11 units may be chosen from the required courses or restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in biology.
Outcome 2: Demonstrate safe and proficient use of laboratory equipment and techniques.
Outcome 3: Explain the significance of evolutionary theory and how it relates to life on Earth.

## Complete 7-10 units from the following:

Units
ANAT 231 F General Human Anatomy
ANAT 240 F Human Physiology 5
BIOL 222 F Marine Biology
3
BIOL 266 F General Zoology
BIOL 268 F General Botany
BIOL 272 F Cell and Molecular Biology
BIOL 274 F General Ecology
BIOL 276 F Genetics and Evolutionary Biology
MICR 262 F General Microbiology

| Restricted Electives: (Select an additional |  |
| :--- | ---: |
| $\mathbf{8 - 1 1}$ units from below so that a total of |  |
| $\mathbf{1 8}$ units are completed): |  |
| CHEM 111AF | General Chemistry I |
| CHEM 111BF | General Chemistry II |
| CHEM 211AF | Organic Chemistry I |
| CHEM 211BF | Organic Chemistry II |
| MATH 141 F | College Algebra |
| MATH 142 F | Trigonometry |
| MATH 150AF | Calculus I |
| MATH 150BF | Calculus II |
| PHYS 205 F | Physics for the Life Sciences I |
| PHYS 206 F | Physics for the Life Sciences II |
| PHYS 210 F | Physics with Calculus I |
| PHYS 211 F | Physics with Calculus II |
| PHYS 221 F | General Physics I |
| PHYS 222 F | General Physics II |
| PHYS 223 F | General Physics III |

## Biological Technician Associate in Science Degree

 PROGRAM CODE: 2508414The Biological Technician Associate in Science Degree program requires a total of 18 units, of which 9-10 units are in required courses. An additional 8-9 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate safe and proficient use of laboratory equipment and techniques.
Outcome 2: Demonstrate knowledge of biological processes from the molecular and cellular perspectives.

| Complete 9-10 units from the following: | Units |  |
| :--- | :--- | ---: |
| BIOL 101 F | General Biology or | 5 |
| BIOL 170 F | Organismal Biology | 5 |
| BIOL 109 F | Genetics and Biotechnology in Society | 3 |
| BIOL 109LF | Biotechnology Lab Techniques | 2 |
| CHEM 101 F | Introduction to Chemistry or | 5 |
| CHEM 107 F | Elementary Chemistry | 5 |
| CIS 111 F | Introduction to Information Systems | 4 |
| HORT 001 F | Principles of Horticulture I | 4 |
| HORT 002 F | Principles of Horticulture II | 4 |
| MICR 220 F | Medical Microbiology | 4 |
| TECH 082 F | Technical Mathematics II | 3 |

Select additional 8-9 units from below: Units
BIOL 222 F Marine Biology
CHEM 111AF General Chemistry I
HORT 205 F Applied Entomology
MICR 262 F General Microbiology
ESC 130 F Introduction to Oceanography
ESC 130HF Honors Introduction to Oceanography
Total Units
17-19

## BUSINESS

## Business Administration <br> Associate in Science Degree for Transfer PROGRAM CODE: 2531531

The Associate in Science in Business Administration for Transfer, also called the Business Administration AS-T Degree, prepares students to transfer to CSU campuses that offer bacheIor's degrees in Business Administration. Ed Code Section 6674666749 states students earning the Business Administration AS-T degree will be granted priority for admission as a Business Administration major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 29-30 units in the major with a cumulative GPA of 2.0 or better. Title V requires that students earn a grade of " C " or better in all major coursework. There are no additional graduation requirements. Business Administration prepares students to enter the job market with an ability to identify and solve business problems. Coursework provides a solid base of knowledge and understanding of fundamental business aspects, beginning with the basics, and emphasizing a foundation in marketing, advertising, management, human relations, finance, communication, writing, business law and international business. While a baccalaureate degree is recommended preparation for those considering business focused careers, the completion of this curriculum will demonstrate commitment to the business field and provide preparation for upper-division work. The Business Administration AA-T Degree requires a total of 29-30 units of required courses and restricted electives from the categories as indicated below.

## Program Level Student Learning Outcomes

Outcome 1: Utilize a working vocabulary of business terminology. Outcome 2: Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.
Outcome 3: Identify basic computer concepts, terms and functions.
Outcome 4: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Required Core Courses: (19 Units)

## Units

ACCT 101AF Financial Accounting 5
ACCT 101BF Managerial Accounting 5
ECON 101 F Principles of Economics - Micro 3
ECON 102 F Principles of Economics-Macro 3
BUS 241AF Business Law or
BUS 240 F Legal Environment of Business
List A: Select 1 of the following:
(4 units, 4 may be GE)
Units
MATH 120 F Introductory Probability and Statistics
MATH 130 F Calculus for Business

List B: Select 2 of the following: (6-7 units). Units
Any course from List A not already chosen
CIS 111 F Introduction to Information Systems 4
BUS 100 F Introduction to Business 3
BUS 211 F Writing for Business or 3
BUS 211HF Honors Writing for Business 3
Total Units
29-30

## Business Administration Associate in Arts Degree PROGRAM CODE: $2 A 03823$

The Business Administration Associate in Arts Degree is designed to transfer to a four-year institution. Completion of this degree will allow faster completion of a four-year degree. This degree requires 18 units chosen from the list below. Any courses listed below taught as Honors courses will also apply to this AA degree.

## Program Level Student Learning Outcomes

Outcome 1: Utilize a working vocabulary of business terminology. Outcome 2: Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.
Outcome 3: Identify basic computer concepts, terms and functions.
Outcome 4: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

| Complete $\mathbf{1 8}$ | units from the following: | Units |
| :--- | :--- | ---: |
| ACCT 101AF | Financial Accounting | 5 |
| ACCT 101BF | Managerial Accounting | 5 |
| BUS 100 F | Introduction to Business | 3 |
| BUS 131 F | Principles of International Business | 3 |
| BUS 180 F | Small Business Management | 3 |
| BUS 211 F | Writing for Business | 3 |
| BUS 240 F | Legal Environment of Business or | 3 |
| BUS 241AF* | Business Law | 3 |
| BUS 241BF | Business Law | 3 |
| CIS 100 F | Introduction to Personal Computers or | 4 |
| CIS 111 F | Introduction to Information Systems | 4 |
| ECON 101 F | Principles of Economics - Micro | 3 |
| ECON 102 F | Principles of Economics-Macro | 3 |
| MATH 120 F | Introductory Probability and Statistics | 4 |
| MATH 130 F | Calculus for Business or | 4 |
| MATH 150AF | Calculus I | 4 |
| MKT 100 F | Introduction to Marketing | 3 |
| Total Units |  | $\mathbf{1 8}$ |

## Business Management

## Associate in Science Degree

PROGRAM CODE： 2508387
The Associate in Science Degree in Business Management requires 31－33 units．Completion of this degree will provide the skills necessary to obtain employment in a business capacity at an organization．

## Program Level Student Learning Outcomes

Outcome 1：Utilize a working vocabulary of business terminology． Outcome 2：Classify，record，and summarize financial transac－ tions in journals and ledgers，manually and／or with computerized accounting software．
Outcome 3：Identify basic computer concepts，terms and functions．
Outcome 4：Analyze a routine business request and respond with a written letter that illustrates good business writing skills．

One course from the following
for a total of 4 units：Units
CIS 100 F Introduction to Personal Computers 4
CIS 111 F Introduction to Information Systems
One course from the following
for a total of 3－5 units：
Units
ACCT 001 F Accounting for Small Business
ACCT 100BF Financial Accounting Principle
ACCT 101AF Financial Accounting
One course from the following
for a total of 3 units：
Units
BUS 111 F Business Communications
BUS 211 F Writing for Business
One course from the following
for a total of 3 units：
Units
BUS 100 F Introduction to Business 3
BUS 131 F Principles of International Business 3
BUS 180 F Small Business Management
One course from the following
for a total of 3 units：
Units
BUS 162 F Business Economics
3
ECON 101 F Principles of Economics－Micro
BUS 251 F Business Finance
One course from the following
for a total of 3 units：（See counselor for determination of correct course）

Units
BUS 240 F Legal Environment of Business
BUS 241AF Business Law

## Three courses from the following

for a total of 9 units：
Units
BUS 225 F International Management 3
BUS 262 F Principles of Management 3
BUS 266 F Human Relations in Business 3
BUS 267 F Principles of Supervision 3
BUS 271 F Leadership and Business Ethics 3
$\begin{array}{llr}\text { One course from the following } & \\ \text { for a total of } \mathbf{3} \text { units：} & \text { Units } \\ \text { MKT 100 F } & \text { Introduction to Marketing } & 3 \\ \text { MKT 151 F } & \text { New Media Marketing } & 3 \\ \text { BUS 224 F } & \text { International Marketing } & 3 \\ \text { Total Units } & & \mathbf{3 1 - 3 3}\end{array}$

## Entrepreneurship Associate in Science Degree PROGRAM CODE： 2508388

The Entrepreneurship Associate in Science Degree will prepare a student with the skills necessary to start up a new busi－ ness．It requires a total of 33－36 units．

Program Level Student Learning Outcomes<br>Outcome 1：Create a basic business plan for a small business．<br>Outcome 2：Utilize a working vocabulary of business terminology．<br>Outcome 3：Analyze a routine business request and respond with a written letter that illustrates good business writing skills．

| Required Courses（9 units） | Units |  |
| :--- | :--- | ---: |
| BUS 100 F | Introduction to Business | 3 |
| BUS 180 F | Small Business Management | 3 |
| MKT 100 F | Introduction to Marketing | 3 |

Choose one course from the following

for a total of 3－5 units：

## Units

ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principles 3
ACCT 101AF Financial Accounting 5
Choose one course from the following
for a total of 3 units：Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
Choose one course from the following
for a total of 2－3 units：

## Units

BUS 170 F Principles of E－Business
BUS 181 F Business Plan Development 2
BUS 182 F Doing Business Online
BUS 269 F Managing Business Projects
MKT 151 F New Media Marketing


## International Business Management Associate in Science Degree

PROGRAM CODE: 2508391
The Associate in Science Degree in International Business Management will provide a student with key knowledge of international business that will allow employment in an organization doing business internationally. The degree requires a total of 29-33 units.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.
Outcome 2: Utilize a working vocabulary of business terminology. Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Five courses from the following

for a total of 15-16 units:
Units
BUS 131 F Principles of International Business 3
BUS 132 F Principles of Import/Export 3
BUS 170 F Principles of E-Business 3
BUS 224 F International Marketing 3
BUS 225 F International Management 3
BUS 242 F International Business Law 3
BUS 267 F Principles of Supervision 3
BUS 271 F Leadership and Business Ethics 3
CIS 100 F Introduction to Personal Computers or 4
CIS 111 F Introduction to Information Systems 4
One course from the following
for a total of 3-5 units:
Units
ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principle 3
ACCT 101AF Financial Accounting 5
One course from the following
for a total of 3 units: Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following
for a total of 3 units:
Units
BUS 100 F Introduction to Business 3
BUS 180 F Small Business Management 3
One course from the following
for a total of 3 units: (See counselor for determination of correct course)

Units
BUS 240 F Legal Environment of Business 3
BUS 241AF Business Law 3
BUS 242 F International Business Law 3
One course from the following
for a total of 2-3 units: Units
OT 070 F Business Protocol and Ethics 2
BUS 170 F Principles of E-Business 3
Total Units 29-33

## Business and Technology Skills Certificate <br> PROGRAM CODE：2C11688

The Business and Technology Skills Certificate will prepare a student with key business skills along with key technical skills（in the technical field of their choice）to obtain employment in the technical field of the student＇s choice．The certificate requires a total of 39－44 units of which 29－31 units are required courses．

## Program Level Student Learning Outcomes

Outcome 1：Utilize a working vocabulary of business terminology．
Outcome 2：Identify basic computer concepts，terms and functions．
Outcome 3：Analyze a routine business request and respond with a written letter that illustrates good business writing skills．
Required Courses（29－31 units）

BUS 111 F Business Communications 3
BUS 151 F Business Mathematics 3
BUS 262 F Principles of Management 3
BUS 266 F Human Relations in Business 3
CIS 100 F Introduction to Personal Computers or 4
CIS 111 F Introduction to Information Systems 4
CIS 123 F Word Processing
3
COUN 141 F Career Exploration 1
LANG 101 F Elementary Foreign Language（3－5）＊or
Course which meets Multicultural Course Requirements＊
MKT 208 F Principles of Selling
READ 142 F College Reading：Logical Analysis and Evaluation

## Restricted Electives（10－13 units）

The student must complete four electives for a total of 10－13 units．The electives must be pre－approved by the counselor and program coordinator and determined to be required for the student＇s career path．Electives may be from any ONE of the following career areas：Units BUS 061 F Business Skills Internship 1－4
Students must take career area courses equal to 9 units from any of ONE of the topic areas below：

Auto Technology
Cinema－Radio－TV
Construction
Cosmetology
Engineering
Fashion
Interior Design
Machine Technology
Photography
Printing Technology
Welding
＊The student is responsible for completing any necessary prerequisites．
Total Units

## Business Management Certificate <br> PROGRAM CODE： 2 C21256

The Certificate in Business Management provides the skills necessary to obtain employment in a business capacity in an orga－ nization．The certificate requires total of 31－33 units．

## Program Level Student Learning Outcomes

Outcome 1：Utilize a working vocabulary of business terminology．
Outcome 2：Classify，record，and summarize financial transac－ tions in journals and ledgers，manually and／or with computerized accounting software．
Outcome 3：Identify basic computer concepts，terms and functions．
Outcome 4：Analyze a routine business request and respond with a written letter that illustrates good business writing skills．

## One course from the following

for a total of 4 units：Units
CIS 100 F Introduction to Personal Computers 4
CIS 111 F Introduction to Information Systems 4
One course from the following
for a total of 3－5 units：Units
ACCT 001 F Accounting for Small Business 3
ACCT 100AF Financial Accounting Principle 3
ACCT 101AF Financial Accounting 5
One course from the following
for a total of 3 units：Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following
for a total of 3 units：Units
BUS 100 F Introduction to Business 3
BUS 131 F Principles of International Business 3
BUS 180 F Small Business Management 3
One course from the following
for a total of 3 units：Units
BUS 162 F Business Economics 3
ECON 101 F Principles of Economics－Micro 3
BUS 251 F Business Finance 3
One course from the following
for a total of 3 units：（See counselor for determination of correct course）

Units
BUS 240 F Legal Environment of Business 3
BUS 241AF Business Law

| Three courses from the following for a total of 9 units: |  | Units |
| :---: | :---: | :---: |
| BUS 225 F | International Management |  |
| BUS 262 F | Principles of Management | 3 |
| BUS 266 F | Human Relations in Business | 3 |
| BUS 267 F | Principles of Supervision | 3 |
| BUS 271 F | Leadership and Business Ethics | 3 |
| One course from the following |  |  |
| MKT 100 F | Introduction to Marketing | 3 |
| MKT 151 F | New Media Marketing | 3 |
| BUS 224 F | International Marketing | 3 |
| Total Units |  | 31-33 |

## Entrepreneurship Certificate

PROGRAM CODE: 2C21257
Upon completion of this certificate a student will be familiar with the key considerations for starting up a business. The Certificate in Entrepreneurship: Small Business Management requires a total of 27-30 units.

## Program Level Student Learning Outcomes

Outcome 1: Create a basic business plan for a small business.
Outcome 2: Utilize a working relationship of business terminology. Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Required Course (3 units) <br> Units <br> BUS 180 F Small Business Management

One course from the following
for a total of 3-5 units
Units
ACCT 001 F Accounting for Small Business
ACCT 100BF Financial Accounting Principle
ACCT 101AF Financial Accounting
One course from the following
for a total of 3 units
BUS 111 F Business Communications
BUS 211 F Writing for Business
One course from the following
for a total of 2-3 units
Units
BUS 100 F Introduction to Business
BUS 170 F Principles of E-Business
BUS 181 F Business Plan Development
BUS 182 F Doing Business Online
BUS 269 F Managing Business Projects
MKT 151 F New Media Marketing

| One course from the following for a total of 3 units |  | Units |
| :---: | :---: | :---: |
| BUS 162 F | Business Economics | 3 |
| ECON 101 F | Principles of Economics - Micro | 3 |
| BUS 251 F | Business Finance | 3 |
| One course from the following for a total of 3 units (See counselor for determination of correct course) |  | Units |
| BUS 240 F | Legal Environment of Business | 3 |
| BUS 241AF | Business Law | 3 |
| One course from the following for a total of 3 units |  | Units |
| BUS 262 F | Principles of Management | 3 |
| BUS 266 F | Human Relations in Business | 3 |
| BUS 267 F | Principles of Supervision | 3 |
| BUS 271 F | Leadership and Business Ethics | 3 |

One course from the following
for a total of 3 units Units
MKT 100 F Introduction to Marketing 3
MKT 201 F Small Business Promotions 3
BUS 224 F International Marketing 3
Choose one course from the following
for a total of 4 units:
CIS 100 F Introduction to Personal Computers 4
CIS 111 F Introduction to Information Systems 4
Total Units
27-30

## International Business Management Certificate <br> PROGRAM CODE: 2 C21258

Upon completion of this certificate a student will have a working knowledge of international business issues. The International Business Management Certificate requires a total of 29-33 units.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.
Outcome 2: Utilize a working vocabulary of business terminology.
Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

Five courses from the following
for a total of 15-16 units:
Units
BUS 131 F Principles of International Business 3
BUS 132 F Principles of Import/Export
BUS 224 F International Marketing
BUS 225 F International Management
BUS 267 F Principles of Supervision
BUS 271 F Leadership and Business Ethics
CIS 100 F Introduction to Personal Computers or
CIS 111 F Introduction to Information Systems

## One course from the following

for a total of 3-5 units:

## Units

ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principle
ACCT 101AF Financial Accounting

One course from the following
for a total of 3 units:

## Units

BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following
for a total of 3 units:

## Units

BUS 180 F Small Business Management
BUS 100 F Introduction to Business
One course from the following
for a total of 3 units: (See counselor for determination of correct course)

Units
BUS 240 F Legal Environment of Business
BUS 241AF Business Law
BUS 242 F International Business Law
One course from the following
for a total of 2-3 units:
OT 070 F Business Protocol and Ethics
BUS 170 F Principles of E-Business
Total Units
Units
2
3
29-33

## International Business Skills Certificate <br> PROGRAM CODE: 2 C00061

The Certificate in International Business will help students develop skills doing business internationally, and understand the nature of globalization and the differences in cultures and business practices. The certificate requires a total of 9 units of which 6 units are required courses.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a country from aspects of political economy and culture and evaluate its strengths and weaknesses for the global marketplace.
Outcome 2: Utilize a working vocabulary of business terminology. Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

## Required Courses (6 units)

Units
BUS 131 F Principles of International Business 3
BUS 132 F Principles of Import/Export
One course from the following
for a total of 3 units:
Units
BUS 224 F International Marketing 3
BUS 225 F International Management
BUS 242 F International Business Law
Total Units

## CARPENTRY

## Carpentry Associate in Arts Degree <br> PROGRAM CODE: 2A13206

Curriculum leads to the Carpentry Associate in Arts Degree.
This degree requires 18 units chosen from the following:

## Program Level Student Learning Outcomes

Outcome 1: Break down the components of a raised floor system.
Outcome 2: Name three advantages of steel construction.

## Select 18 units from the courses listed below: <br> Units

ARCH 113 F Architectural Drawing I 3
$\begin{array}{ll}\text { CSTR } 006 \text { F } & \begin{array}{l}\text { Residential Plumbing and Mechanical } \\ \text { Systems }\end{array}\end{array}$
CSTR 014 F Contractor's License Law 3
CSTR 018 F Residential Construction Practice II 4
CSTR 020 F Remodeling and Additions Construction I 4
CSTR 022 F Remodeling and Additions Construction II 4
CSTR 032 F Uniform Plumbing Code 3
CSTR 034 F National Electrical Code 3
CSTR 036 F Uniform Building Code - Residential 3
CSTR 038 F Uniform Mechanical Code 3
CSTR 100 F Beginning Residential Constr 4
CSTR 102 F Residential Finish Carpentry 4
CSTR 104 F Concrete and Masonry 3
CSTR 108 F Surveying for Builders 2
CSTR 110 F Residential Estimating 3
$\begin{array}{ll}\text { CSTR } 112 \text { F } & \begin{array}{l}\text { Construction Materials, Specifications } \\ \text { and Purchasing }\end{array}\end{array}$
CSTR 116 F Residential Construction Practice II
Total Units 18

## CHEMISTRY

## Chemistry Associate in Arts Degree <br> PROGRAM CODE: 2 A03873

The Chemistry Associate in Arts Degree prepares students for further study in chemistry or related physical and life science disciplines. This degree will provide a background in general chemistry while providing skills for possible entry-level employment in science-related industries or laboratories. This degree requires 18-20 units of which 10 units are in required courses, and 8-10 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate knowledge of inorganic chemistry appropriate for general chemistry and have the ability to articulate this chemical knowledge in verbal, written, and/or computational form.
Outcome 2: Demonstrate the ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.
Outcome 3: Demonstrate the use of proper procedures and regulations for safe handling and use of chemicals.
Required Courses (10 units)
Units
CHEM 111AF General Chemistry
CHEM 111BF General Chemistry II5
Restricted Electives (8-10 units)
Units
CHEM 211AF Organic Chemistry I ..... 5
CHEM 211BF Organic Chemistry II5
PHYS 205 F Physics for the Life Sciences I ..... 4
PHYS 206 F Physics for the Life Sciences II ..... 4
PHYS 210 F Physics with Calculus for theLife Sciences I
PHYS 211 F Physics with Calculus for the Life Sciences II44
PHYS 221 F General Physics I orPHYS 222 F General Physics IIPHYS 223 F General Physics III
MATH 150AF Calculus I orMATH 150HF Honors Calculus IMATH 150BF Calculus II4
PHYS 221HF Honors General Physics I ..... 4444MA4

## Chemistry Associate in Science Degree PROGRAM CODE: $2 S 35174$

The Chemistry Associate in Science Degree is designed to prepare students for further study in the sciences, in particular chemistry. It may also support attempts to gain entry-level employment in government agencies or various areas of industry, including environmental, pharmaceutical, and material chemistry. The Chemistry Associate in Science Degree requires 20 units of required courses.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate knowledge of inorganic and organic chemistry and have the ability to articulate this chemical knowledge in verbal, written, and/or computational form.
Outcome 2: Demonstrate the ability to conduct experiments, analyze data, and interpret results, while observing responsible and ethical scientific conduct.
Outcome 3: Demonstrate the use of proper procedures and regulations for safe handling and use of chemicals.

## Required (20 units)

Units

| CHEM 111AF | General Chemistry I | 5 |
| :--- | :--- | ---: |
| CHEM 111BF | General Chemistry II | 5 |
| CHEM 211AF | Organic Chemistry I | 5 |
| CHEM 211BF | Organic Chemistry II | 5 |
| Total Units |  | $\mathbf{2 0}$ |

## CHILD DEVELOPMENT \& EDUCATIONAL STUDIES

## Child Development and Educational Studies Associate in Arts Degree

PROGRAM CODE: 2A18801

Curriculum leads to the Child Development and Educational Studies Associate in Arts Degree (CDES AA), which prepares students for employment as teachers or teacher's assistants in private preschools or children's centers. This degree also prepares students majoring in CDES for transfer to a four year institution. The CDES AA degree, in conjunction with CDES 225 F: Early Childhood Student Teaching Practicum, and the required minimum number of hours of field experience will meet the Title V Child Development Teacher Permit requirement. In many of the courses included in the CDES AA degree, students study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. A minimum grade of " C " is required in each course taken. The Child Development and Educational Studies Associate in Arts Degree includes 21 units in required courses. (See catalog for General Education units).

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience.
Outcome 3: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 4: Recognize and evaluate the interrelationships of the child, family, school and greater community.
Outcome 5: Apply human development theory to observation and practice.
Outcome 6: Design quality early childhood programs and curriculum.
Required Courses (21 units) UnitsCDES 120 F Child Development3
CDES 122 F Principles of Early Childhood Education ..... 3
CDES 125 F Observation and Assessment for Early Learning and Development ..... 3
CDES 201 F Child in the Home and Community ..... 3
CDES 204 F Introduction to Special Education ..... 3
CDES 210 F Anti-Bias Perspective/Diversity Seminar ..... 3CDES 238 F Reggio and Constructivism inEarly Childhood3

## EDUCATION DEGREES

## Elementary Teacher Education Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A31525

The Associate in Arts in Elementary Teacher Education for Transfer (AA-T), also called the Elementary Teacher Education AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Liberal Studies or Integrated Teacher Education Programs. Ed Code Section 66746-66749 states students earning the Elementary Teacher Education AA-T degree will be granted priority for admission as a Liberal Studies or Integrated Teacher Education Program major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 55-56 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The Elementary Teacher Education AA Degree is designed for students who will be transferring to a four-year institution, obtaining a Bachelor's degree and pursuing a teaching credential through a California State University (CSU) integrated or traditional teacher preparation program. Course and degree requirements may vary at each CSU campus therefore it is important that students consult with a Fullerton College Teacher Preparation Counselor and respective university transfer representative to confirm program requirements and transferable work. The Elementary Teacher Education AA-T Degree requires a total of 55-56 units of required courses and restricted electives from the categories below as indicated

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 3: Apply human development theory to observation and practice.
Required Core Courses: (49 units) ..... Units
CDES 261AF Introduction to Elementary Classroom Teaching and ..... 2
CDES 261BF Introduction to Elementary Classroom Teaching: Observation ..... 1
ESC 101 F Earth Science Survey and ..... 3
ESC 101LF Earth Science Survey Lab ..... 1
SPCH 100 F Public Speaking ..... 4
ENGL 100 F College Writing ..... 4
CHEM 101 F Introduction to Chemistry and ..... 5
PHYS 130 F Elementary Physics ..... 4
BIOL 101 F General Biology ..... 5
MATH 203 F Mathematics for Future Elementary Teachers ..... 3
HIST 112 F World Civilizations I ..... 3
ENGL 102 F Introduction to Literature or ..... 3
ENGL 102HF Honors Introduction to Literature ..... 3
GEOG 100 F Global Geography or ..... 3
GEOG 100HF Honors Global Geography ..... 3
POSC 100 F American Government or ..... 3
POSC 100HF Honors American Government ..... 3
HIST 127 F Survey of American History or ..... 3
HIST 170 F History of the United States I ..... 3
CDES 120 F Child Development ..... 3
List A (3-4 units) Select 1 course from the following: ..... Units
ENGL 103 F Critical Reasoning and Writing ..... 4
ENGL 104 F Critical Thinking and Writing about Literature ..... 4
ENGL 201 F Intermediate College Writing ..... 3
PHIL 172 F Critical Thinking/Writing ..... 3
List B (3 units) select 1 course from the following: ..... Units
ART 110 F Introduction to Art ..... 3
DANC 100 F Dance Appreciation ..... 3
MUS 116 F Music Appreciation ..... 3
THEA 100 F Introduction to the Theatre ..... 3

## Early Childhood Education Associate in Science Degree for Transfer PROGRAM CODE: 2531524

The Associate in Science for Transfer in Early Childhood Education, also called the ECE AS-T, prepares students to transfer to CSU campuses that offer bachelor's degrees in Early Childhood Education. Ed Code Section 66746-66749 states students earning the Early Childcare Education AS-T degree will be granted priority for admission as an Early Childcare Education major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 24 units in the major, with a cumulative GPA of 2.0 or better. Title V requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The ECE AS-T Degree requires a total of 24 units of required courses as listed below. The program is designed to prepare students for working with young children from birth through the age of 8 and for employment in child development programs, public and private pre-schools, and children's centers.

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development curriculum design.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience.
Outcome 3: Analyze and think critically about current research, public policy and various media sources concerning child development.
Outcome 4: Recognize and evaluate the interrelationships of the child, family, school and greater community.
Outcome 5: Apply human development theory to observation and practice.
Outcome 6: Design and implement quality programs based on the understanding that children actively construct their own knowledge as researchers, scientists and learners.

## Required Core Courses (24 units)

Units
CDES 110 F Anti-Bias Perspective Seminar 3
CDES 115 F Introduction to Early Childhood Education Curriculum
CDES 120 F Child Development 3

3
CDES 122 F Principles of Early Childhood Education
CDES 125 F Observation and Assessment for Early Learning and Development
CDES 201 F Child in the Home and Community
CDES 215 F Health, Safety, Food, and Nutrition for Children
CDES 225 F Early Childhood Teaching with Field Experience3

Total Units
Total Units ..... 24

## Early Childhood Education <br> Associate in Arts Degree

PROGRAM CODE: 2A16838
The Early Childhood Education Associate in Arts Degree
(ECE AA), provides students with preparation for employment working with children from birth through age 8 in early care and education programs, public and private preschools, and children's centers. The ECE AA courses meet the basic course requirements for teachers in private preschools licensed by the California State Department of Social Services. With the completion of the ECE $A A$ degree and the required minimum number of field experience hours, the student will be able to apply for the Title $V$ Child Development Permit at the Associate Teacher level. In many of the courses included in the ECE AA degree, students study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. A minimum grade of " $C$ " is required in each course taken. The total number of CDES units in this program is 23 . (See catalog for General Education requirements).

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience, therefore generating a comprehensive portfolio of the student's journey becoming an anti-bias educator that includes academic journals and evidence of further research from multiple perspectives.
Outcome 3: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 4: Design quality early childhood programs and curriculum.

| Required Courses (21 units) | Units |  |
| :--- | :--- | ---: |
| CDES 115 F | Introduction to Early Childhood Education |  |
|  | Curriculum | 3 |
| CDES 120 F | Child Development | 3 |
| CDES 122 F | Principles of Early Childhood Education | 3 |
| CDES 125 F | Observation and Assessment for Early |  |
|  | Learning and Development 3 <br> CDES 201 F Child in the Home and Community | 3 |
| CDES 210 F | Anti-Bias Perspective/Diversity Seminar | 3 |
| CDES 121 F | Introduction to Early Childhood Education: |  |
|  | The Assistant Teacher or |  |
| CDES 225 F | Early Childhood Student Teaching Practicum | 3 |

Restricted Electives (2 units) Units
CDES 116 F Art Education in Early Childhood
CDES 117 F Literacy and Language in Early Childhood 2
CDES 118 F Science and Math Education in Early Childhood
CDES 119 F Music Education in Early Childhood

## Total Units

## Early Childhood Education Administration Certificate

PROGRAM CODE: 2 C08432
The completion of the Early Childhood Education Administration Certificate prepares the student to act in a leadership and administrative capacity in a child care and development program. This includes providing for budget design and fiscal management, marketing, constructing personal policies and procedures, including job analysis, developing a staff in-service plan, and designing a comprehensive educational philosophy. To qualify for the Early Childhood Education Administration Certificate, the student must have already met the minimum requirements for the Teacher Permit on the Child Development Permit matrix and must complete the total of 27 units of required courses. Many of the courses in this program utilize the CDES Child Development Laboratory Instructional Classrooms for observation and study of young children and their programs. A minimum grade of "C" is required in each course taken. See Child Development Permit Matrix for requirements needed for Title V programs. The Child Development Permit Matrix is available in the Social Sciences Division Office.

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience.
Outcome 3: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 4: Recognize and evaluate the interrelationships of the child, family, school and greater community.
Outcome 5: Apply human development theory to observation and practice.
Outcome 6: Design quality early childhood programs and curriculum.

Required Courses (27 units) Units CDES 204 F Introduction to Special Education
CDES 205 F Creating Environments for Young Children
CDES 208 F Working with Families of Children with Special Needs
CDES 210 F Anti-Bias Perspective/Diversity Seminar
CDES 215 F Health, Safety, Food, and Nutrition for Children
CDES 230 F Early Childhood Education Administration: Business Models and Practices
CDES 231 F Early Childhood Education Administration II 3
CDES 238 F Reggio and Constructivism in Early Childhood
CDES 240 F Mentoring and Leadership in Early Childhood Education
With this Certificate plus 350 days of $3+$ hours per day (within the previous 4 years) including at least 100 days of supervising adults, the student will be qualified to apply for the Title V Child Development Permit at the Site Supervisor level.
Total Units

## Early Childhood Education Teacher Certificate PROGRAM CODE: 2 C08431

The Early Childhood Education Teacher Certificate Program prepares the student to provide service in the care, development and instruction of children in a licensed early care and education program. The certificate requires the completion of 30-31 units of which 27 are in required courses. An additional 3-4 units minimum must be selected from restricted electives. A grade of " $C$ " or better is required in each course taken. In many of the courses taken in this program, students will study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. This certificate plus 16 units of general education and 175 days of 3+ hours per day experience will meet the Title $\checkmark$ Child Development Permit, Teacher level requirements.

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience.
Outcome 3: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 4: Recognize and evaluate the interrelationships of the child, family, school and greater community.
Outcome 5: Design quality early childhood programs and curriculum.

## Required Courses (27 units) <br> Units

CDES 115 F Introduction to Early Childhood Education Curriculum

3
CDES 120 F Child Development 3
CDES 122 F Principles of Early Childhood Education 3
CDES 125 F Observation and Assessment for Early Learning and Development 3
CDES 201 F Child in the Home and Community 3
CDES 204 F Introduction to Special Education 3
CDES 210 F Anti-Bias Perspective/Diversity Seminar 3
$\begin{array}{ll}\text { CDES } 225 \mathrm{~F} & \begin{array}{l}\text { Early Childhood Student Teaching } \\ \\ \text { Practicum }\end{array}\end{array}$
CDES $238 \mathrm{~F} \quad \begin{aligned} & \text { Reggio and Constructivism in } \\ & \text { Early Childhood }\end{aligned}$
A valid American Red Cross First Aid Card or equivalent must be on file.

| Restricted Electives (3-4 units) | Units |  |
| :--- | :--- | ---: |
| CDES 116 F | Art Education in Early Childhood | 2 |
| CDES 117 F | Literacy and Language in Early Childhood | 2 |
| CDES 118 F | Science and Math Education in <br> Early Childhood | 2 |
| CDES 119 F | Music Education in Early Childhood <br> Introduction to Early Childhood Education: | 2 |
| CDES 121 F | 3 |  |
| CDES 141 F | The Assistant Teacher <br> Principles of Infant/Toddler Care and | 3 |
| CDES 200 F | Education | Adolescent Development |
| CDES 206 F | Sensory Integration and Motor Planning <br> for Children | 3 |
| CDES 207 F | Principles and Techniques of Early <br> Childhood Special Education with <br> Field Experience | 3 |
| CDES 208 F | Working with Families of Children with <br> Special Needs | 3 |
| CDES 215 F | Health, Safety, Food, and Nutrition <br> for Children | 3 |
| Total Units | $30-\mathbf{3 1}$ |  |

## Infant/Toddler Certificate <br> PROGRAM CODE: 2 C15781

The Infant/Toddler Certificate is designed to educate caregivers for employment in programs serving infants and toddlers. It is also recommended for Licensed Family Child Care Providers who care for very young children in their homes. Completion of this certificate will meet the State of California Title 22 requirements to teach infants and toddlers in a licensed facility. In many of the courses taken in this program, students will study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms. Completion of this certificate will meet the requirements for six specialization units for the Title V Child Development Permit at the Master Teacher level. Completion of the AA or AS-T degree (transfer) in Child Development is strongly recommended for those students considering a professional career in the area of Infant Development. The Infant/Toddler Caregiver Certificate requires completion of 21 units. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Recognize and challenge issues of bias that children, individuals and families experience.
Outcome 3: Analyze and think critically about the teacher's comprehensive role in infant/toddler learning and development settings.
Outcome 4: Apply human development theory to observation and practice.
Required Courses (21 units) Units
CDES 120 F Child Development ..... 3
CDES 140 F Infant/Toddler Development and Observation ..... 3
CDES 141 F Principles of Infant/Toddler Care and Education ..... 3
CDES 201 F Child in the Home and Community ..... 3
CDES 208 F Working with Families of Children with Special Needs ..... 3
CDES 210 F Anti-Bias Perspective/Diversity Seminar ..... 3
CDES 215 F Health, Safety, Food, and Nutrition for Children ..... 3
Total Units ..... 21

## Special Education Certificate <br> PROGRAM CODE: 2C16840A

The curriculum in the Special Education Certificate prepares the student for employment as an instructional aide in K-12 public schools and early childhood programs where children identified with special needs are enrolled. The Certificate requires a total of 18 units with 6 required units and 12 restricted elective units. A minimum grade of $C$ is required in each course taken. In many of the courses in this certificate, students study, observe and learn utilizing the Child Development Laboratory Instructional Classrooms.

## Program Level Student Learning Outcomes

Outcome 1: Know and understand the established as well as recent theories of child development.
Outcome 2: Analyze and think critically about the teacher's comprehensive role in early learning and development settings.
Outcome 3: Recognize and evaluate the interrelationships of the child, family, school and greater community.
Outcome 4: Design quality early childhood programs and curriculum.
Required Courses (6 units)

Units

CDES 120 F Child Development 3
CDES 204 F Introduction to Special Education
3
Restricted Electives (12 units)

## Units

CDES 206 F Sensory Integration and Motor Planning for Children
CDES 207 F Principles and Techniques of Early Childhood Special Education with Field Experience
CDES 208 F Working with Families of Children with Special Needs
CDES 209 F The Role of the Para-Professional in Diverse Settings
CDES 211 F Classroom Practices for Diverse Learners Total Units

## CINEMA-RADIO-TV

## Communications: General Associate in Arts Degree

PROGRAM CODE: $2 A 03828$
The Communications: General A.A. Degree Program requires 18-19 units chosen from the list below. This A.A. Degree provides a solid foundation for students interested in all areas of Communications. This degree is especially beneficial to students interested in Broadcast Journalism.

## Program Level Student Learning Outcomes

Outcome 1: Operate audio recording equipment used in radio, internet radio and television.
Outcome 2: Demonstrate the ability to effectively direct and/or produce a video production while working in a group.
Outcome 3: Compose written copy for radio, TV, film or the Internet.

## Required courses (18 units complete 6 of the courses below)

Units
CRTV 118 F Introduction to Radio, TV and Film
3
CRTV 122 F Audio Production Techniques 3
CRTV 129 F Broadcast News 3
CRTV 135 F Broadcast TV and Radio Announcing 3
CRTV 145 F Radio/TV Sports Broadcasting 3
CRTV 150 F Television Studio Production 3
CRTV 157 F Digital Production/Non-Linear Editing for Video/Film

3
JOUR 101 F Reporting and Writing 3
JOUR 102 F Advanced Reporting \& Writing 3
JOUR 110 F Mass Media Survey
PHOT 101 F Introduction to Photography
Total Units

## Radio Broadcast News <br> Associate in Arts Degree <br> PROGRAM CODE: 2A36482



The Radio Broadcast News Associate in Arts degree provides the writing, production and on-air skills necessary for the student to enter the Radio Broadcast News, Traffic Reporting, or Radio Broadcast News field where they may work as producers, writers and broadcasters of newscasts, traffic reports and other on-air content at radio stations, traffic bureaus and production houses, and allows the student to transfer to a four year university. The Radio Broadcast News Associate in Arts Degree requires a total of 18 units chosen from the list below, plus the General Education requirements for this degree.

## Program Level Student Learning Outcomes

Outcome 1: Compose an employment package for entry-level employment in the radio Broadcast News or Traffic Reporting industry, broadcast entity or audio production company and may continue their studies at a four year university.

| 18 required | units chosen from the list below | Units |
| :--- | :--- | ---: |
| CRTV 129 F | Broadcast News | 3 |
| CRTV 122 F | Audio Production Techniques | 3 |
| CRTV 133 F | Traffic Reporting | 3 |
| CRTV 130 F | Broadcast Audio Production | 3 |
| CRTV 139 F | Intermediate Broadcast News | 3 |
| CRTV 135 F | Broadcast TV and Radio Announcing | 3 |
| CRTV 149 F | Advanced Broadcast News | 3 |
| CRTV 175 F | Documentary Filmmaking | 3 |
| CRTV 128 F | Writing for Radio, TV and Film | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 8}$ |

## Radio Broadcasting Associate in Arts Degree <br> PROGRAM CODE: 2A36481

The Radio Broadcasting Associate in Arts Degree Program is designed to prepare students for entry level employment in Internet, radio broadcasting, audio production in the Film and Television industries, and/or independent audio production studio work. The Radio Broadcasting AA degree requires a total of 18-19 units of which 15 units are required courses. An additional 3-4 units must be chosen from the restricted elective list below.

## Program Level Student Learning Outcomes <br> Outcome 1: Compose an employment package. <br> Outcome 2: Compose a professional demo as part of a broadcast entity.

| Required Courses (15 Units) | Units |  |
| :--- | ---: | ---: |
| CRTV 118 F | Introduction to Radio, TV and Film | 3 |
| CRTV 122 F | Audio Production Techniques | 3 |
| CRTV 130 F | Broadcast Audio Production | 3 |
| CRTV 135 F | Broadcast TV and Radio Announcing | 3 |
| CRTV 235 F | On-Air Radio Broadcasting | 3 |
|  |  |  |
| Restricted Electives (3-4 units) | Units |  |
| CRTV 124 F | Broadcast Advertising Sales | 1 |
| CRTV 129 F | Broadcast News | 3 |
| CRTV 145 F | Radio/TV Sports Broadcasting | 3 |
| CRTV 236 F | On-Air Radio Broadcasting - Intermediate | 3 |
| Total Units |  | $\mathbf{1 8 - 1 9}$ |

## Radio Production Associate in Arts Degree PROGRAM CODE: 2 A08397

The Radio Production Associate in Arts Degree is designed to prepare students for entry-level employment in radio broadcasting, employment in the Film industry as an audio editor and producer, employment in post-production for Film and TV, or employment within any industry requiring an audio expert, including corporate media, law enforcement and independent contractor work. This degree requires a total of 18 units of which 12 units are in required courses. An additional 6 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Compose an employment package for entry-level employment in the radio industry, production house, agency, studio or audio production company.

## Required Courses (12 units)

Units
CRTV 118 F Introduction to Radio, TV and Film 3
CRTV 122 F Audio Production Techniques 3
CRTV 128 F Writing for Radio, TV and Film
CRTV 130 F Broadcast Audio Production
Restricted Electives (6 units)
Units
CRTV 124 F Broadcast Advertising Sales
1
CRTV 129 F Broadcast News 3
CRTV 235 F On-Air Radio Broadcasting 3
CRTV 290 F Internship in Communications I 2-4
CRTV 133 F Traffic Reporting 3
CRTV 135 F Broadcast TV and Radio Announcing
Total Units

## Television/Film Associate in Arts Degree PROGRAM CODE: 2A08398A

Television/Film Associate in Arts Degree program requires a total of 18 units of which 6 units are in required courses. An additional 12 units must be chosen from the restricted units listed below. The Television/Film Associate in Arts Degree prepares students for careers in the Motion Picture/Television Industry and for transfer to upper division coursework in the major at four-year colleges and universities

## Program Level Student Learning Outcomes

Outcome 1: Distinguish between attached shadows that influence perception of shape and texture and cast shadows that articulate distance from a surface or other objects.
Outcome 2: Distinguish how volume of light, distance, color spill, and mixed color temperature can compromise the accurate appearance of color.
Outcome 3: Demonstrate proficiency in ability to direct a production using the proper terminology $75 \%$ of the time.
Outcome 4: Calculate proper f-stop settings when given a written example.
Required Courses (6 units) ..... Units
CRTV 120 F Media Aesthetics ..... 3
CRTV 150 F Television Studio Production ..... 3
Restricted Electives (12 units) Units
CRTV 118 F Introduction to Radio, TV and Film ..... 3
CRTV 121 F American Cinema to the 1960's ..... 3
CRTV 122 F Audio Production Techniques ..... 3
CRTV 126AF World Cinema to 1945 ..... 3
CRTV 126BF World Cinema 1946 to Present ..... 3
CRTV 127 F Screenwriting ..... 3
CRTV 128 F Writing for Radio, TV and Film ..... 3
CRTV 130 F Broadcast Audio Production ..... 3
CRTV 131 F Contemporary Cinema ..... 3
CRTV 157 F Digital Production/Non-Linear Editing for Video/Film ..... 3
CRTV 160 F Introduction to Filmmaking ..... 3
CRTV 164 F Advanced Digital Production/Non-Linear Editing for Video ..... 3
CRTV 175 F Documentary Filmmaking ..... 3
CRTV 196 F Communications Seminars ..... 0.5-3
CRTV 245AF Digital Editing, Graphics and Effects ..... 3
CRTV 245BF Advanced Digital Editing, Graphics \& Effects ..... 3
CRTV 280 F Television Production Workshop ..... 2-5
CRTV 290 F Internship in Communications I ..... 2-4
JOUR 110 F Mass Media Survey ..... 3
Total Units ..... 18
Radio and Television/Video Production Certificate

PROGRAM CODE: 2 C11690

The Radio and Television/Video Production prepares students for entry-level employment in the radio/television/video broadcast journalism industries. This certificate requires a total of 37-40 units of which 32-34 are in required courses. An additional 5-6 units must be chosen from the restricted units listed below. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Identify key factors pertaining to the business operations of the radio, television and film industries.
Outcome 2: Compose written copy for radio, TV, film and the Internet.
Outcome 3: Produce radio, internet radio and television recordings using digital audio software.
Outcome 4: Calculate proper f-stop settings when given a written example.

## Required Courses (32-34 units)

Units
CRTV 118 F Introduction to Radio, TV and Film 3
CRTV 122 F Audio Production Techniques 3
CRTV 128 F Writing for Radio, TV and Film
CRTV 129 F Broadcast News
CRTV 130 F Broadcast Audio Production
CRTV 135 F Broadcast TV and Radio Announcing
CRTV 150 F Television Studio Production
CRTV 157 F Digital Production/Non-Linear Editing for Video/Film
CRTV 164 F Advanced Digital Production/Non-Linear Editing for Video
CRTV 235 F On-Air Radio Broadcasting 3
CRTV 290 F Internship in Communications I

## Restricted Electives (5-6 units)

CRTV 127 F Screenwriting
CRTV 133 F Traffic Reporting
CRTV 196 F
CRTV 236 F On-Air Radio Broadcasting-Intermediate
CRTV 280 F Television Production Workshop
CRTV 245AF Digital Editing, Graphics and Effects
Total Units

## Radio Broadcast News Certificate PROGRAM CODE: 2 C36478

The Radio Broadcast News Certificate provides the background and skills needed for an entry-level position as a reporter, broadcaster and producer in the Radio Broadcast News industry. Upon completion of this certificate program a student will be prepared for an entry-level position as a reporter, broadcaster and producer in the Radio Broadcast News industry. This certificate requires the completion of 18 units of which 15 are in required courses. An additional 3 units must be chosen from restricted electives. A minimum grade of " $C$ " is required in each course taken. Required Courses: (15 units), Restricted Electives: (3 units).

## Program Level Student Learning Outcomes

Outcome 1: Compose an employment package for entry-level employment in the radio broadcast news industry as a radio news reporter, traffic reporter and radio news producer.

## 15 required units

Units
CRTV 129 F Broadcast News
CRTV 122 F Audio Production Techniques 3
CRTV 130 F Broadcast Audio Production 3

CRTV 139 F Intermediate Broadcast News 3
CRTV 135 F Broadcast TV and Radio Announcing

## Restricted Electives (3 units)

## CRTV 133 F Traffic Reporting

CRTV 149 F Advanced Broadcast News
CRTV 175 F Documentary Filmmaking
SPCH 105 F Interpersonal Communication
JOUR 110 F Mass Media Survey
Total Units

## Radio Broadcasting Certificate

PROGRAM CODE: 2 C21265
The Radio Broadcasting Certificate Program requires the completion of $25-26$ units of which 19 units are in required courses. An additional 6-7 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in each course taken. Upon completion of this certificate program a student will be prepared for an entry-level position with a radio station.

## Program Level Student Learning Outcomes

Outcome 1: Compose a professional demo from air-checked material as part of a portfolio used to establish their own independent contractor business in the radio industry, a broadcast entity or audio production company.
Outcome 2: Compose a single-tracked professional demo of audio voice-over edits as part of a portfolio used to establish their own independent contractor business in the radio industry, a broadcast entity or audio production company.
Required Courses (19 units)

Units

CRTV 118 F Introduction to Radio, TV and Film 3
CRTV 122 F Audio Production Techniques 3
CRTV 124 F Broadcast Advertising Sales 1
CRTV 129 F Broadcast News 3
CRTV 130 F Broadcast Audio Production 3
CRTV 135 F Broadcast TV and Radio Announcing 3
CRTV 235 F On-Air Radio Broadcasting 3
Restricted Electives (6-7 units) Units
CIS 100 F Introduction to Personal Computers 4
CRTV 128 F Writing for Radio, TV and Film 3
ERTV 235 F On-Air Radio Broadeasting 3
CRTV 236 F On-Air Radio Broadcasting - Intermediate 3
CRTV 290 F Internship in Communications 2-4
SPCH 105 F Interpersonal Communication 3
THEA 127 F Oral Interpretation 3
THEA 129 F Beginning Voice for the Actor 3
ERTV 133- Traffic Reporting 3
Total Units
25-26

## Sports Broadcasting Certificate

PROGRAM CODE: 2 C36357
The Sports Broadcasting Certificate prepares students for entry-level positions in radio, television, internet or cable television sports broadcasting. Students learn how to do play-by-play, color reporting, cover games by remote broadcasts on KBPK and on audio and internet streams. The Sports Broadcasting Certificate requires a total of 19 units of which 16 units are in required courses. An additional 3 units must be chosen from the restricted units listed below. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Compose an employment package for entry-level employment in the sports radio industry as a sports reporter, sports producer and sports announcer.

## Required Courses (16 units)

Units
CRTV 118 F Introduction to Radio, TV and Film
CRTV 122 F Audio Production Techniques 3
CRTV 124 F Broadcast Advertising Sales 1
CRTV 129 F Broadcast News 3
CRTV 145 F Radio/TV Sports Broadcasting 3
CRTV 139 F Intermediate Broadcast News
Units
Restricted electives (3 units)
CRTV 130 F Broadcast Audio Production 3
CRTV 135 F Broadcast TV and Radio Announcing 3
CRTV 150 F Television Studio Production 3
CRTV 290 F Internship in Communications I 2-4
CRTV 146 F Intermediate Sports Broadcasting
CRTV 147 F Advanced Sports Broadcasting 3
CRTV 149 F Advanced Broadcast News
PE 247 F Sports Management
Total Units

## Television-Film Production Certificate <br> PROGRAM CODE: 2C21266A

The Television/Film Production Certificate Program provides the background and skills needed for an entry-level position in the television/film industry. This certificate requires a total of 24 units of which 9 units are in required courses. An additional 6 units of restricted courses and at least 9 units of recommended electives must be chosen from the list below. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Identify key factors pertaining to the business operations of the television and film industries.
Outcome 2: Compose written copy for television or film using proper industry format.
Outcome 3: Produce a television/video production from concept to completion using industry standard equipment.
Outcome 4: Calculate proper f-stop settings when given a written example.

## Required Courses (9 units)

| CRTV 118 F | Introduction to Radio, TV and Film |
| :--- | :--- |
| CRTV 120 F | Media Aesthetics |
| CRTV 122 F | Audio Production Techniques |

## Restricted Courses (3 units)

CRTV 150 F Television Studio Production
CRTV 157 F Digital Production/Non-Linear Editing for Video/Film
Restricted Courses (3 units)

Units

CRTV 127 F Screenwriting 3
CRTV 128 F Writing for Radio, TV and Film 3
CRTV 129 F Broadcast News 3
Recommended Electives (9 units) Units
CRTV 121 F American Cinema to the 1960's 3
CRTV 126AF World Cinema to 1945
CRTV 126BF World Cinema 1946 to Present 3
CRTV 127 F Screenwriting 3
CRTV 128 F Writing for Radio, TV and Film 3
CRTV 129 F Broadcast News 3
CRTV 130 F Broadcast Audio Production 3
CRTV 131 F Contemporary Cinema 3
CRTV 135 F Broadcast TV and Radio Announcing 3
CRTV 150 F Television Studio Production 3
CRTV 157 F Digital Production/Non-Linear Editing for Video/Film

3
CRTV 160 F Introduction to Filmmaking 3
$\begin{array}{ll}\text { CRTV } 164 \text { F } & \text { Advanced Digital Production/Non-Linear } \\ & \text { Editing for Video }\end{array}$
CRTV 175 F Documentary Filmmaking 3
CRTV 196 F Communications Seminars 0.5-3
CRTV 245AF Digital Editing, Graphics and Effects 3
CRTV 245BF Advanced Digital Editing, Graphics \& Effects
CRTV 280 F Television Production Workshop 2-5
CRTV 290 F Internship in Communications I 2-4
Total Units

## COMPUTER INFORMATION SYSTEMS

## Computer Information Systems Associate in Science Degree <br> PROGRAM CODE: 2503831

Curriculum leads to the Associate of Science Degree and/or employment in computer applications and computer information systems. This degree requires 34-40.5 units, 9 of which are required, with an additional 25-31.5 units from the appropriate categories.

## Program Level Student Learning Outcomes

Outcome 1: Proficiency in one or more common Business Software programs.
Outcome 2: An understanding of common computer technology related terms.
Outcome 3: The ability to be effective communicators using common Business communication tools.
Outcome 4: Knowledge of common Internet related technologies and software.

| Required Courses (9 units) |  | Units |
| :---: | :---: | :---: |
| CIS 107 F | Introduction to Operating Systems | 3 |
| CIS 180 F | Introduction to Networking Concepts | 3 |
| CIS 217 F | Visual Basic Programming I | 3 |
| Choose one | the following for 3-5 units: | Units |
| ACCT 001 F | Accounting for Small Business | 3 |
| ACCT 100BF | Financial Accounting Principle | 3 |
| ACCT 101AF | Financial Accounting | 5 |
| BUS 151 F | Business Mathematics | 3 |
| Choose one of the following for 3 units: |  | Units |
| BUS 111 F | Business Communications | 3 |
| BUS 211 F | Writing for Business | 3 |
| Choose one of the following for 3 units: |  | Units |
| BUS 182 F | Doing Business Online | 3 |
| MKT 151 F | New Media Marketing | 3 |
| CIS 104 F | Presentation Graphics | 3 |
| CIS 153 F | Business Web Graphics | 3 |
| CIS 298 F | Advanced Computer Topics | 0.5-3 |
| Choose one of the following for 3-4 units: |  | Units |
| CIS 100 F | Introduction to Personal Computers | 4 |
| CIS 111 F | Introduction to Information Systems | 4 |
| CIS 111HF | Honors Introduction to Information Systems | 3 |
| Choose one of the following for 2-3 units: |  | Units |
| CIS 106 F | Beginning Spreadsheet (MS Excel) | 3 |
| CIS 123 F | Word Processing | 3 |
| CIS 148 F | Introduction to Personal Computer Communications | 2 |
| CIS 150 F | Introduction to the Internet | 3 |
| CIS 205 F | Spreadsheet (Advanced MS Excel) | 3 |
| CIS 124 F | Advanced Word | 3 |
| Choose one of the following for 3 units: |  | Units |
| CIS 142 F | Database I | 3 |
| CIS 242 F | Database II | 3 |
| CIS 270 F | SQL Server Administration | 3 |
| CIS 280 F | Introduction to Oracle:SQL and PL/SQL | 3 |
| Choose one of the following for 2-3 units: |  | Units |
| CIS 152 F | Web Page Design II | 3 |
| CIS 154 F | JavaScript Programming I | 3 |
| CIS 157 F | Dreamweaver I | 3 |
| CIS 159 F | Introduction to XML | 3 |
| CIS 177 F | Dreamweaver II | 3 |
| CISG 100 F | Introduction to Computer Game Design | 3 |
| CIS 155 F | Web Page Multimedia Design I | 3 |
| CIS 255 F | Web Page Multimedia Design II | 3 |
| CIS 254 F | JavaScript Programming II | 2 |

CIS 107 F Introduction to Operating Systems 3
CIS 180 F Introduction to Networking Concepts
CIS 217 F Visual Basic Programming I
Choose one of the following for 3-5 units:

## Units

BUS 111 F Business Communications
BUS 211 F Writing for Business
Choose one of the following for 3 units:

## Units

BUS 182 F Doing Business Online
CIS 104 F New Media Marketing
CIS 153 F Business Web Graphics
CIS 298 F Advanced Computer Topics

## Units

CIS 100 F Introduction to Personal Computers
CIS 111 F Introduction to Information Systems
CIS 111HF Honors Introduction to Information Systems
Choose one of the following for 2-3 units:
CIS 106 F Beginning Spreadsheet (MS Excel)
CIS 123 Ford Processing

CIS 150 F Introduction to the Internet
CIS 205 F Spreadsheet (Advanced MS Excel)
CIS 124 F Advanced Word
Choose one of the following for 3 units:

## Units

CIS 142 F Database I
CIS 270 F SQL Server Administration
CIS 280 F Introduction to Oracle:SQL and PL/SQL
Choose one of the following for 2-3 units:
CIS 152 F Web Page Design II 3
CIS 154 F JavaScript Programming I
CIS 159 F Introduction to XML
CIS 177 F Dreamweaver II
CISG 100 F Introduction to Computer Game Design
CIS 155 F Web Page Multimedia Design I
CIS 254 F JavaScript Programming II
Choose one or two for 3-4.5 units: ..... Units
CIS 200 F Fundamentals of Computer Programming ..... 1
CIS 212 F Robotic Programming ..... 3
CIS 219 F Visual Basic Programming II ..... 3
CIS 220 F Web Server Programming ..... 3
CIS 221 F Introduction to C\# Programming ..... 3
CIS 222 F CGI/Perl Scripting ..... 3
CIS 223 F Programming in C++ ..... 3
CIS 226 F Java Programming I ..... 3
CIS 227 F Advanced C\# Programming ..... 3
CIS 228 F Java Programming II ..... 3
CIS 229 F XML Programming ..... 3.5
CIS 230 F PHP and MySQL Programming ..... 3
CIS 257 F Dreamweaver III ..... 3
CISG 110 F Introduction to Programming for Computer Games ..... 3
CISG 160 F C\# for Game Programming ..... 3
CISG 165 F C++ For Game Programming ..... 3
CISG 170 F Java for Game Programming ..... 3
CISG 175 F Game Programming in Flash ..... 3
CISG 182 F Game Graphics Programming ..... 3
CISG 185 F Artificial Intelligence in Game Programming ..... 3
CISG 190 F Programming Multiuser Online Games ..... 3
Choose one of the following for 3 units: ..... Units
CIS 160 F Introduction to Computer Forensics ..... 3
CIS 165 F Computer Forensics and Networking ..... 3
CIS 166 F Operating Systems and Computer Forensics ..... 3
CIS 168 F Tools for Computer and Network Forensics
CIS 170 F Cisco Networking 1 ..... 3
CIS 172 F Cisco Networking 2 ..... 3
CIS 171 F Network Intrusion and Detection ..... 3
CIS 173 F Cisco Networking 3 ..... 3
CIS 174 F Cisco Networking 4 ..... 3
CIS 183 F Network Security Fundamentals ..... 3
CIS 285 F Windows Server ..... 3
CIS 286 F Web Server Management ..... 3
CIS 287 F Exchange Server ..... 3
CIS 289 F Windows Active Directory ..... 3
CIS 290 F UNIX Operating System ..... 3
Total Units

## Computer Information Systems Certificate <br> PROGRAM CODE: 2C21267

The Computer Information Systems Certificate is designed for students who intend to pursue employment using current business software applications and Internet related technologies. Graphics, marketing, and popular programming language courses are also included in the Certificate. The Certificate requires the completion of $35-40.5$ units, 9 of which are required. A minimum grade of " $C$ " is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Proficiency in one or more common Business Software programs.
Outcome 2: An understanding of common computer technology related terms.
Outcome 3: The ability to be effective communicators using common Business communication tools.
Outcome 4: Knowledge of common Internet related technologies and software.

## Required Courses (9 units)

## Units

CIS 180 F Introduction to Networking Concepts
CIS 217 F Visual Basic Programming I
CIS 107 F Introduction to Operating Systems
One course from the following for 3-5 units:
Units
ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principle
ACCT 101AF Financial Accounting
BUS 151 F Business Mathematics
One course from the following courses for 3 units: Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following courses for 3 units: Units
BUS 182 F Doing Business Online
3
MKT 151 F New Media Marketing 3
CIS 298 F Advanced Computer Topics 0.5-3
CIS 104 F Presentation Graphics 3
CIS 153 F Business Web Graphics
3
One course from the following for 4 units: Units
CIS 100 F Introduction to Personal Computers
CIS 111 F Introduction to Information Systems
CIS 111HF Honors Introduction to Information Systems
One course from the following for 2-3 units: Units
CIS 106 F Beginning Spreadsheet (MS Excel)
CIS 123 F Word Processing
CIS 124 F Advanced Word
CIS 148 F Introduction to Personal Computer Communications
CIS 150 F Introduction to the Internet
CIS 205 F Spreadsheet (Advanced MS Excel)

One course from the following for 3 units: Units
CIS 142 F Database I 3
CIS 242 F Database II 3
CIS 270 F SQL Server Administration 3
CIS 280 F Introduction to Oracle:SQL and PL/SQL 3
One course from the following for 2-3 units: Units
CIS 152 F Web Page Design II 3
CIS 154 F JavaScript Programming I 3
CIS 157 F Dreamweaver I 3
CIS 159 F Introduction to XML 3
CIS 177 F Dreamweaver II 3
CIS 155 F Web Page Multimedia Design I 3
CIS 255 F Web Page Multimedia Design II 3
CISG 100 F Introduction to Computer Game Design 3
CIS 254 F JavaScript Programming II 2
One or two courses for 3-4.5 units: Units
CIS 200 F Fundamentals of Computer Programming 1
CIS 212 F Robotic Programming 3
CIS 219 F Visual Basic Programming II 3
CIS 220 F Web Server Programming 3
CIS 221 F Introduction to C\# Programming 3
CIS $223 \mathrm{~F} \quad$ Programming in C++ 3
CIS 226 F Java Programming I 3
CIS 227 F Advanced C\# Programming 3
CIS 228 F Java Programming II 3
CIS 229 F XML Programming 3.5
CIS 257 F Dreamweaver III 3
CIS 222 F CGI/Perl Scripting 3
CIS 230 F PHP and MySQL Programming 3
CISG 110 F Introduction to Programming for Computer Games
CISG 160 F C\# for Game Programming 3
CISG 165 F C++ For Game Programming 3
CISG 170 F Java for Game Programming 3
CISG 175 F Game Programming in Flash 3
CISG 182 F DirectX Graphics Programming 3
CISG 185 F Artificial Intelligence in Game Programming 3
CISG 190 F Programming Multiuser Online Games 3

## Choose one from the following for 3 units:

Units
CIS 183 F Network Security Fundamentals
CIS 281 F Intro to Networking Hardware 3
CIS 285 F
CIS 170 F
CIS 172 F
Windows Server 3

CIS 172 F Cisco Networking 2
CIS 173 F Cisco Networking 3
CIS 174 F Cisco Networking 4
CIS 160 F Introduction to Computer Forensics
CIS 165 F Computer Forensics and Networking
CIS 166 F
CIS 168 F
Operating Systems and Computer Forensics
Tools for Computer and Network Forensics
Network Intrusion and Detection
CIS 286 F
Web Server Management
Exchange Server
Windows Active Directory
UNIX Operating System
CIS 290 F
Total Units
35-40.5

## Networking Skills Certificate <br> PROGRAM CODE: 2C00034

The Networking Certificate prepares the student for a career using computer networks in business. This will include skills in installing and managing Windows networks. The Networking Certificate Program requires a total of 12 units of which 9 are required and 3 may be chosen from the restricted electives listed. A minimum grade of " $C$ " is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of common computer technology related terms.
Outcome 2: Demonstrate proficiency in one or more common Business Software programs.
Outcome 3: Demonstrate knowledge of common Internet related technologies and software.
Outcome 4: Demonstrate the ability to be effective communicators using common Business communication tools.

| Required Courses (9 units) | Units |  |
| :--- | :--- | ---: |
| CIS 180 F | Introduction to Networking Concepts | 3 |
| CIS 183 F | Network Security Fundamentals | 3 |
| CIS 285 F | Windows Server | 3 |
| CIS 291 F | Enterprise Networking | 3 |
|  |  |  |
| Restricted | Electives (3 units) | 3 |
| CIS 281 F | Introduction to Networking Hardware | 3 |
| CIS 286 F | Web Server Management | 3 |
| CIS 287 F | Exchange Server | 3 |
| CIS 289 F | Windows Active Directory | 3 |
| CIS 290 F | UNIX Operating System | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 2}$ |

## Programming Skills Certificate <br> PROGRAM CODE: 2 C00023

The Programming Certificate requires a total of 9-9.5 units of which 6 units are in required classes. An additional 3-3.5 units must be chosen from the restricted electives listed below. A minimum grade of " C " is required in each course taken. At least one-half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of common computer technology related terms.
Outcome 2: Demonstrate proficiency in one or more common business software programs.
Outcome 3: Demonstrate knowledge of common Internet related technologies and software.
Outcome 4: Demonstrate the ability to be effective communicators using common business communication tools.

| Required Courses (6 units) | Units |
| :---: | :---: |
| CIS 211 F Basic Programming for Business | 3 |
| CIS 217 F Visual Basic Programming I | 3 |
| EIS 218 F Visual Basic Programming III | 3 |
| CIS 226 F Java Programming I or | 3 |
| CIS 223 F Programming in C++ | 3 |
| Restrictive Electives (Choose one course from the following for a total of 3-3.5 units): | Units |
| CIS 212 F Robotic Programming | 3 |
| CIS 219 F Visual Basic Programming II | 3 |
| CIS 222 F CGI/Perl Scripting | 3 |
| CIS 228 F Java Programming II | 3 |
| CIS 229 F ( XML Programming | 3.5 |
| CIS 230 F PHP and MySQL Programming | 3 |
| Total Units | 9-9.5 |

## Web Scripting Skills Certificate <br> PROGRAM CODE: 2 C00062

The Web Scripting Certificate program prepares the student for a career using various Web scripting tools to create and manage databases. Skills include using typical Web scripting tools to create Web pages and Web sites. The Web Scripting Certificate requires a total of 13 units.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate proficiency in one or more common Business/Web Design Software programs.
Outcome 2: Demonstrate an understanding of common web design and computer technology related terms.
Outcome 3: Demonstrate ability to create a website using Business/Web Design Software programs.

## Required Courses (13 units)

Units
CIS 152 F Web Page Design II (HTML)
CIS 252 F Web Page Design III
CIS 154 F JavaScript Programming I 2

CIS 254 F JavaScript Programming II CIS 230 F PHP and MySQL Programming 3

Total Units

## COMPUTER INFORMATION SYSTEMS - GAMING

## Computer Game-Design Skills Certifieate PROGRAM CODE: 2 C00080

The Game-Design Certificate requires the completion of 15 units of which 12 units are in required classes listed betow. A minimum grade of " $C$ " is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning-Outcomes

Outcome 1: Create an effective game analysis document.
Outcome 2: Create a basic game design document.
Outcome 3: Plan and implement game mechanics in a scriptbased game prototyping language.

| Required Courses (12 units) | Units |  |
| :--- | :--- | ---: |
| EISG 100 F | Introduction to Computer Game Design | 3 |
| CISG 110 F | Introduction to Programming for |  |
|  | Computer Games | 3 |
| ESS 153 F | Business Web Graphics | 2 |
| CIS 155 F | Web Page Multimedia Design I | 2 |
| CIS 255 F | Web Page Multimedia Design II | 2 |

Restricted Electives (3 units) ..... Units
CISG 160 F C\# for Game Programming or ..... 3
EISG 175 F Game Programming in Flash or ..... 3
ElSG 170 - Java for Game Programming ..... 3
Fotal Units ..... 15

## Computer Game Programming Skills Certificate

PROGRAM CODE: 2 C00079
The Game Programming Certificate requires the completion of 15 units of which 12 units are in required classes listed below. A minimum grade of " $C$ " is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Plan the major programming components of a typical computer game.
Outcome 2: Create a basic game that implements a defined set of game mechanics.
Outcome 3: Create a basic game that manipulates and manages game resources such as graphics, sound, and video.

| Required Courses (12 units) | Units |  |
| :--- | :--- | ---: |
| CISG 100 F | Introduction to Computer Game Design | 3 |
| CISG 110 F | Introduction to Programming for |  |
|  | Computer Games |  |
| CISG 182 F | DirectX Graphics Programming | 3 |
| CISG 190 F | Programming Multiuser Online Games | 3 |
|  |  | 3 |
| Restricted Electives (3 units) | Units |  |
| CISG 175 F | Game Programming in Flash | 3 |
| CISG 170 F | Java for Game Programming | 3 |
| CISG 160 F | C\# for Game Programming | 3 |
| CISG 165 F | C++ For Game Programming | 3 |
| CISG 185 F | Artificial Intelligence in Game |  |
|  | Programming | 3 |
| Total Units |  | $\mathbf{1 5}$ |

## COMPUTER SCIENCE

## Computer Science Associate in Science Degree PROGRAM CODE: 2508408

The Computer Science Associate in Science Degree prepares students to transfer to colleges and universities that offer bachelor's degrees in computer science. Students with a degree in computer science may pursue careers in many areas of industry, such as aerospace, health, finance, entertainment, and more. Opportunities for specialties in the field include software engineering and development, computer networks and security, telecommunications, mobile computing, game programming, internet and web technology, embedded systems and real-time programming, systems analysis, information technology, distributed computing and artificial intelligence. The Computer Science Associate in Science Degree program requires 24 units of which 20 units are in required courses. An additional 4 units must be chosen from the restricted electives. A minimum grade of " $C$ " is required in all courses.

## Program Level Student Learning Outcomes

Outcome 1: Write computer programs to solve problems.
Outcome 2: Design and implement Abstract Data Types using object-oriented techniques.

## Required Courses (20 units)

Suggested sequence Units
CSCI 123 F Introduction to Programming Concepts in C++
CSCI 133 F Data Structures in C++
4
MATH 150BF
Calculus II
MATH 171 F Discrete Mathematics
MATH 172 F Graph Theory and Linear Algebra

## Restricted Electives (4 units)

$\begin{array}{ll}\text { CSCI } 223 \text { F } & \text { C Language for Math and Science } \\ \text { CSCI } 241 \text { F } & \begin{array}{l}\text { Computer Organization and } \\ \text { Assembly Language Programming }\end{array} \\ \text { Total Units } & \end{array}$
Units

## CONSTRUCTION

## Construction Inspection Associate in Science Degree <br> PROGRAM CODE: 2513208

Curriculum leads to the Construction Inspection Associate in Science Degree and/or entry-level employment in the construction industry. A total of 18 units is required.

## Program Level Student Learning Outcomes

Outcome 1: Identify building occupancies.
Outcome 2: Select a specific code application.

## Required courses (18 units) <br> Units

CSTR 030 F Construction Blueprint Reading
3
CSTR 032 F Uniform Plumbing Code 3
CSTR 034 F National Electrical Code 3
CSTR 036 F Uniform Building Code-Residential 3
CSTR 037 F Uniform Building CodeCommercial/Industrial 3
CSTR 038 F Uniform Mechanical Code
Total Units

## Construction Management Associate in Science Degree <br> PROGRAM CODE: 2503844

Curriculum leads to the Associate in Science Degree and/ or employment in the construction industry. A total of 24 units are required. High School preparation: woodwork, drafting, and mathematics are recommended.

## Program Level Student Learning Outcomes

Outcome 1: Differentiate the various construction delivery methods.
Outcome 2: Interpret the alphabet of lines.

| Complete 24 or more units from the following list: | Units |  |
| :--- | :--- | ---: |
| ACCT 101AF | Financial Accounting | 5 |
| BUS 100 F | Introduction to Business | 3 |
| BUS 180 F | Small Business Management | 3 |
| CIS 100 F | Introduction to Personal Computers | 4 |
| CSTR 014 F | Contractor's License Law | 3 |
| CSTR 015 F | Construction Management | 3 |
| CSTR 030 F | Construction Blueprint Reading | 3 |
| CSTR 110 F | Residential Estimating | 3 |
| CSTR 112 F | Construction Materials, Specifications |  |
|  | and Purchasing | $\mathbf{2}$ |
| Total Units |  | $\mathbf{2 4}$ |

## Construction Technology <br> Associate in Science Degree

PROGRAM CODE: 2503839
The Construction Technology Associate in Science Degree requires 24 units from the following catalog list of classes.

## Program Level Student Learning Outcomes

Outcome 1: Differentiate between a builder's level and a transit. Outcome 2: Name the three qualities of a building.

## Complete 24 or more units from the following list: Units

| CSTR 006 F | Residential Plumbing and Mechanical <br>  <br> Systems |
| :--- | :--- |

CSTR 007 F Residential Electrical Systems 2
CSTR 014 F Contractor's License Law 3
CSTR 018 F Residential Construction Practice II 4
CSTR 030 F Construction Blueprint Reading 3
CSTR 042 F Residential Steel Frame Construction 4
CSTR 100 F Beginning Residential Constr 4
CSTR 102 F Residential Finish Carpentry 4
CSTR 104 F Concrete and Masonry 3
CSTR 108 F Surveying for Builders 2
CSTR 110 F Residential Estimating 3
$\begin{array}{ll}\text { CSTR } 112 \mathrm{~F} \quad \begin{array}{l}\text { Construction Materials, Specifications } \\ \text { and Purchasing }\end{array} & 2\end{array}$
CSTR 116 F Residential Construction Practice II 4
WOOD 110 F Fundamentals of Woodwork 4
Total Units

## Construction Estimating Skills Certificate PROGRAM CODE: $2 C 00045$

The Construction Estimating Certificate Program requires a total of 17 units in required courses. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Perform a basic take-off calculation.
Outcome 2: Formulate the number of studs in a wall.
Required Courses (17 units) Units
CSTR 015 F Construction Management 3
CSTR 030 F Construction Blueprint Reading 3
CSTR 060 F Computer Estimating-Construction 3
CSTR 065 F Construction Project Scheduling 3
CSTR 110 F Residential Estimating 3
CSTR 112 F Construction Materials, Specs and Purchasing
Total Units

## Construction Inspection Certificate <br> PROGRAM CODE: 2C21272

The Construction Inspection Certificate requires the completion of 25 units of which 15 units are in required courses. An additional 10 units must be chosen from the restricted electives listed below. A minimum grade of " C " is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Identify building occupancies.
Outcome 2: Select a specific code application.

## Required Courses (15 units)

Units
CSTR 032 F Uniform Plumbing Code
3
CSTR 034 F National Electrical Code 3
CSTR 036 F Uniform Building Code - Residential
3
CSTR 037 F Uniform Building Code -
Commercial/Industrial
3
CSTR 038 F Uniform Mechanical Code
Restricted Electives (10 units)
Units
CSTR 006 F Residential Plumbing and Mechanical Systems
CSTR 030 F Construction Blueprint Reading
CSTR 104 F Concrete and Masonry 3

CSTR 108 F Surveying for Builders
3

TECH 081 F Technical Mathematics I 2

TECH 088 F Technical Science 3
TECH 127 F Industrial Safety
Total Units

## Construction Technology Certificate <br> PROGRAM CODE: 2C21271

The Construction Technology Certificate Program requires a total of 29 units of which 17 units are in required courses. An additional 12 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College. Any course offered in the construction technology department (ARCH, CSTR or WOOD) will fulfill requirements for the restricted electives. The certificate leads to entry-level employment in the construction industry.

## Program Level Student Learning Outcomes

Outcome 1: Calculate differences in elevation from plotted stakes.
Outcome 2: Illustrate the location of utilities on a plot plan.
Required Courses (17 units) ..... Units
CSTR 006 F Residential Plumbing/Mechanical Systems ..... 3
CSTR 100 F Beginning Residential Constr ..... 4
CSTR 102 F Residential Finish Carpentry ..... 4
CSTR 104 F Concrete and MasonryCSTR 110 F Residential Estimating
Restricted Electives (12 units)
Units
CSTR 005 F Construction Technology Lab ..... 0.5-2
CSTR 007 F Residential Electrical Systems ..... 2
CSTR 014 F Contractor's License Law ..... 3
CSTR 015 F Construction Management ..... 3
CSTR 016 F Bus Admin for Construction Industry ..... 3
CSTR 018 F Residential Construction Practices II ..... 4
CSTR 020 F Remodeling/Additions Construction I ..... 4
CSTR 022 F Remodeling/Addition Construction II ..... 4
CSTR 028 F Introduction to Alternate Energy ..... 2
CSTR 030 F Construction Blueprint Reading ..... 3
CSTR 031 F International Building Code ..... 3
CSTR 032 F Uniform Plumbing Code
CSTR 033 F Commercial Construction Blueprint Reading ..... 3
CSTR 034 F National Electrical CodeCSTR 035 F CA Accessibility \& Energy Code3
CSTR 036 F Uniform Building Code-Residential ..... 3CSTR 037 F Uniform Building Code-Commercial/Industrial
3
CSTR 038 F Uniform Mechanical Code ..... 3CSTR 039 F Commercial Mechanical Code
CSTR 040 F Building Design-Hazard Materials ..... 3CSTR 041 F International Residential CodeCSTR 042 F Residential Steel Frame Construction
CSTR 050 F Comp Design Software/Contractor ..... 2
CSTR 060 F Computer Estimating-Construction ..... 3
CSTR 065 F Construction Project Scheduling ..... 3
CSTR 108 F Surveying for Builders ..... 2
CSTR 112 F Construction Materials, Specs and Purchasing ..... 2
CSTR 116 F Residential Construction Practice IITotal Units

## COSMETOLOGY

## Cosmetology Associate in Science Degree <br> PROGRAM CODE: 2503887

Curriculum leads to the Associate in Science Degree and prepares the student to pass the California Board of Barbering and Cosmetology examination. The program requires 50 units in required courses.

## Program Level Student Learning Outcomes

Outcome 1: Evaluate the difference between the articles listed in the State Board Rules and Regulation and Cosmetology Acts Manuals.
Outcome 2: Create, organize, and produce a professional job resume.

## Required courses (50 units):

Units
COSM 055AF Cosmetology: Level 1
11
COSM 055BF Cosmetology: Level 2
11
COSM 055CF Cosmetology: Level 3
10
COSM 055DF Cosmetology: Level 4
COSM 055EF Cosmetology: Level 5
Total Units
9
9
50

## Cosmetology Instructor Associate in Science Degree <br> PROGRAM CODE: 2508439

The Cosmetology Instructor Associate in Science Degree will prepare a student for a career and/or employment as an instructor trained to teach the technical skills necessary for work with hair, skin and nails. Preparation includes communications skills, advanced Avant-garde make-up, and principles of selling products and services. This program is designed to introduce and/ or expand Pivot Point principles and advanced techniques. This degree requires a total of 20-22 units of which 8 units are in required courses and additional 12-14 units of restricted electives must be chosen from the list below.

## Program Level Student Learning Outcomes

Outcome 1: Create, appraise and justify lesson plans.
Outcome 2: Instruct with a variety of technologies including videos, laser disk, DVD's remote control, and PowerPoint Software.

## Required courses (8 units)

COSM 061AF Pivot Point Instruction I
COSM 061BF Pivot Point Instruction II
COSM 061CF Pivot Point Instruction III 3
COSM 070 F Continuing Education Instruction Techniques in Cosmetology
MKT 208 F Principles of Selling or 5

SPCH 105 F Interpersonal Communication or
THEA 172 F Stage Makeup
Total Units

## Cosmetology Certificate

PROGRAM CODE: 2 C21276
The Cosmetology Certificate Program will lead a student into a career and/or employment in the technical field of cosmetology with basic entry level skills necessary in: roll hair design placement, roller hair design comb outs, thermal hair styling, long hair design, press and curl with marcel iron, plain facials, chemical facials, electrical facials, hair sculpture, permanent waving, soft permanent waving, chemical texturizing with sodium hydroxide; manicuring, pedicuring, acrylic nail application, nail tips, nail wraps, nail mends, plain scalp treatment, scalp treatment with high frequency, makeup, corrective makeup, lash and brow tinting, hair color correction, tinting hair back to natural, virgin bleach, hair color to lighten, hair color to darken. This certificate requires the completion of 50 units with a grade of " C " or better in each course. At least one half of the units completed must be taken at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Identify and compare the differences in SemiPermanent, Demi-Permanent, and Permanent hair color products.
Outcome 2: Demonstrate a press and curl procedure.

| Required courses (50 units) | Units |
| :--- | ---: |
| COSM 055AF | Cosmetology: Level 1 |
| COSM 055BF | Cosmetology: Level 2 |
| COSM 055CF | Cosmetology: Level 3 |
| COSM 055DF | Cosmetology: Level 4 |
| COSM 055EF | Cosmetology: Level 5 |
| Total Units | 11 |

## Esthetician Certificate

PROGRAM CODE: 2 C16658
The Esthetician Certificate is designed to prepare the esthetician student in a career in skin care. It requires the completion of 20 units with a grade of "C" or better in each course taken. At least one half of the units completed must be taken at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the procedure for disinfection of equipment as mandated by the State Board of Barbering and Cosmetology standards.
Outcome 2: Recall health and safety measures used in the performance of dermal light facial treatments as mandated by the State Board of Barbering and Cosmetology standards.

## Required courses ( 20 units)

Units
COSM 041 F Esthetician: Level 1
COSM 042 F Esthetician: Level 2
Total Units
DEGREES \& CERTIFICATES

## DANCE

## Dance Associate in Arts Degree <br> PROGRAM CODE: 2 A03851

The Associate in Arts Degree in Dance is designed to provide students with a foundational dance education emphasizing dance technique and performance complimented by integrated studies in choreography, dance production, repertory, dance appreciation and conditioning that will prepare them to transfer as dance majors for an advanced degree or to teach, choreograph, and perform at various community and private venues. Additionally the dance training will contribute to the student's development of management skills, collaboration strategies and aesthetics. The Dance Associate in Arts Degree requires 24-26 units of which 21-23 units are in required courses and the remaining 3 units are chosen from restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate a foundational knowledge of ballet, modern and jazz techniques from beginning to intermediate level.
Outcome 2: Demonstrate acquired knowledge of dance techniques enabling them to perform various styles of dance.
Outcome 3: Assess and criticize dance from a historical and stylistic perspective.

## Required Courses (21-23 Units)

## Units

DANC 102 F Conditioning for Dance
2
DANC 141 F Ballet $\mathrm{I}:$ Beginning Ballet 2
DANC 142 F Ballet II: Advanced Beginning Ballet
DANC 162 F Advanced Beginning Modern Dance or
DANC 163 F Intermediate Modern Dance
2

DANC 112 F Jazz II 1
DANC 202 F Dance Composition/Choreography 3
DANC 143 F Ballet III: Intermediate Ballet 2
DANC 100 F Dance Appreciation or
DANC 210 F Multicultural Dance History or
DANC 120 F Dance History
DANC 214 F Dance Repertory or
DANC 205 F Dance Ensemble
DANC 203 F Dance Production or
DANC 204 F Dance Rehearsal \& Performance

## Restricted Electives (3 Units)

Select 3 Units from the following list: Units
DANC 113 F Tap Dance I
DANC 114 F Tap Dance II 1
DANC 130 F Afro-Caribbean Dance 1
DANC 150 F Commercial Dance
DANC 122 F Middle Eastern Dance
Total Units
24-26

## Dance Teaching Certificate

PROGRAM CODE: 2 C00077
The Dance Teaching Skills Certificate is designed to prepare the student to teach creative movement at a variety of locations, such as community centers and private dance studios. The Dance Teaching Skills Certificate requires 17 units of which 14 units are in required courses and the remaining 3 units are chosen from restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the ability to teach creative movement in the style of ballet, modern, jazz as well as ethnic dance forms.
Outcome 2: Demonstrate acquired dance training and practical skills to qualify for work in community centers, private dance studios, and other venues.
Outcome 3: Create choreographed beginning dance sequences in the style of ballet, modern and jazz dance.

## Required Courses (14 units) <br> Units

DANC 160 F Introduction to Modern Dance 2
DANC 161 F Beginning Modern Dance 2
DANC 111 F JazzI 2
DANC 112 F Jazz II 2
DANC 150 F Commercial Dance 1
DANC 113 F Tap Dance I 1
DANC 140 F Introduction to Ballet 2
DANC 141 F Ballet I: Beginning Ballet 2
Restricted Electives (3 units) Units
DANC 100 F Dance Appreciation or 3
DANC 120 F Dance History 3
DANC 115 F Hip Hop Dance I 1
DANC 116 F Social Dance 1
DANC 119 F Dance for Theatre 1
DANC 122 F Middle Eastern Dance or 1
DANC 130 F Afro-Caribbean Dance 1
DANC 132 F Flamenco Dance I 1
DANC 200 F Dance Appreciation: A Classical Ballet or 3
DANC 210 F Multicultural Dance in U.S. 3
Total Units

## EARTH SCIENCES

## Astronomy Associate in Arts Degree

PROGRAM CODE: 2 A08436
Curriculum leads to the Associate in Arts Degree. This degree requires 21-22 units of which 17 are in required courses; an additional 4-5 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in astronomy.
Outcome 2: Explain the motion, formation, and evolution of celestial objects in the solar system and beyond.

## Required Courses (17 units)

Units
ESC 116 F Astronomy
ESC 116LF Astronomy Lab 3

PHYS 221 F General Physics I 2

PHYS 222 F General Physics II
PHYS 223 F General Physics III
Restricted Electives (4-5 units)
CHEM 111AF General Chemistry I
CHEM 111BF General Chemistry II
MATH 150AF Calculus I
MATH 150BF Calculus II
MATH 250AF Multivariable Calculus
MATH 250BF Linear Algebra and Differential Equations
Total Units
21-22

## Earth Science Associate in Science Degree PROGRAM CODE: 2533890

This Associate in Sciences Degree is designed to introduce the student to the multidisciplinary field of Earth Science. Students who complete this degree will be prepared for further study in Earth Science or related disciplines, for transfer to B.A./B.S. programs in Earth Science, or as preparation to teach Earth Science at a primary or secondary grade level. This degree requires a total of 21 units of which 13 units are in required courses. An additional 8 units must be chosen from the list of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in earth science and geology.
Outcome 2: Apply earth science/geology concepts to better understand current issues of environmental and/or geologic concern.
Outcome 3: Demonstrate concept mastery.

## Required Courses (13 units)

Units
ESC 100 F Physical Geology
3
ESC 100LF Physical Geology Lab
1
ESC 130 F Introduction to Oceanography or
ESC 130HF Honors Introduction to Oceanography
ESC 130LF
ESC 116 F Astronomy or
1

ESC 116HF Honors Astronom
3
ESC 116LF Astronomy Lab

## Restricted Electives (8 units)

Units
ESC 102 F Survey of Natural Disasters
ESC 103 F Historical Geology
ESC 104 F Geology of National Parks and Monuments
ESC 105 F Introduction to Weather and Climate
ESC 106 F Geology of the Orange County Area
ESC 120 F Geology of California
ESC 190 F Environmental Geology
Total Units
Total Units4

## ECONOMICS

## Economics Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A33300

The Associate in Arts Degree in Economics for Transfer, also referred to as the Economics AA-T degree (or ADT), prepares students to transfer to CSU campuses that offer bachelor's degrees in economics. Ed Code Section 66746-66749 states students earning the Economics AA-T degree will be granted priority for admission as an economics major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC, and 21-24 units in the major, with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The Economics AA-T focuses on the systematic study of the production, conservation and allocation of resources in conditions of scarcity, together with the organizational frameworks related to these processes. Coursework includes instruction in economic theory, micro- and macroeconomics. This program requires a total of 21-24 units of required courses and restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Use the supply/demand model to analyze and evaluate individual market outcomes.
Outcome 2: Use the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.

## Required "Core" Courses (6 units) <br> (Honors versions of any required course and/or restricted elective course are considered equivalent courses) <br> ECON 101HF Honors Principles of EconomicsMicro and <br> ECON 102HF Honors Principles of Economics-Macro

MATH 120HF Honors Introductory Probability and Statistics or

MATH 130 F Calculus for Business or
MATH 150AF Calculus I or
MATH 150HF Honors Calculus I or
MATH 150BF Calculus II
Restricted Electives (7-10 units)
Units
ACCT 101AF Financial Accounting
ACCT 101BF Managerial Accounting
CIS 111 F Introduction to Information Systems
BUS 211 F Writing for Business
MATH 250AF Multivariable Calculus
Total Units

## Economics Associate in Arts Degree <br> PROGRAM CODE: 2A03882

The Economics Associate in Arts Degree program focuses on the systematic study of the production, conservation and allocation of resources in conditions of scarcity, together with the organizational frameworks related to these processes. Includes instruction in economic theory, micro- and macroeconomics. This program requires a total of 18 units of which 6 are in required courses. An additional 12 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Utilize the supply/demand model to analyze and evaluate individual market outcomes.
Outcome 2: Utilize the aggregate demand/aggregate supply model to predict likely changes in the overall macro economy.

## Required Courses (6 units)

## Units

ECON 101 F Principles of Economics-Micro or
ECON 101HF Honors Principles of Economics-Micro 3
ECON 102 F Principles of Economics-Macro or
ECON 102HF Honors Principles of Economics-Macro

## Restricted Electives (12 units)

## Units

ACCT 101AF Financial Accounting 5
MATH 120 F Introductory Probability and Statistics or
4
SOSC 120 F Introduction to Probability and Statistics 4
MATH 130 F Calculus for Business 4
MATH 150AF Calculus I
MATH 150BF Calculus II
PHIL 100 F Introduction to Philosophy
PHIL 160 F Introduction to Ethics
BUS 131 F Principles of International Business 3
HIST 110 F Western Civilization I
3
HIST 111 F Western Civilization II
HIST 170 F History of the United States I
HIST 171 F History of the United States II 3
Foreign Language 203 F Intermediate
Foreign Language 204 F Intermediate
Total Units

## EDUCATIONAL DEGREES

(see Child Development and Educational Studies)

## ENGINEERING

## Engineering Associate in Science Degree

PROGRAM CODE: 2503834
The Associate in Science Degree in Engineering is designed to develop the skills necessary to facilitate transfer to a university for a Bachelor of Engineering degree. Students with a degree in engineering may pursue careers in the engineering and engineering technology industries, such as manufacturing, defense, medical equipment, automotive, power, communications and civil infrastructure. In order to be well prepared for upper division engineering curriculum at the university after transfer students should complete as many courses as possible from both the core engineering course list and the restricted electives list. The Engineering Associate in Science Degree requires 24-28 units of which at least 8 units must be in category A (Engineering Courses). Additional units must be completed in categories A (Engineering Courses) and/or B (Supporting Courses) for a total of 24-28 units. A minimum grade of " $C$ " is required in all courses.

## Program Level Student Learning Outcomes

Outcome 1: Apply knowledge of mathematics, science, and engineering.
Outcome 2: Design and conduct experiments, as well as to analyze and interpret data.
Outcome 3: Identify, formulate, and solve engineering problems.
Outcome 4: Use the techniques, skills, and modern engineering tools necessary for engineering practice.

Choose at least 8 units from category A (Engineering
Courses) and then complete additional units in categories
A and/or B (Supporting Courses) for a total of 24-28 units.
$\begin{array}{llr}\text { Category A (Engineering Courses): } & \text { Units } \\ \text { ENGR 101AF } & \text { Surveying I } & 4 \\ \text { ENGR 105 F } & \text { Engineering CAD } & 4 \\ \text { ENGR 110 F } & \text { Introduction to Engineering } & 3 \\ \text { ENGR 201 F } & \text { Statics } & 3 \\ \text { ENGR 203 F } & \text { Electric Circuits } & 4 \\ \text { ENGR 203LF } & \text { Electric Circuits Lab } & 1 \\ & & \\ \text { Category B (Supporting Courses): } & 4 \\ \text { MATH 150AF } & \text { Calculus I or } & 4 \\ \text { MATH 150HF } & \text { Honors Calculus I } & 4 \\ \text { MATH 150BF } & \text { Calculus II } & 4 \\ \text { MATH 250AF } & \text { Multivariable Calculus } & 4 \\ \text { MATH 250BF } & \text { Linear Algebra and Differential Equations } & 4 \\ \text { MATH 255 F } & \text { Linear Algebra } & 4 \\ \text { MATH 260 F } & \text { Ordinary Differential Equations } & 4 \\ \text { PHYS 221 F } & \text { General Physics I or } & 4 \\ \text { PHYS 221HF } & \text { Honors General Physics I } & 4 \\ \text { PHYS 222 F } & \text { General Physics II } & 4 \\ \text { PHYS 223 F } & \text { General Physics III } & 5 \\ \text { CHEM 111AF } & \text { General Chemistry I } & \mathbf{4 4 - 2 8}\end{array}$

## ENGLISH

## English Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A31580

The Associate in Arts in English for Transfer, also called the English AA-T Degree, prepares students to transfer to CSUs that offer bachelor's degrees in English. Students earning the English AA-T Degree will be granted priority for admission as an English major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. This degree is designed to prepare students to read and write about literature critically and to understand key historical and generic influences in the production and reception of literature and other cultural texts. While a baccalaureate degree is recommended preparation for those considering careers in fields such as writing, journalism, education, training and development, sales, community relations, the ministry, law, business, entertainment, nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. The English AA-T Degree requires a total of 18-21 units of required courses and restricted electives from the categories below as indicated. (Students interested in completing a BA in English at a CSU are strongly encouraged to complete a two-semester survey sequence in American literature, British literature or World literature.)

## Program Level Student Learning Outcomes

Outcome 1: Analyze a work of literature based on its literary, historical, social, and/or cultural significance.
Outcome 2: Explain the stylistic, formal, thematic, and/or rhetorical elements of a work of literature in order to reveal its artistic and/or historical contributions to literature.

## Required Core Option 1: Choose two courses from the following list (6-7 units):

 UnitsENGL 102 F Introduction to Literature or 3
ENGL 102HF Honors Introduction to Literature and 3
ENGL 103 F Critical Reasoning and Writing or 4

ENGL 103HF Honors Critical Reasoning and Writing or
ENGL 201 F Intermediate College Writing

## Required Core Option 2: Choose one course (4 units)

ENGL 104 F
Critical Thinking and Writing about Literature

## Units

List A: Choose two courses (6 units) Units
ENGL 221 F American Literature to the Civil War and 3
ENGL 222 F American Literature from the Civil War to the Present or 3
ENGL 211 F British Literature to 1800 and 3
ENGL 212 F British Literature since 1800 or 3
ENGL 224 F World Literature through the Early Modern Period and 3
ENGL 225 F World Literature since the Early Modern Period

## List B: Select courses based on option chosen for Required Core.

Option 1: (3 units) from List B OR Option 2: (6 units) from List B

## Units

Any course from List A not used above.
ENGL 105 F Introduction to Creative Writing 3
ENGL 203 F Introduction to Dramatic Literature 3
ENGL 204 F Introduction to Poetry 3
ENGL 207 F The Short Story 3
ENGL 246 F The Novel 3
List C: Choose one course (3-5 units) Units
Any course from List A and List B not used above.
ENGL 208 F Introduction to Film Studies
$\begin{array}{ll}\text { ENGL } 210 \text { F } & \begin{array}{l}\text { Introduction to Language Structure } \\ \text { and Use }\end{array}\end{array}$
ENGL 234 F Introduction to Shakespeare or 3
ENGL 234HF Honors Introduction to Shakespeare 3
ENGL 239 F Survey of Children's Literature 3
ENGL 243 F Folklore and Mythology or 3
ENGL 243HF Honors Folklore and Mythology 3
ENGL 245 F The Bible as Literature 3
ENGL 248 F Science Fiction 3
CHIN 203 F Intermediate Chinese - Mandarin III 4
CHIN 204 F Intermediate Chinese - Mandarin IV 4
FREN 203 F Intermediate French III 4
FREN 204 F Intermediate French IV 4
GERM 203 F Intermediate German III 4
GERM 204 F Intermediate German IV 4
ITAL 203 F Intermediate Italian III 4
ITAL 204 F Intermediate Italian IV 4
JAPN 203 F Intermediate Japanese III 4
JAPN 204 F Intermediate Japanese IV 4
SPAN 201 F Spanish for the Spanish Speaker 5
SPAN 203 F Intermediate Spanish III 4
SPAN 204 F Intermediate Spanish IV 4
SPAN 206 F Introduction to Latin American Literature SPAN 205 F Introduction to Spanish Literature SPAN 207 F Children's Literature/Spanish

## English Associate in Arts Degree <br> PROGRAM CODE： 2 A03866

The English Associate in Arts Degree is designed to prepare students to read and write about literature critically and to under－ stand key historical and generic influences in the production and reception of literature and other cultural texts．The degree requires 18 units，of which 12 units are in required courses．An additional six units must be selected from the restricted electives listed below．

## Program Level Student Learning Outcomes

Outcome 1：Analyze a text based on its literary，historical，social， and／or cultural significance．
Outcome 2：Explain the stylistic，formal，thematic and／or rhetor－ ical elements of a text in order to reveal its artistic and／or histor－ ical contributions to literature．

## Required：

Units
ENGL 102 F Introduction to Literature or
ENGL 102HF Honors Introduction to Literature

## And one survey sequence（6 units）

from the following：
ENGL 211 F British Literature to 1800 or Units

ENGL 211HF Honors British Literature to 1800 and
ENGL 212 F British Literature since 1800 or
3

ENGL 212HF Honors British Literature since 1800 or
ENGL 221 F American Literature to the Civil War or
ENGL 221HF Honors American Literature to the
Civil War and
3

ENGL 222 F American Literature from the Civil War to the Present or
ENGL 222HF Honors American Literature from the Civil War to the Present or
ENGL 224 F World Literature through the Early Modern Period or
ENGL 224HF Honors World Literature through the Early Modern Period and
ENGL 225 F World Literature since the
ENGI 225HF Early Modern Period or 3
ENGL 225HF Honors World Literature since the Early Modern Period

And one course（3 units）from the following：Units
ENGL 203 F Introduction to Dramatic Literature
ENGL 204 F Introduction to Poetry
ENGL 207 F The Short Story
ENGL 208 F Introduction to Film Studies
ENGL 246 F The Novel

## Restricted Electives：

6 additional units from any of the above courses or the following：

Units
ENGL 105 F Introduction to Creative Writing 3
ENGL 209 F Intermediate Creative Writing 3
ENGL 210 F Introduction to Language Structure and Use 3
ENGL 214 F Contemporary Literature 3
ENGL 234 F Introduction to Shakespeare or 3
ENGL 234HF Honors Introduction to Shakespeare 3
ENGL 239 F Survey of Children＇s Literature 3
ENGL $243 \mathrm{~F} \quad$ Folklore and Mythology or 3
ENGL 243HF Honors Folklore and Mythology 3
ENGL 245 F The Bible as Literature 3
ENGL 248 F Science Fiction 3
ENGL 249 F Survey of Chicano／a Literature 3
ENGL 251 F Survey of Native American Literature 3
ENGL 254 F Intermediate Creative Writing：Poetry 3
ENGL 255 F Intermediate Creative Writing：Fiction 3
SPAN 205 F Introduction to Spanish Literature 3
SPAN 206 F Introduction to Latin American Literature 3
ENGL 280 F Language Arts Tutoring Practicum 3
Total Units
18

## ENVIRONMENTAL SCIENCES

## Environmental Sciences Associate in Science Degree

PROGRAM CODE： 2508435

The Environmental Sciences Associate in Science Degree program emphasizes the development of skills in natural history and ecology．Specified coursework trains students to identify， describe，and analyze natural environments in terms of native species and ecological processes．The program＇s many field－ oriented laboratory courses investigate a variety of natural settings including chaparral，woodland，estuary，coastal ocean， island，desert，and mountain environments．Accompanying lecture courses provide the theoretical foundation to support comprehen－ sive field studies．The Environmental Sciences Associate in Science Degree requires a total of 22－25 units of which 8 units are in required courses．An additional 14－17 units must be chosen from the list of restricted electives listed below．

## Program Level Student Learning Outcomes

Outcome 1：Examine，identify and describe natural ecosystems．
Outcome 2：Examine，distinguish and describe the ecological communities that compose natural ecosystems．
Outcome 3：Analyze and explain the organization and dynamics of natural ecosystems．

## Required Courses（8 units）

ENVS 105 F Environmental Biology
Units
ENVS 105LF Environmental Biology Lab
ESC 130LF Introduction to Oceanography Field Experience
ESC 130 F Introduction to Oceanography or
ESC 130HF Honors Introduction to Oceanography
Restricted Electives (14-17 units) ..... Units
General Ecology4
ENVS 106 F Conservation Biology ..... 3
ENVS 126 F Natural History of California3
ENVS 126FF Natural History of California Field Lecture ..... 2
ENVS 140 F Introduction to the Natural History of Birds ..... 1-2
ENVS 141 F Desert Natural History ..... 1
ENVS 142 F Geology and Marine Biology of theChannel Islands2
ENVS 145 F Marine Vertebrate Ecology of the Channel Islands ..... 1
ESC 105 F Introduction to Weather and Climate ..... 3
GEOG 102LF Physical Geography Lab ..... 1
GEOG 102 F Physical Geography or ..... 3
GEOG 102HF Honors Physical Geography ..... 3
Total Units ..... 22-25

## ETHNIC STUDIES

## Chicano/Chicana Studies Associate in Arts Degree <br> PROGRAM CODE: 2A16767

The Chicano/Chicana Studies Associate in Arts Degree is designed to meet the needs of students preparing for careers serving Chicana/o-Latina/o constituencies in areas/fields such as public and business administration, marketing, communications, public relations, the arts, education, politics, government and minority affairs, as well as careers in which the graduate would work in an international or multicultural environment. Among the strengths of the interdisciplinary Chicano/Chicana Studies major is a stress on furthering critical thinking and effective oral and written communication skills. The program's curriculum explores the dimensions of race, ethnicity, culture and identity, gender, and class in the United States, both in historical and in contemporary contexts. It prepares students in an array of theories, methodologies, technologies, and teaching approaches that support a thorough undergraduate and graduate education. The Chicano/ Chicana Studies AA degree requires a total of 19 units, of which 13 units are in required courses. An additional 6 units must be chosen from the list of restricted elective courses.

## Program Level Student Learning Outcomes

Outcome 1: Explain concepts of indigenous memory, conquest and colonization, mestizaje, migration, immigration, border regions, culture and Chicanismo.
Outcome 2: Develop a comparative and contrastive analysis of the Mexican, Chicano, Anglo (white Euro American) exploration and settlements.
Outcome 3: Explain and employ an analytical framework for the study of the contemporary Chicana-o/Latina-o community.
Outcome 4: Identify key works of art, architecture and sculpture from the Olmec, Maya and Aztec cultures, as well as important works from Posada, Rivera, Kahlo, and other seminal Mexican and Chicano artists.
Required Courses (13 units) ..... Units
ETHS 101 F American Ethnic Studies ..... 4
ETHS 140 F Introduction to Chicano/Chicana Studies ..... 3
ETHS 141 F Chicana/Chicano History ..... 3
ETHS 142 F The Chicano-a/Latino-a in Contemporary Society ..... 3
Restricted Electives (6 units) ..... Units
ETHS 118 F Introduction to Bilingual - Crossculturalism ..... 3
ETHS 129 F Introduction to African - American Studies ..... 3
ETHS 130 F African-American History I ..... 3
ETHS 131 F African-American History II ..... 3
ETHS 160 F History of the Native Americans ..... 3
ETHS 170 F Introduction to Asian Pacific American Studies ..... 3
ETHS 171 F Asian Pacific American History ..... 3
ANTH 102 F Cultural Anthropology ..... 3
ART 116 F Art History: The Art of Mexico ..... 3
HIST 190 F History of the Americas I or ..... 3
HIST 191 F History of the Americas II ..... 3
HIST 270 F Women in United States History ..... 3
PSY 101 F General Psychology ..... 3
SOC 101 F Introduction to Sociology ..... 3
WMNS 100 F Introduction to Women's Studies ..... 3
Total Units ..... 19
Ethnic Studies Associate in Arts Degree
PROGRAM CODE: $2 A 03881$
The Ethnic Studies AA Degree Program requires a total of19 units of which 16 units are in required courses. An additional3 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify race/ethnic/cultural relations within American society.
Outcome 2: Define and explain the relationship of the African American experience and that of the overall American experience.
Outcome 3: Explain concepts of indigenous memory, conquest and colonization, mestizaje, migration, immigration, border regions, culture and Chicanismo.
Outcome 4: Summarize, relate, and construct the life of Native peoples within the American history of the United States.
Outcome 5: Identify and explain the various shifting definitions and articulations of Asian Pacific American identities.

## Required Courses (16 units)

## Units

ETHS 101 F American Ethnic Studies 4
ETHS 129 F Introduction to African - American Studies
ETHS 140 F Introduction to Chicano/Chicana Studies
ETHS 160 F History of the Native Americans
ETHS 170 F Introduction to Asian Pacific American Studies

## Restricted Electives (3 units)

Units
ETHS 118 F Introduction to Bilingual - Crossculturalism 3
ETHS 130 F African-American History I 3
ETHS 131 F African-American History II
ETHS 141 F Chicana/Chicano History
ETHS 142 F The Chicano-a/Latino-a in Contemporary Society
ETHS 171 F Asian Pacific American History
HIST 160 F Asian Civilization I or 3
HIST 161 F Asian Civilization II 3
HIST 190 F History of the Americas I or 3
HIST 191 F History of the Americas II 3
HIST 270 F Women in United States History 3
WMNS 100 F Introduction to Women's Studies
Total Units

## FASHION

## Fashion Design Associate in Arts Degree <br> PROGRAM CODE: 2 A03862

The Fashion Design Associate in Arts Degree is designed to provide the student with a course of study leading to employment in the fashion apparel industry as an assistant designer. The assistant designer should be able to design and illustrate collections, and create patterns manually and on the computer. This degree requires 24-26 units, all of which are required courses.

## Program Level Student Learning Outcomes

Outcome 1: Identify the basic fashion design principles and qualifications necessary for entry level employment with fashion manufacturers.
Outcome 2: Create a 5-piece outfit with five different patterns on the computer.

## Required Courses (24-26 units)

 UnitsFASH 088 F CAD for Apparel 2
FASH 108 F Flat Pattern Methods and Design I
FASH 109 F Flat Pattern Methods and Design II
FASH 110 F Flat Pattern Methods and Design III
FASH 150 F Introduction to the Fashion Industry
FASH 186 F Workroom Sketching
FASH 188 F Apparel Production
FASH 201 F Fashion Sewing
FASH 206 F Textiles
FASH 284 F Fashion Design 2
FASH 299 F Fashion Industry Internship 1
Total Units

## Fashion Journalism Associate in Arts Degree

PROGRAM CODE: 2 A03861
Curriculum leads to the Fashion Journalism Associate in Arts Degree and/or employment in fashion journalism fields such as fashion magazines, trade magazines, promotion writing, radio and television program writer, advertising, and public relations. This degree requires completion of 18 units of which 15 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Compose and revise a simple news story with a compelling lead, adequate sourcing and context, clear transitions and a minimal number of technical writing errors.
Outcome 2: Compare and contrast the practices used to promote fashion apparel.

## Required Courses (15 units) <br> Units

JOUR 101 F Reporting and Writing 3
JOUR 135 F Advanced Magazine Production 3
FASH 150 F Introduction to the Fashion Industry 3
FASH 183 F Fashion Marketing 3
FASH 250 F Fashion Promotion 3
Restricted Electives (3 units) Units
PHOT 100 F Basic Photography 3
PHOT 101 F Introduction to Photography 3
JOUR 102 F Advanced Reporting and Writing 3
JOUR 110 F Mass Media Survey 3
JOUR 210 F Multimedia Reporting 3
FASH 107 F Apparel Analysis 3
FASH 145 F Field Studies in Fashion 1
FASH 206 F Textiles 3
FASH 242 F History of Costume 3
Total Units 18

## Fashion Merchandising Associate in Arts Degree <br> PROGRAM CODE: 2A08430

Curriculum leads to the Fashion Merchandising Associate in
Arts Degree and/or employment in the ready-to-wear industry, department stores, specialty shops, and wholesale fashion showrooms. This degree requires completion of 21-22 units of which 18 units are in required courses. An additional 3-4 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the skills and qualifications necessary for entry level employment with the fashion retail industry.
Outcome 2: Use an excel spreadsheet "open-to-buy" data.

| Required Courses（18 units） | Units |  |
| :--- | :--- | ---: |
| FASH 107 F | Apparel Analysis | 3 |
| FASH 150 F | Introduction to the Fashion Industry | 3 |
| FASH 152 F | Ready－To－Wear Evaluation | 3 |
| FASH 206 F | Textiles | 3 |
| FASH 220 F | Retail and Fashion Buying | 3 |
| FASH 221 F | Advanced Retail and Fashion Buying | 3 |
|  |  |  |
| Restricted Electives（3－4 units） | Units |  |
| BUS 151 F | Business Mathematics | 3 |
| BUS 267 F | Principles of Supervision | 3 |
| CIS 106 F | Beginning Spreadsheet（MS Excel） | 3 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 183 F | Fashion Marketing | 3 |
| FASH 250 F | Fashion Promotion | 3 |
| FASH 242 F | History of Costume | 3 |
| Total Units |  | $\mathbf{2 1 - 2 2}$ |

## Textiles and Clothing Associate in Arts Degree <br> PROGRAM CODE：2A13210

The Textiles and Clothing Associate in Arts Degree is designed to prepare students for an entry level position as a textile assistant designer creating prints in CAD and／or the field of a Fit Specialist in garment construction and alterations．This degree requires a completion of 18 units of required courses．

## Program Level Student Learning Outcomes

Outcome 1：Demonstrate the ability of garment construction， alterations and qualifications necessary for entry level employ－ ment with fashion manufacturers．
Outcome 2：Describe and compare two methods of printing．
Outcome 3：Create a print／textile in CAD（currently Adobe Photo－ shop）and make a 4 way print with 2 colorways．

Required Courses（18 units）Units
ART 118 F Color Theory 3
FASH 085 F Bridal and Special Occasion Wear 2
FASH 088 F CAD for Apparel 2
FASH 093 F Pattern Alteration and Fitting 2
FASH 101 F Basic Sewing Techniques 2
FASH 201 F Fashion Sewing 2
FASH 206 F Textiles 4
FASH 284 F Fashion Design 2
Total Units 18

## Advanced Fashion Design Certificate

PROGRAM CODE： 2 C10627
The Advanced Fashion Design Certificate prepares students for a career as a Fashion Design Room Assistant or an Assistant Designer．The student is required to complete the Fashion Design Certificate（37－41 units）plus the Advanced Fashion Design Certif－ icate requirements of 29－31 units，of which 24 units are required and 5－7 units are included under restricted electives．The program requires completion of a total of 66－72 units．

## Program Level Student Learning Outcomes

Outcome 1：Create an employment portfolio for entry－level employment in the fashion apparel industry as a fashion design room assistant or an assistant designer．
Outcome 2：Create a fashion trend booklet on one fashion category．

## Completion of Fashion Design Certificate （37－41 units），plus：

| Required Courses（24 units） | Units |  |
| :--- | :--- | ---: |
| ART 120 F | Basic Design | 3 |
| ART 139 F | Fashion Sketching | 2 |
| ART 182 F | Basic Drawing | 3 |
| FASH 110 F | Flat Pattern Methods and Design III | 2 |
| FASH 183 F | Fashion Marketing | 3 |
| FASH 188 F | Apparel Production | 2 |
| FASH 190 F | Pattern Grading | 2 |
| FASH 211 F | Draping－Advanced | 2 |
| FASH 285 F | Fashion Design－Advanced | 2 |
| FASH 297 F | Fashion Design Portfolio | 1 |
| FASH 975 F | Patternmaking：Collections | 2 |
|  |  |  |
| Restricted Electives（5－7 Units） | Units |  |
| FASH 045 F | Swim and Active Wear | 1 |
| FASH 085 F | Bridal and Special Occasion Wear | 2 |
| FASH 090 F | Creative Serging：Overlock Machine | 2 |
| ART 186 F | Beginning Life Drawing | 3 |
| Total Units |  | $\mathbf{6 6 - 7 2}$ |

## Dressmaking－Alterations Certificate

PROGRAM CODE： 2 C08428
The Dressmaking－Alterations Certificate Program prepares students for entry－level employment as a professional in the fields of dressmaker，garment construction，fit and alterations specialist． The program requires the student to complete 35－37 units of which 27 are in required courses．An additional 8－10 units must be chosen from the restricted electives below．

## Program Level Student Learning Outcomes

Outcome 1：Demonstrate the skills and complete the necessary requirements for certification for employment in dressmaking and alterations field．
Outcome 2：Alter a commercial sewing pattern to fit defined body measurements．
Outcome 3：Create a garment from fitting a muslin on an indi－ vidual missy body．

| Required Courses (27 units) | Units |  |
| :--- | :--- | ---: |
| FASH 050 F | Careers in Fashion | 1 |
| FASH 085 F | Bridal and Special Occasion Wear | 2 |
| FASH 093 F | Pattern Alteration \& Fitting | 2 |
| FASH 101 F | Basic Sewing Techniques | 2 |
| FASH 107 F | Apparel Analysis | 3 |
| FASH 108 F | Flat Pattern Methods and Design I | 2 |
| FASH 109 F | Flat Pattern Methods and Design II | 2 |
| FASH 150 F | Introduction to the Fashion Industry | 3 |
| FASH 152 F | Ready-To-Wear Evaluation | 3 |
| FASH 188 F | Apparel Production | 2 |
| FASH 206 F | Textiles | 3 |
| FASH 209 F | Draping | 2 |
|  |  |  |
| Restricted Electives (8-10 units) | Units |  |
| FASH 060 F | Professional Image | 2 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 186 F | Workroom Sketching | 2 |
| FASH 201 F | Clothing II | 2 |
| PSY 110 F | Introduction to Applied Psychology | 3 |
| Total Units |  | $\mathbf{3 5 - 3 7}$ |

## Fashion Design Certificate <br> PROGRAM CODE: 2C21273

The Fashion Design Certificate Program is designed to prepare students for entry-level employment in the field of the apparel industry as a worker in the design room. This certificate requires the completion of 37-41 units of which 33-35 are in required courses. An additional 4-6 units must be chosen from the restricted electives listed below. A minimum grade of " C " is required for all courses.

## Program Level Student Learning Outcomes

Outcome 1: Prepare a cost sheet for a defined seasonal heading in the apparel industry as a design worker in the design room.
Outcome 2: Demonstrate an understanding of the basic design principles.

| Required Courses (33-35 units) |  |
| :---: | :---: |
| FASH 050 F | Careers in Fashion |
| FASH 088 F | CAD for Apparel |
| FASH 093 F | Pattern Alteration and Fitting |
| FASH 101 F | Basic Sewing Techniques |
| FASH 107 F | Apparel Analysis |
| FASH 108 F | Flat Pattern Methods and Design I |
| FASH 109 F | Flat Pattern Methods and Design II |
| FASH 150 F | Introduction to the Fashion Industry |
| FASH 186 F | Workroom Sketching |
| FASH 201 F | Fashion Sewing |
| FASH 206 F | Textiles |
| FASH 209 F | Draping |
| FASH 242 F | Fashion History: The Evolution of Dress, Culture and Style |
| FASH 284 F | Fashion Design |
| FASH 299 F | Fashion Industry Internship |

Units
1
2
2

FASH 299 F Fashion Industry Internship

| Restricted Electives (4-6 units) | Units |  |
| :--- | :--- | ---: |
| FASH 060 F | Professional Image | 2 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 152 F | Ready-to-Wear Evaluation | 3 |
| FASH 244 F | Ethnic Costume | 3 |
| FASH 260 F | Fashion Forecasting | 2 |
| Total Units |  | $\mathbf{3 7 - 4 1}$ |

## Fashion Illustration Certificate

PROGRAM CODE: 2 C08427
Curriculum leads to the Fashion Illustration Certificate and/ or employment in fashion illustration fields such as technical designer, textiles, model drawing, direct-mail catalog and advertising. This certificate requires the completion of 33 units of which 26 are from required courses. An additional 7 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required for all courses.

## Program Level Student Learning Outcomes

Outcome 1: Illustrate the 10 head fiqure (croquis) and generate folds, pleats and gathers of clothing and complete the necessary requirements for certification for employment in fashion illustration.
Outcome 2: Illustrate a garment from their own creative ideas so that they can communicate a mental image to a viewer using a variety of drawing tools and assemble a portfolio for job interviews.
Required Courses (26 units) Units
ART 139 F Fashion Sketching ..... 2
ART 182 F Basic Drawing ..... 3
ART 183 F Representational Drawing ..... 3
ART 186 F Beginning Life Drawing ..... 3
ART 244 F Illustration ..... 3
FASH 107 F Apparel Analysis ..... 3
FASH 150 F Introduction to the Fashion Industry ..... 3
FASH 186 F Workroom Sketching ..... 2
FASH 242 F History of Costume ..... 3
FASH 297 F Fashion Design Portfolio ..... 1
Restricted Electives (select a minimum of 7 units) Units
FASH 050 F Careers in Fashion ..... 1
FASH 088 F CAD for Apparel ..... 2
FASH 101 F Basic Sewing Techniques ..... 2
ART 188 F Watercolor Painting ..... 3
FASH 201 F Clothing IIART 236 F Intermediate Life Drawing
Total Units

## Fashion Merchandising Certificate <br> PROGRAM CODE: 2 C21274

The Fashion Merchandising Certificate is designed to prepare students for employment in fashion merchandising fields such as fashion merchandiser, fashion apparel buyer, visual merchandiser, and fashion sales representative. The Fashion Merchandising Certificate requires the completion of 34-38 units of which 30-32 are in required courses. An additional 4-6 units must be chosen from the restricted electives listed below. A minimum grade of a ' $C$ ' is required for all courses.

## Program Level Student Learning Outcomes

Outcome 1: Define and discuss the role of the retail fashion buyer in today's retail environment and complete the necessary requirements for certification for employment in fashion merchandise.
Outcome 2: Evaluate consumer behavior in the fashion business.
Required Courses: (30-32 units) Units
FASH 107 F Apparel Analysis 3
FASH 145 F Field Studies in Fashion 1
FASH 150 F Introduction to the Fashion Industry 3
FASH 152 F Ready-To-Wear Evaluation 3
FASH 183 F Fashion Marketing 3
FASH 206 F Textiles
FASH 220 F Retail and Fashion Buying

- 3

FASH 221 F Advanced Retail and Fashion Buying 3
FASH 250 F Fashion Promotion
BUS 131 F Principles of International Business
FASH 299 F Fashion Industry Internship

## Restricted Electives: (4-6 units)

Units
FASH 060 F Professional Image
FASH 242 F History of Costume 3
BUS 132 F Principles of Import/Export
FASH 297 F Fashion Design Portfolio
FASH 050 F Careers in Fashion
Total Units

## Image Consultant Certificate <br> PROGRAM CODE: 2 C08429

The Image Consultant Certificate prepares students for a career as a professional wardrobe and color consultant. This certificate requires completion of 31-34 units of which 27 units are in required courses and 4-7 units must be chosen from the restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Compare and contrast the practices used to promote fashion apparel.
Outcome 2: Create an image consultant portfolio for entry-level employment with major retailers, image consulting firms, or self-employment.
Outcome 3: List a personal code of professional ethics.

| Required Courses (27 units) | Units |  |
| :--- | :--- | ---: |
| ART 118 F | Color Theory | 3 |
| FASH 050 F | Careers in Fashion | 1 |
| FASH 060 F | Professional Image | 2 |
| FASH 107 F | Apparel Analysis | 3 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 150 F | Introduction to the Fashion Industry | 3 |
| FASH 183 F | Fashion Marketing | 3 |
| FASH 186 F | Workroom Sketching | 2 |
| FASH 206 F | Textiles | 3 |
| FASH 250 F | Fashion Promotion | 3 |
| PSY 101 F | General Psychology | 3 |

Restricted Electives (4-7 units) Units
BUS 266 F Human Relations in Business 3
FASH 096 F Exploring a Home-Based Business 2
FASH 152 F Ready-To-Wear Evaluation 3
IDES 130 F Applied Color \& Design Theory 4

Total Units
31-34

## Product Development for Apparel Industries Skills

PROGRAM CODE: 2 C00076
The Product Development for the Apparel Industries Certificate requires a total of 17 units of which 14 units are in required courses. An additional 3 units must be chosen from the restricted units listed below. The curriculum leads to a certificate that prepares students to work in the fashion design or merchandising fields developing apparel designs and/or lines of apparel for specific target customers. The certificate can be completed in a single school year and the courses can be applied to the more advanced Fashion Merchandising Certificate or Associate in Arts degree.

## Program Level Student Learning Outcomes

Outcome 1: Plan and execute the assembly of a garment, using various industrial machines within a prescribed amount of time and complete the necessary requirements for certification for entry-level employment.
Outcome 2: Evaluate the construction of Junior and Women's moderate market apparel.

| Required Courses: (14 units) | Units |  |
| :--- | :--- | ---: |
| FASH 107 F | Apparel Analysis | 3 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 186 F | Workroom Sketching | 2 |
| FASH 152 F | Ready-To-Wear Evaluation | 3 |
| FASH 284AF | Fashion Design | 2 |
| FASH 220 F | Retail and Fashion Buying | 3 |
|  |  |  |
| Restricted Electives: (3 units) | Units |  |
| FASH 150 F | Introduction to the Fashion Industry | 3 |
| FASH 183 F | Fashion Marketing | 3 |
| FASH 284BF | Fashion Design - Advanced | $\mathbf{2}$ |
| Total Units |  | $\mathbf{1 7}$ |

## FOODS AND NUTRITION

## Nutrition and Dietetics Associate in Science Degree for Transfer <br> PROGRAM CODE: 2 S35804

The Nutrition and Dietetics Associate in Science Degree for Transfer, also referred to as the Nutrition and Dietetics AS-T degree (or ADT), prepares students to transfer to CSU campuses that offer bachelor's degrees in nutrition and dietetics. Ed Code Section 66746-66749 states students earning the Nutrition and Dietetics AS-T degree will be granted priority for admission as a Nutrition and Dietetics major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC, and 27-29 units in the major, with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of $C$ or better in all major coursework. There are no additional graduation requirements. The Nutrition and Dietetics AS-T introduces students to the principles and methodologies used in the study of nutrition and dietetics and allows students to acquire the foundational knowledge necessary to pursue post-secondary degrees in nutrition and dietetics. Coursework includes instruction in nutrition, foods, psychology, chemistry, and microbiology. The Nutrition and Dietetics AS-T degree requires a total of 27-29 units of required courses as indicated below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to evaluate diet and foods.
Outcome 2: Apply nutritional concepts in the planning of meals and the preparation of food.
Required Core (16 units) Units
CHEM 111AF General Chemistry I ..... 5
MICR 262 F General Microbiology ..... 5
NUTR 210 F Human Nutrition ..... 3
PSY 101 F General Psychology or ..... 3
PSY 101HF Honors General Psychology ..... 3
List A: Select two courses (8-10 units) Units
ANAT 231 F General Human Anatomy or ..... 4
ANAT 240 F Human Physiology ..... 5
CHEM 111BF General Chemistry II ..... 5
CHEM 211AF Organic Chemistry I ..... 5
MATH 120 F Introductory Probability and Statistics or ..... 4
MATH 120HF Honors Introductory Probability andStatistics or4
PSY 161 F Elementary Statistics for Behavioral Science or ..... 4PSY 161HF Honors Elementary Statistics forBehavioral Science or4
SOSC 120 F Introduction to Probability and Statistics ..... 4
List B (3 units) ..... Units
FOOD 102 F Introduction to Foods
Total Units ..... 27-29

## Nutrition and Foods Associate in Arts Degree PROGRAM CODE: 2A03865

The Nutrition and Foods Associate in Arts Degree includes coursework that is applicable to a transfer program at selected universities and colleges in the field of Dietetics, Food and Nutrition. Within the field of Nutrition and Foods, professionals work in healthcare, education and research, business and industry. Careers are also available in government, food service management, fitness, food companies and in private practice. This degree requires completion of 18 units of which 8 are in required courses. Select a minimum of 10 units from the restricted electives below so that a minimum of 18 units are completed.

## Program Level Student Learning Outcomes

Outcome 1: An understanding of how the scientific method is used to evaluate diet and foods.
Outcome 2: Apply nutritional concepts in the planning of meals and the preparation of food.
Required Courses (8 units) ..... Units
FOOD 102 F Introduction to Foods ..... 3
FOOD 130 F Cultural Aspects of Food ..... 2
NUTR 210 F Human Nutrition ..... 3
Restricted Electives (minimum of 10 units) Units
ANAT 231 F General Human Anatomy ..... 4
ANAT 240 F Human Physiology ..... 5
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
CIS 100 F Introduction to Personal Computers ..... 4
MATH 142 F Trigonometry ..... 4
MICR 262 F General Microbiology ..... 5
PHYS 130 F Elementary Physics ..... 4
Total Units ..... 18

## FOREIGN LANGUAGE

## Foreign Language Associate in Arts Degree PROGRAM CODE: $2 A 03853$

Curriculum leads to the Associate in Arts Degree. This degree requires a minimum of 18-19 units. Students may fulfill the 18-19 units requirement by completing the entire sequence (LANG 101 F, 102 F, 203 F, and 204 F) for a single foreign language. Some students may be placed into the language course sequence at a higher level than LANG 101 F. For example, according to the prerequisite policy, students who complete high school coursework with a C or better may place out of some of the language sequence. However, these students are not awarded units for the courses out of which they placed. Such students must complete the 18-19 unit degree requirement by selecting the remaining units from the list of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Refine target language oral and written production in response to discourse related to self, family, social situations, school, work and societal issues.
Outcome 2: Refine target language oral and written production in response to written materials in the target language.
Outcome 3: Interpret similarities and differences between the cultural practices and perspectives of the target language and those of other cultures.

## Required Courses

## Units

LANG 101 F Elementary I
5
LANG 102 F Elementary II
LANG 203 F Intermediate III or
SPAN 201 F* Spanish for the Spanish Speaker 5
LANG 204 F Intermediate IV 4
*Note that students may not receive credit for either SPAN 101 F or SPAN 102 F and SPAN 201 F. Native Spanish speakers should enroll in SPAN 201 F and continue with SPAN 204 F. CSU and UC offer transfer credit for SPAN 203 F or SPAN 201 F, but not both. In the case of native Spanish speakers that follow the SPAN 201 F-SPAN 204 F sequence (9 units), the remaining units to complete the degree must be chosen from the restricted electives listed.

## Select remaining units from restricted electives

 listed below:LANG 200 F Conversation
A second foreign language (any course from Level I
through Level IV)
HIST 110 F Western Civilization I
ENGL 102 F Introduction to Literature
ENGL 225 F World Literature since the Early Modern Period
PHIL 100 F Introduction to Philosophy
PHIL 105 F World Religions
SPAN 205 F Introduction to Spanish Literature
SPAN 206 F Introduction to Latin American Literature
HIST 154 F Ancient Egypt
Total Units

## GEOGRAPHY

## Geography Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2 A33078

The Associate in Arts for Transfer Degree in Geography, also called the Geography AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in geography. Ed Code Section 66746-66749 states students earning the Geography AA-T degree will be granted priority for admission as a Geography major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 19 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The Associate in Arts Degree for Transfer in Geography is designed to provide students with an introduction to both physical and human areas of geographic studies. It provides students the background knowledge needed by undergraduate geography majors for university transfer and coursework. This degree is excellent preparation for careers in international fields, law, science, environmental work and cultural diversity programs. The geographic perspective provides lifelong tools for interpreting the world's complex systems and world events. The program requires a total of 19-20 units of which 7 units are in core required courses. An additional 12-13 units must be chosen from the restricted units listed.

## Program Level Student Learning Outcomes

Outcome 1: Identify, evaluate and critique human-environmental processes of globalization from a geo-spatial perspective.
Outcome 2: Define, describe and evaluate the uneven and unequal geographical outcomes of society and nature interrelationships.
Outcome 3: Describe, interpret and evaluate movement, migration and cultural traits related to the social construction of human/cultural landscapes.
Outcome 4: Apply the fundamental concepts of the scientific method and explain the basic components and interrelationships of earth's physical systems of the atmosphere, biosphere, hydrosphere and lithosphere.

## Core Courses: 7 units <br> Units

GEOG 102 F Physical Geography 3
GEOG 102LF Physical Geography Lab 1
GEOG 160 F Cultural Geography 3

## List A: 6 units <br> Units

GEOG 100 F Global Geography 3

GEOG 100HF Honors Global Geography 3
GEOG 281AF Introduction to Geographic Information Systems

List B: Select 6-7 units from the following:
Any courses not selected above (from List A), OR Units
GEOG 120 F Global Environmental Problems and
ANTH 101HF Honors Physical Anthropology
ANTH 102 F Cultural Anthropology
ANTH 102HF Honors Cultural Anthropology
ANTH 103 F Introduction to Archaeology
ECON 101 F Principles of Economics - Micro
ECON 101HF Honors Principles of Economics - Micro
ECON 102 F Principles of Economics-Macro
ECON 102HF Honors Principles of Economics-Macro
POSC 100 F American Government
POSC 100HF Honors American Government
POSC 230 F Introduction to International Relations
PSY 161 F Elementary Statistics for Behavioral Science
PSY 161HF Honors Elementary Statistics for Behavioral Science 4
SOSC 120 F Introduction to Probability and Statistics
ANTH 101 F Physical Anthropology
Total Units

## Geography Associate in Arts Degree

PROGRAM CODE: 2A03884
The Associate in Arts Degree in Geography is designed to provide students with an introduction to both physical and human areas of geographic studies. It provides students the background knowledge needed by undergraduate geography majors for university transfer and coursework. This degree is excellent preparation for careers in international fields, law, science, environmental work and cultural diversity programs. The geographic perspective provides lifelong tools for interpreting the world's complex systems and world events. The program requires a total of 19 units of which 10 units are in required courses. An additional 9 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify, evaluate and critique human-environmental processes of globalization from a geo-spatial perspective.
Outcome 2: Define, describe and evaluate the uneven and unequal geographical outcomes of society and nature interrelationships.
Outcome 3: Describe, interpret and evaluate movement, migration and cultural traits related to the social construction of human/cultural landscapes.
Outcome 4: Apply the fundamental concepts of the scientific method and explain the basic components and interrelationships of earth's physical systems of the atmosphere, biosphere, hydrosphere and lithosphere.

Any courses listed below taught as Honors courses will also apply to this AA degree.

Units

## Required Courses (10 units)

GEOG 102 F Physical Geography
GEOG 102LF Physical Geography Lab
1
GEOG 160 F Cultural Geography
GEOG 100 F Global Geography

| Restricted Electives (9 units) | Units |  |
| :--- | :--- | ---: |
| ANTH 101 F | Physical Anthropology | 3 |
| ANTH 102 F | Cultural Anthropology | 3 |
| ENVS 105 F | Environmental Biology | 3 |
| ESC 100 F | Physical Geology | 3 |
| GEOG 120 F | Global Environmental Problems | 3 |
| GEOG 170 F | Urban Geography: Introduction to the City | 3 |
| GEOG 281AF | Introduction to Geographic Information |  |
|  | Systems | 3 |
| HIST 113 F | World Civilizations II | 3 |
| HIST 161 F | Asian Civilizations II | 3 |
| PHIL 105 F | World Religions | 3 |
| POSC 216 F | Government and Politics of the Middle East | 3 |
| POSC 230 F | Introduction to International Relations | 3 |
| SOC 102 F | Social Problems | 3 |
| Total Units |  | $\mathbf{1 9}$ |

## GEOLOGY

## Geology Associate in Science Degree for Transfer PROGRAM CODE: 2531528

The Associate in Science in Geology for Transfer (AS-T) Degree, also called the Geology AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in geology. Students earning the Geology AS-T Degree will be granted priority for admission as a Geology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 26 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Students with a degree in geology may pursue careers in a variety of industries such as education, environmental technology, mineral (fossil fuels, metals) discovery and extraction, archeology, research, and more. The Geology AS-T Degree requires a total of 26 units of required courses as indicated below. Recommended courses are not required for the degree but are highly recommended if you plan to pursue the Bachelor's in Science degree in geology.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in geology.
Outcome 2: Apply geology concepts to better understand current issues of environmental and/or geologic concern.

## Required Courses (26 units)

Units

| ESC 100 F | Physical Geology and |
| :--- | :--- |
| ESC 100LF | Physical Geology Lab |
| ESC 103 F | Historical Geology |
| CHEM 111AF | General Chemistry I |
| CHEM 111BF | General Chemistry II |
| MATH 150AF | Calculus I |
| MATH 150BF | Calculus II |

DEGREES \& CERTIFICATES

## Recommended* Courses (0-13 units) <br> *Contact your specific transfer institution for more information.

BIOL 101 F General Biology or Units

BIOL 101HF Honors General Biology 5

PHYS 221 F General Physics I
PHYS 222 F General Physics II
Total Units

## Geology Associate in Science Degree <br> PROGRAM CODE: 2503874

This Geology Associate in Science Degree is designed to introduce the student to the field of geology. Students who complete the degree will be prepared for future study in geology or related fields. This degree requires a total of 18-20 units of which 8 units are in required courses. An additional 10-12 units must be chosen from the list of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in geology.
Outcome 2: Apply geology concepts to better understand current issues of environmental and/or geologic concern.
$\begin{array}{lrr}\text { Required Courses (8 units) } & \text { Units } \\ \text { ESC } 100 \mathrm{~F} & \text { Physical Geology } & 3\end{array}$
ESC 100LF Physical Geology Lab 1
ESC 103 F Historical Geology
Restricted Electives (10-12 units)

## Units

BIOL 170 F Organismal Biology
CHEM 111AF General Chemistry I
CHEM 111BF General Chemistry II
ENGR 101AF Surveying I
5

ESC 104 F Geology of National Parks and Monuments
ESC 105 F Introduction Weather and Climate
ESC 106 F Geology of the Orange County Area
ESC 120 F Geology of California
ESC 130 F Introduction to Oceanography
ESC 130HF Honors Introduction to Oceanography
ESC 190 F Environmental Geology
MATH 150AF Calculus I
MATH 150BF Calculus II
PHYS 205 F Physics for the Life Sciences I
PHYS 206 F Physics for the Life Sciences II
PHYS 221 F General Physics I
PHYS 222 F General Physics II
PHYS 223 F General Physics III

## Total Units

## HISTORY

## History Associate in Arts Degree for Transfer PROGRAM CODE: 2A31522

The Associate in Arts Degree in History for Transfer, also called the History AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in History. Students earning the History AA-T degree will be granted priority for admission as a History major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title $V$ requires that students earn a grade of " $C$ " or better in all major coursework. There are no additional graduation requirements. History is the study of change over time. Historians analyze cause and effect, construct narratives from primary sources, and try to explain the actions of people in the past. Students in history courses learn more than dates, names, and events. They also learn how to interpret, debate, and draw conclusions. History majors acquire a broad perspective on the human experience and appreciate how the past shaped the present. A History degree is an excellent general preparation for careers in education, law, historical research, historical preservation, government, journalism, media, and communication. The History AA-T Degree requires a total of 18 units of required courses and restricted electives from the categories below.

## Program Level Student Learning Outcomes

Outcome 1: Identify important events, themes, and concepts of United States, Western Civilization, and world history.
Outcome 2: Investigate historical problems and issues by consulting primary and secondary sources.
Outcome 3: Identify an author's thesis or main idea in a historical work.

| Required Core: 6 units | Units |  |
| :--- | :--- | ---: |
| HIST 170 F | History of the United States I | 3 |
| HIST 171 F | History of the US II | 3 |

List A: 6 units
Units
HIST 112 F World Civilizations I or 3
HIST 110 F Western Civilization I 3
HIST 113 F World Civilizations II or 3
HIST 111 F Western Civilization II 3
List B, Group 1: select one course for 3 units
*HIST 112 F and HIST 113 F may be used in List B if not used in List A OR
Units
HIST 112 F World Civilizations I 3
HIST 113 F World Civilizations II 3
HIST 154 F Ancient Egypt 3
HIST 160AF Asia: Basic Heritage 3
HIST 160BF Modern China and Japan
HIST 165 F Introduction to the Middle East
HIST 270 F Women in United States History
ETHS 130 F African-American History I
ETHS 131 F African-American History II
ETHS 141 F Chicano/Chicana History
ETHS 160 F History of Native Americans
ETHS 171 F Asian Pacific American History
List B, Group 2: select one course for 3 units
Any list A courses not used above OR
Units
HIST 151 F Survey of British History I
3
HIST 152 F Survey of British History II
HIST 162AF History of the Americas I
HIST 162BF History of the Americas II
HIST 275 F History of California
Total Units

## History Associate in Arts Degree <br> PROGRAM CODE: 2A03883

The History Associate in Arts Degree is designed to prepare students to acquire basic historical knowledge and academic skills both to transfer to a four year institution and to understand historical causes of current events. History is the study of change over time. Historians analyze cause and effect, construct narratives from primary and secondary sources, and try to explain the actions of people in the past. Students in history courses learn more than dates, names, and events. They also learn how to interpret, debate, and draw conclusions. History majors acquire a broad perspective on the human experience and appreciate how the past shaped the present. A History degree is an excellent general preparation for careers in education, law, historical research, historical preservation, government, journalism, media, and communication. The degree requires a total of 18 units: 6 units of required courses and 12 units of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Identify important events, themes, and concepts of United States, Western Civilization, and World History.
Outcome 2: Investigate historical problems and issues by consulting primary and secondary sources.
Outcome 3: Identify an author's thesis or main idea in a historical work.

Required Courses: 6 units

Honors versions of any required course and/or
restricted elective course are considered
equivalent courses.

## Units

HIST 170 F History of the United States I 3

HIST 171 F History of the United States II

3

Restricted Electives: List A

6 units Units

HIST 112 F World Civilizations I or 3

HIST 110 F Western Civilization I 3

HIST 113 F World Civilizations II or 3

HIST 111 F Western Civilization II 3

Restricted Electives: List B, Group 1-3 units
HIST 112 F and HIST 113 F may be used in List B
if not used in List A
HIST 112 F World Civilizations I 3
HIST 113 F World Civilizations II 3
HIST 154 F Ancient Egypt 3
HIST 160 F Asian Civilizations I 3
HIST 161 F Asian Civilizations II 3
HIST 165 F Introduction to the Middle East 3
HIST 270 F Women in United States History 3
ETHS 130 F African-American History I 3
ETHS 131 F African-American History II 3
ETHS 141 F Chicana/Chicano History 3
ETHS 160 F History of the Native Americans 3
ETHS 171 F Asian Pacific American History 3
Restricted Electives List B, Group 2-3 units
Any List A courses not used above OR Units
HIST 151 F Survey of British History I 3
HIST 152 F Survey of British History II 3
HIST 190 F History of the Americas I 3
HIST 191 F History of the Americas II 3
HIST 275 F History of California $\quad 3$
Total Units
18

## HORTICULTURE

## Nursery Management Associate in Arts Degree <br> PROGRAM CODE: $2 A 03816$

Curriculum leads to an Nursery Management Associate in Arts Degree and entry-level positions in retail and wholesale nurseries, parks departments, and landscape contracting. A total of 18 units is required.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.
Outcome 2: Identify plants, abiotic components, and horti-culturally-significant insects.
Outcome 3: Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

Complete 18 units from the following list:
HORT 001 F Principles of Horticulture I

## Units

HORT 002 F Principles of Horticulture II
HORT 152 F Applied Botany
HORT 153 F Landscape Irrigation
HORT 155 F Soils
HORT 156 F Plant Nutrition
HORT 160 F Plant ID / Ornamental Trees
HORT 161 F Plant ID/Ornamental Shrubs
HORT 162 F Landscaping for Dry Climates
HORT 164 F Plant Identification - Annual, Perennials and Houseplants
HORT 173 F Greenhouse \& Nursery Production
HORT 174 F Plant Propagation
HORT 200 F Landscape Design
HORT 215 F Diseases/Pests Ornament Plants

## Total Units

## Landscape Management <br> Associate in Science Degree <br> PROGRAM CODE: 2503817

Curriculum leads to the Associate in Science Degree and/or employment in parks, golf courses, landscape contracting, and landscape gardening.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.
Outcome 2: Identify plants, abiotic components, and horti-culturally-significant insects.
Outcome 3: Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

Complete 18 or more units from the following list: Units
HORT 001 F Principles of Horticulture I
4
HORT 002 F Principles of Horticulture II 4
HORT 005 F Basic Landscape Plants I 3
HORT 006 F Basic Landscape Plants II 3
HORT 152 F Applied Botany 4
BIOL 268 F General Botany 5
HORT 153 F Landscape Irrigation 3
HORT 155 F Soils 3
HORT 156 F Plant Nutrition 2
HORT 160 F Plant ID / Ornamental Trees 3
HORT 161 F Plant ID/Ornamental Shrubs 3
HORT 162 F Landscaping for Dry Climates 3
HORT 165 F Landscape Management 4
HIST 112 F World Civilizations I
HORT 177 F Turfgrass Management
HORT 200 F Landscape Design
HORT 215 F Diseases/Pests Ornament Plants 4
Total Units

## Ornamental Horticulture <br> Associate in Science Degree

PROGRAM CODE: 2510606
Curriculum leads to the Ornamental Horticulture Associate in
Science Degree. This degree requires completion of 21 units of which 9 units are in required courses. An additional 12 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.
Outcome 2: Identify plants, abiotic components, and horti-culturally-significant insects.
Outcome 3: Demonstrate an understanding of the biology of plants, abiotic components, and horticulturally-significant insects.

| Required Courses (9 units) | Units |  |
| :--- | :--- | ---: |
| HORT 153 F | Landscape Irrigation | 3 |
| HORT 157 F | Irrigation Principles | 3 |
| HORT 155 F | Soils | 3 |
| HORT 160 F | Plant ID / Ornamental Trees | 3 |
| HORT 161 F | Plant ID/Ornamental Shrubs | 3 |
| HORT 162 F | Landscaping for Dry Climates | 3 |
| HORT 164 F | Plant Identification - Annual, Perennials |  |
|  | and Houseplants | 3 |

Restricted Electives (12 units) Units
HORT 156 F Plant Nutrition 2
HORT 165 F Landscape Management 4
HORT 173 F Greenhouse \& Nursery Production 3
HORT 174 F Plant Propagation 3
HORT 177 F Turfgrass Management 3
HORT 200 F Landscape Design 3
HORT 201 F Advanced Landscape Design 3
HORT 219 F CAD Applications in Horticulture 3
Total Units 21

## Greenhouse and Nursery Production Certificate

PROGRAM CODE: 2 C15845
The Greenhouse and Nursery Production Certificate Program requires 29-31 units of which 12 units are in required courses. An additional 8-9 units must be chosen from restricted electives group A and at least 9 units from restricted electives group A or B.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.

## Required Courses (12 units)

Units
HORT 160 F Plant ID / Ornamental Trees
3
HORT 161 F Plant ID/Ornamental Shrubs
HORT 164 F Plant Identification - Annual, Perennials and Houseplants
HORT 173 F Greenhouse and Nursery Production

| Restricted Electives — Group A (8-9 units) | Units |  |
| :--- | :--- | ---: |
| HORT 155 F | Soils | 3 |
| HORT 156 F | Plant Nutrition | 2 |
| HORT 174 F | Plant Propagation | 3 |
| HORT 205 F | Applied Entomology | 3 |
|  |  | Units |
| Restricted Electives - Group B (9-10 units) | 4 |  |
| HORT 152 F | Applied Botany | 3 |
| HORT 162 F | Landscaping for Dry Climates | 3 |
| HORT 177 F | Turf Grass Management | 3 |
| HORT 200 F | Landscape Design | 3 |
| HORT 207 F | Plant Pathology | $\mathbf{3}$ |
| Total Units |  | $\mathbf{2 9 - 3 1}$ |

## Landscape Design/Management Certificate PROGRAM CODE: 2C21252

The Landscape Design/Management Certificate Program requires completion of 33-35 units of which 18-19 units are in required courses. An additional 7 units must be chosen from restricted electives group $A$, and at least 8-9 units from restricted electives group B.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.

Required Courses (18-19 units) Units
HORT 005 F Basic Landscape Plants I
HORT 006 F Basic Landscape Plants II or
3

HORT 160 F Plant ID / Ornamental Trees
HORT 161 F Plant ID/Ornamental Shrubs and
HORT 153 F Landscape Irrigation
HORT 165 F Landscape Management or
HORT 200 F Landscape Design
HORT 177 F Turf Grass Management
Restricted Electives - Group A (7 units)
HIST 112 F World Civilizations I
HORT 156 F Plant Nutrition 3
HORT 169LF Landscape Construction Lab
HORT 170 F Landscaping Contracting
HORT 201 F Adv Landscape Design
HORT 215 F Diseases/Pests Ornament Plants
HORT 155 F Soils
Restricted Electives - Group B (8-9 units) Units
HORT 162 F Landscaping for Dry Climates
HORT 164 F Plant Identification - Annual, Perennials and Houseplants
HORT 185 F Arboriculture
HORT 205 F Applied Entomology
HORT 207 F Plant Pathology
Total Units

## Landscape Irrigation Certificate PROGRAM CODE: 2 C08383

The Landscape Irrigation Certificate Program requires a total of 30-31 units of which 18 units are in required courses. An additional 12-13 units must be chosen from the restricted units listed below, 6 units from Category A, and 6-7 units from Category B.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.

| Required Courses (18 units) | Units |  |
| :--- | :--- | ---: |
| HORT 153 F | Landscape Irrigation | 3 |
| HORT 154 F | Irrigation Design | 3 |
| HORT 155 F | Soils | 3 |
| HORT 157 F | Irrigation Principles | 3 |
| HORT 162 F | Landscaping for Dry Climates | 3 |
| HORT 218 F | Landscape Hydraulics | 3 |

Restricted Electives - Group A (6 units) Units
ARCH 113 F Architectural Drawing I 3
$\begin{array}{ll}\text { CSTR } 006 \text { F } & \begin{array}{l}\text { Residential Plumbing and Mechanical } \\ \text { Systems }\end{array}\end{array}$
DART 100 F Introduction to Digital Art 3
HORT 177 F Turfgrass Management 3
HORT 200 F Landscape Design 3
HORT 219 F CAD Applications in Horticulture 3
Restricted Electives - Group B (6-7 units) Units
HORT 165 F Landscape Management 4
HORT 169LF Landscape Construction Lab 1
HORT 170 F Landscaping Contracting 3
HORT 201 F Advanced Landscape Design 3
Total Units 30-31

## Pest Management Certificate

PROGRAM CODE: 2 C03818
The Pest Management Certificate Program prepares students for licensing and employment as pest control applicators and advisors. The Pest Management Certificate Program requires a total of 30 units of which 10 are in required courses. An additional 8 units must be chosen from restricted units from restricted electives group A, and at least 12 units from restricted electives group A or B.

## Program Level Student Learning Outcomes

Outcome 1: Apply horticultural concepts to real-world problems and solutions.

## Required Courses (10 units)

Units
HORT 045 F Pest Control Cert \& Safety 2
HORT 188 F Integrated Pest Management 2
HORT 205 F Applied Entomology 3
HORT 207 F Plant Pathology 3
Restricted electives - Group A Choose 8-12 units
Units
HORT 001 F Principles of Horticulture I
4
HORT 002 F Principles of Horticulture II 4
HORT 005 F Basic Landscape Plants I 3
HORT 006 F Basic Landscape Plants II 3
HORT 046 F Pest Safety for Landscape Work 2

HORT 152 F Applied Botany 4
HORT 156 F Plant Nutrition 2
HORT 160 F Plant ID / Ornamental Trees 3
HORT 161 F Plant ID/Ornamental Shrubs
HORT 215 F Diseases/Pests Ornamental Plants
Restricted electives - Group B Choose 8-12 Units
HORT 155 F Soils
3
HORT 165 F Landscape Management 4
HORT 177 F Turfgrass Management 3
HORT 185 F Arboriculture 2
HORT 200 F Landscape Design 3
Total Units

## INDUSTRIAL ARTS

## Industrial Arts Associate in Arts Degree <br> PROGRAM CODE: $2 A 03833$

Curriculum leads to the Industrial Arts Associate in Arts Degree. This degree requires 18 units chosen from the courses listed below.

## Program Level Student Learning Outcomes

Outcome 1: Describe occupations typically found in each industry/ technical area such as: Manufacturing; Automotive; Photography; Construction; Welding; Printing; and Drafting.
Outcome 2: Apply theories and principles to solve technical and management problems.
Outcome 3: Design, test and analyze a system or process to meet desired needs.
Outcome 4: Apply good written and oral communication and presentation skills.
Outcome 5: Collect, analyze and interpret data to analyze and solve problems.
Outcome 6: Select and use computer applications software.
Required Courses (18 units) Units
AUTO 131 F Automotive Fundamentals
4
DRAF 171 F Fundamentals of Drafting 2
MACH 116 F Machine Tools 2
PHOT 101 F Introduction to Photography 3
TECH 127 F Industrial Safety 1
WELD 121AF Introduction to Welding 2
WOOD 110 F Fundamentals of Woodwork 4
Total Units

## INDUSTRIAL DRAFTING

Industrial Drafting Associate in Science Degree<br>PROGRAM CODE: 2S03840A

The Industrial Drafting Associate in Science Degree provides the skills and knowledge for those who wish to pursue a career as a Mechanical Engineer or CADD operator/designer in fields related to engineering, tool design, and 3D Parametric Modeling in a manufacturing environment. This degree requires a total of 25 units listed below with a grade of "C" or better in each course.

## Program Level Student Learning Outcomes

Outcome 1: Communicate technical ideas through modeling and creation of technical drawings that fully describe a design idea.
Outcome 2: Describe information contained on blueprints including symbols and title block features.

| Complete 25 | units from the following list | Units |
| :--- | :--- | ---: |
| DRAF 070 F | Blueprint Reading for the Metal Trades | 2 |
| DRAF 140 F | AutoCAD For Industry | 2 |
| DRAF 141 F | Advanced CAD for Industry | 2 |
| DRAF 143 F | 3D Applications Using AutoCAD | 2 |
| DRAF 171 | Fundamentals of Drafting | 2 |
| DRAF 173 F | Geometric Dimensioning and Tolerancing | 2 |
| DRAF 944 F | Solidworks | 3 |
| MACH 050 F | CNC Programming Using Mastercam or | 3 |
| MACH 060 F | CNC Programming Using SURFCAM | 3 |
| MACH 116 F | Machine Tools | 2 |
| TECH 108 F | Manufacturing Processes | 3 |
| WELD 121AF | Introduction to Welding | $\mathbf{2}$ |
| Total Units |  | $\mathbf{2 5}$ |

## Industrial Drafting Level I Certificate <br> PROGRAM CODE: 2 C10622

The Industrial Drafting Level I Certificate Program prepares students to work as computer-aided drafters/designers in industry and to upgrade the skills of persons presently employed as drafters/designers. This Certificate requires a total of 18 units with a grade of " $C$ " or better in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate productive use of CAD software menus and commands for creating graphic solutions to 2D mechanical and industrial drafting problems, conforming to the latest industry standards.
Outcome 2: Demonstrate proper use of a printer/plotter to produce hard copy output of drawing to scale.
Required (18 units)Units
DRAF 070 F Blueprint Reading/Metal Trades ..... 2
DRAF 140 F AutoCAD For Industry ..... 2
DRAF 173 F Geometric Dimensions \& Tolerancing ..... 2
DRAF 171 F Fundamentals of Drafting ..... 2
MACH 116 F Machine Tools ..... 2
MACH 050 F CNC Programming Using Mastercam or ..... 3
MACH 060 F CNC Programming Using SURFCAM ..... 3
WELD 121AF Introduction to Welding ..... 2
ARCH 124 F Architectural CAD I ..... 3
Total Units18

## Industrial Drafting Level II Certificate <br> PROGRAM CODE: 2C10623

The Industrial Drafting Level II Certificate Program is designed for students who have completed Level I and wish to learn advanced technical drafting skills required by industry. This certificate requires completion of the Level I Certificate (18 units) plus a minimum of 19-20 units of required courses for a total of 37-38 units. A grade of "C" or better is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Define technical terms associated with 3D CAD modeling.
Outcome 2: Create template drawings incorporating the use of Paperspace with default settings and scales appropriate for industry standard drawings.
Completion of Level I Certificate (18 units), plus:
Required Courses (19-20 units)Units
DRAF 141 F Advanced CAD for Industry ..... 2
DRAF 143 F 3D Applications Using AutoCAD ..... 2
DRAF 944 F Solidworks ..... 3
MATH 015 F Pre-Algebra or ..... 4
TECH 081 F Technical Mathematics I ..... 3
MACH 052 F Adv CNC Program w/ Mastercam or ..... 3
MACH 062 F Advanced CNC ProgrammingUsing SURFCAM3
METL 192 F Fundamentals of Metallurgy ..... 3
TECH 108 F Manufacturing Processes ..... 3
Total Units ..... 37-38

## INDUSTRIAL TECHNOLOGY

Industrial Technology Associate in Arts Degree<br>PROGRAM CODE: 2A13207

Curriculum leads to the Industrial Technology Associate in Arts Degree. This degree requires 18-21 units from the courses listed below.
Required Courses (18-21 units) ..... Units
Students need to complete at least two classes from List A (9-14 units) and at least one class from List $B$ ( $4-12$ units) so that a total of at least 18 units are completed.

List A (9-14 units)
MATH 150AF Calculus I ..... 4
CHEM 107 F Elementary Chemistry or ..... 5
CHEM 111BF General Chemistry II ..... 5
List B (4-12 units)
Students may choose either PHYS 205 F orPHYS 221 F if completing a physics course.If students wish to complete a sequence ofphysics courses, PHYS 205 F is followed byPHYS 206 F or PHYS 221 F is followed by
PHYS 222 F and PHYS 223 F.
PHYS 205 F Physics for the Life Sciences I ..... 4
PHYS 206 F Physics for the Llfe Sciences II or ..... 4
PHYS 221 F General Physics I ..... 4
PHYS 222 F General Physics II ..... 4
PHYS 223 F General Physics III ..... 4
Total Units ..... 18-21
INTERDISCIPLINARY STUDIES
Interdisciplinary Studies: Emphasis in Arts and Human Expression Associate in Arts Degree

Interdisciplinary Studies with an Emphasis in Arts and Human Expression: 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. This emphasis includes lower division coursework that prepares students for majors in fine arts, foreign languages, literature, and philosophy.

## Program Level Student Learning Outcomes

Outcome 1: Create written and spoken works that demonstrate effective communication and critical thinking skills.
Outcome 2: Demonstrate a critical understanding, appreciation and expression of artistic and cultural sensibilities in historical and contemporary contexts.

Choose 18 units of coursework, including two or more disciplines, from the following list:
ART 110 F Introduction to Art
ART 112 F Art History: Ancient to Medieval
ART 113 F Art History: Renaissance to Modern
ART 114 F Art History: Impressionism to Present
ART 115 F Museum Survey
ART 116 F Art History: The Art of Mexico
ART 117 F Art History: American Art
ART 118 F Color Theory
ART 120 F Basic Design
ART 121 F Three-Dimensional Design
ART 127 F Applied Painting: Floral
ART 153 F Ceramics: Beginning Handbuilding
ART 154 F Ceramics: Beginning Throwing
ART 160 F Fundamentals of Sculpture
ART 174 F
ART 179 F
ART 182 F
ART 184 F
ART 186 F
ART 187 F
ART 188 F
ART 189 F
ART 196HF
ART 210 F
ART 212 F Art History: The Art of Asia
ART 213 F Art History: Pre-Columbian Art
CDES 242 F Introduction to Liberal Studies
CRTV 120 F Media Aesthetics
CRTV 121 F American Cinema to the 1960's
CRTV 126AF World Cinema to 1945
CRTV 126BF World Cinema 1946 to Present
CRTV 131 F Contemporary Cinema
DANC 100 F Dance Appreciation
DANC 101 F Introduction to Dance World Cultures
DANC 103 F Dance Technique I
DANC 111 F Jazz I
DANC 120 F Dance History
DANC 210 F Multicultural Dance in the U.S. Today
ENGL 102 F Introduction to Literature or
ENGL 102HF Honors Introduction to Literature
ENGL 105 F Introduction to Creative Writing
ENGL 203 F Introduction to Dramatic Literature
ENGL 204 F Introduction to Poetry
ENGL 207 F The Short Story
ENGL 208 F Introduction to Film Studies
ENGL 210 F Introduction to Language Structure and Use
ENGL 211 F British Literature to 1800 or
ENGL 211HF Honors British Literature to 1800
ENGL 212 F British Literature since 1800 or
ENGL 212HF Honors British Literature since 1800
ENGL 214 F Contemporary Literature
ENGL 221 F American Literature to the Civil War or
ENGL 221HF Honors American Literature to the Civil War
ENGL 222 F American Literature from the Civil War to the Present or
ENGL 222HF Honors American Literature from the Civil War to the Present
Jewelry: Fabrication

## Drawing for Non-Art Majors

Basic Drawing
Expressive Drawing
Beginning Life Drawing
Watercolor for Non-Art Majors
Watercolor Painting
Beginning Painting
Honors Creative Arts-Art
Life Painting

HIST 110 F
HIST 110HF
HIST 111 F
HIST 111HF
HIST 112 F
HIST 112HF
HIST 113 F
HIST 113HF
HIST 127 F
HIST 154 F
HIST 170 F
HIST 170HF
HIST 171 F
HIST 171HF
HIST 270 F
IDES 180 F
MUS 101 F
MUS 102 F
MUS 103 F
MUS 106 F
MUS 107 F
MUS 110 F
MUS 113 F
MUS 116 F
MUS 118 F
MUS 119 F
MUS 120 F
MUS 180 F
MUS 196HF
MUS 271 F
MUS 273 F
MUS 274 F
MUS 281 F
MUS 282 F
PHIL 100 F
PHIL 100HF
PHIL 101 F
PHIL 105 F
PHIL 105HF
PHIL 135 F
PHIL 160 F
PHIL 195 F
PHIL 200 F
PHIL 201 F
PHIL 202 F
PHIL 210 F
PHIL 250 F
PHIL 270 F
PHOT 100 F
PHOT 101 F
PHOT 111 F
SPCH 100 F
SPCH 105 F
SPCH 124 F
SPCH 135 F

| Western Civilization I or |
| :--- |
| Honors Western Civilization I |
| Western Civilization II or |
| Honors Western Civilization II |
| World Civilizations or |
| Honors World Civilizations I |
| World Civilizations II or |
| Honors World Civilizations II |
| Survey of American History |
| Ancient Egypt |
| History of the United States I or |
| Honors History of the United States I |
| History of the United States II or |
| Honors History of the United States II |
| Women in United States History |
| History of Interior Architecture I |
| Music Fundamentals |
| Music Reading |
| Beginning Musicianship |
| Introduction to Music Theory |
| Harmony I |
| Electronic Music I: Beginning |
| Music Production |
| Jazz History - An Appreciation |
| Music Appreciation |
| Introduction to Opera |
| History of Rock Music |
| Survey of Music History |
| Collegiate Chorale |
| Honors Creative Arts-Music |
| Fullerton College Symphony |
| Concert Band |
| Fullerton College Symphonic Winds |
| Concert Choir |
| Fullerton College Master Chorale |
| Introduction to Philosophy or |
| Honors Introduction to Philosophy |
| Introduction to Religious Studies |
| World Religions or |
| Honors World Religions |
| Social and Political Philosophy |
| Introduction to Ethics |
| Women's Issues in Philosophy |
| Introduction to Christianity |
| History of Philosophy: Ancient and |
| Medieval |
| History of Philosophy: Modern and |
| Contemporary |
| Introduction to Judaism |
| The Religion of Islam |
| Introduction to Asian Religions |
| Basic Photography |
| Introduction to Photography |
| Introduction to Photography from Analog |
| to Digital |
| Public Speaking |
| Interpersonal Communication |
| Small Group Communication |
| Essentials of Argumentation |

Western Civilization I or
Honors Western Civilization I


World Civilizations or
Honors World Civilizations I
World Civilizations II or
保
有 American History

History of the United States I or
Honors History of the United States I
y the United States or
Women in United States History
History of Interior Architecture I
Music Fundamentals
Music Reading
Begin
Harmony I
Electronic Music I: Beginning
Music Production
3
3

## Honors World Religions

Introduction to Ethics

Introduction to Judaism
3
to Digital

THEA 100 F
THEA 104 F Introduction to Theatre Appreciation 3

THEA 105 F Musical Theare Histor 3
THEA 105 F Musical Theatre History 3
THEA 109 F Modern Dramatic Literature 3
THEA 127 F Oral Interpretation 3
THEA 160 F Introduction to Sound Technology 3
THEA 161 F Sound Reinforcement Techniques 2
THEA 162 F Sound Design for the Theatre 2
THEA 196HF Honors Creative Arts-Theater 3
WOOD 110 F Fundamentals of Woodwork 4
Total Units

## Interdisciplinary Studies: Emphasis in Science and Mathematics Associate in Arts Degree

PROGRAM CODE: 2A18163
Interdisciplinary Studies with an Emphasis in Science and Mathematics: These courses 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 human experience. This emphasis includes lower-division coursework that prepares students for majors in science, math, and health related fields.

## Program Level Student Learning Outcomes

Outcome 1: Analyze and solve theoretical and applied mathematical problems using the logic and symbol system of mathematics.
Outcome 2: Examine and evaluate issues related to the physical and biological sciences from an evidence-based perspective and use in applied contexts.

## Choose at least one course from each category <br> ( $A$ and $B$ ) and then complete additional courses in categories $A$ and/or $B$ to total 18 units:

A) Sciences Units

ANAT 231 F General Human Anatomy 4
ANAT 240 F Human Physiology 5
ANTH 101 F Physical Anthropology or 3
ANTH 101HF Honors Physical Anthropology 3
ANTH 101LF Physical Anthropology Lab 1
BIOL 100 F Principles of Biology 4
BIOL 101 F General Biology or 5
BIOL 101HF Honors General Biology 5
BIOL 102 F Human Biology 3
BIOL 102LF Human Biology Laboratory
BIOL 104 F Biology of Insects and Spiders
BIOL 108 F Plants and People
BIOL 109 F Genetics and Biotechnology in Society
BIOL 141 F Marine Mammal Biology and Conservation
BIOL 170 F Organismal Biology
BIOL 190 -
BIOL 222 F Marine Biology
BIOL 266 F General Zoology
BIOL 268 F General Botany
5
BIOL 272 F Cell and Molecular Biology
BIOL 274 F General Ecology

CHEM 100 F Chemistry for Daily Life
CHEM 101 F Chemistry for Allied Health Science
CHEM 103 F Chemistry in a Changing World
CHEM 107 F Preparation for General Chemistry
CHEM 111AF General Chemistry I
CHEM 111BF General Chemistry II
ESC 100 F Physical Geology
ESC 100LF Physical Geology Lab
ESC 101 F Earth Science Survey
ESC 101LF Earth Science Survey Lab
ESC 103 F
ESC 104 F
ESC 105 F
ESC 106 F
ESC 116 F
ESC 116HF
ESC 116LF
ESC 120 F
ESC 130 F Introduction to Oceanography or
ESC 130HF Honors Introduction to Oceanography
ESC 130LF Introduction to Oceanography
Field Experience
ESC 190 F Environmental Geology
ENVS 105 F Environmental Biology
ENVS 105LF Environmental Biology Lab
$-3$
ENVS 126 F Natural History of California 3
GEOG 102 F Physical Geography or 3
GEOG 102HF Honors Physical Geography
GEOG 102LF Physical Geography Lab
HED 140 F Health Science
HORT 152 F Applied Botany
HORT 205 F Applied Entomology
HORT 207 F Plant Pathology
MICR 220 F Medical Microbiology
MICR 262 F General Microbiology
NUTR 210 F Human Nutrition
PHYS 120 F Relativity for Poets
PHYS 130 F Elementary Physics
PHYS 205 F Physics for the Life Sciences I
PHYS 206 F Physics for the Life Sciences II
PHYS 210 F Physics with Calculus for the Life Sciences I
PHYS 211 F Physics with Calculus for the Life Sciences II
PHYS 221 F General Physics I or
PHYS 221HF Honors General Physics I
PHYS 222 F General Physics II
PHYS 223 F General Physics III

Choose at least one course from each category-
(A and B) and then complete-additional courses-
in categories $A$ and/or $B$ to total 18 units:
B) Mathematics
$\begin{array}{llr}\text { B) Mathematics } & \text { Units } \\ \text { BUS } 151 \mathrm{~F} & \text { Business Mathematics } & 3\end{array}$
MATH 100 F Liberal Arts Mathematics 4
MATH 120 F Introductory Probability and Statistics or 4
$\begin{array}{ll}\text { MATH 120HF } & \begin{array}{l}\text { Honors Introductory Probability and } \\ \\ \text { Statistics }\end{array}\end{array}$
MATH 129 F College Algebra for Business Calculus 4
MATH 130 F Calculus for Business 4
MATH 141 F College Algebra 4
MATH 142 F Trigonometry 4
MATH 150AF Calculus I or 4
MATH 150HF Honors Calculus I 4
MATH 150BF Calculus II 4
MATH 170 F Discrete Structures 4
MATH 171 F Discrete Mathematics 4
MATH 172 F Graph Theory and Linear Algebra 4
MATH 250AF Multivariable Calculus 4
MATH 250BF Linear Algebra and Differential Equations 4
MATH 255 F Linear Algebra 4
MATH 260 O Ordinary Differential Equations 4
PSY 161 F Elementary Statistics for Behavioral Science or 4
PSY 161HF Honors Elementary Statistics for Behavioral Science
SOSC 120 F Introduction to Probability and Statistics $\quad 4$
Total Units

## Interdisciplinary Studies: Emphasis in Social Behavior \& Self-Development Associate in Arts Degree

PROGRAM CODE: 2A18166

These courses provide students knowledge and understanding of social behavior and self-development. This area of emphasis is designed to prepare students to use their understanding of themselves and others to communicate and collaborate more effectively. It combines knowledge of theory with attention to personal growth and purpose, as well as health and wellness. Students learn to become citizens who care for themselves and others, ready to work with people in their communities. Participation in group activities and collaborative projects is a central focus of this emphasis, allowing students to experience group interactions in a variety of contexts. This emphasis includes lower division coursework that prepares students for social/health/human services majors and careers in people/community oriented professions including social, health and recreational services.

## Program Level Student Learning Outcomes

Outcome 1: Identify, analyze, and communicate an understanding of self and society through systematic investigation of social behavior, institutions, and culture.
Outcome 2: Demonstrate a critical understanding, appreciation and expression of philosophical and cultural sensibilities in historical and contemporary contexts.

Choose at least one course from each category below (A, B, and C). Then complete additional courses from categories A, B, and/or C to reach a total of 18 units:

## A) Theory and Knowledge

ANTH 102 F Cultural Anthropology or
ANTH 102HF Honors Cultural Anthropology
ANTH 105 F Language and Culture
BUS 101 F Personal Financial Management
BUS 266 F Human Relations in Business
CDES 120 F Child Development
CDES 140 F Infant/Toddler Development and Observation
CDES 201 F Child in the Home and Community
CIS 100 F Introduction to Personal Computers
ETHS 101 F American Ethnic Studies
ETHS 129 F Introduction to African - American Studies
ETHS 130 F African-American History I
ETHS 131 F African-American History II
ETHS 140 F Introduction to Chicano/Chicana Studies
ETHS 141 F Chicana/Chicano History
ETHS 142 F The Chicano-a/Latino-a in Contemporary Society
ETHS 160 F History of the Native Americans
ETHS 170 F Introduction to Asian Pacific American Studies
ETHS 171 F Asian Pacific American History
GEOG 160 F Cultural Geography
HIST 127 F Survey of American History
HIST 170 F History of the United States I or
HIST 170HF Honors History of the United States I
HIST 171 F History of the United States II or
HIST 171HF Honors History of the United States II
HIST 270 F Women in United States History
HIST 275 F History of California
PE 250 F Sports and Society
POSC 100 F American Government or 3
POSC 100HF Honors American Government 3
PSY 101 F General Psychology or
PSY 101HF Honors General Psychology
PSY 110 F Introduction to Applied Psychology
PSY 120 F Human Sexuality
PSY 131 F Cross Cultural Psychology
PSY 139 F Developmental Psychology: Life Cycle
PSY 145 F Child Psychology
PSY 202 F Research Methods in Psychology or
PSY 202HF Honors Research Methods in Psychology
PSY 222 F Abnormal Psychology
PSY 251 F Social Psychology or
PSY 251HF Honors Social Psychology
SOC 101 F Introduction to Sociology or
SOC 101HF Honors Introduction to Sociology
SOC 102 F Social Problems

SOC 201 F Dying and Death 3
SOC 225 F Sociology of Women or 3
SOC 225HF Honors Sociology of Women 3
SOC 230 F Sociology of Gender or 3
SOC 230HF Honors Sociology of Gender 3
SOC 250 F Sociology of Aging 3
SOC 275 F Marriage and Family or 3
SOC 275HF Honors Marriage and Family 3
SOC 285 F Drugs and Society 3
SOC 292 F Introduction to Criminology 3
SPCH 100 F Public Speaking 4
SPCH 105 F Interpersonal Communication 3
SPCH 120 F Intercultural Communication 3
SPCH 124 F Small Group Communication 3
SPCH 135 F Essentials of Argumentation 4
WMNS 100 F Introduction to Women's Studies or 3
WMNS 100HF Honors Introduction to Women's Studies 3
Choose at least one course from each category below
( $A, B$, and $C$ ). Then complete additional courses from-
categories $A, B$, and/or $C$ to reach a total of 18 units:
B) Growth and Purpose Units

COUN 101 F The College Experience 2
COUN 110 F Teaching As A Career 3-4
COUN 135 F Introduction to Leadership Development 3
COUN 136 F Applied Leadership 1
COUN 140 F Educational Planning 0.5
COUN 141 F Career Exploration 1
COUN 143 F Creative Job Search 1
COUN 144 F Career Motivation and Self Confidence 1
COUN 148 F Human Potential 1
COUN 151 F Career/Life Planning 3
EOUN 152 F Diversity in the Wortld of Work 3
COUN 163 F Personal Growth and Life Transitions 3
COUN 199 F Counseling/Guidance Independent Study 1
STSV 223 F Helping Skills in Human Services 3
Choose at least one course from each category below
( $A, B$, and $C$ ). Then complete-additional courses from categories $A, B$, and/or $C$ to reach a total of 18 units:
C) Health and Wellness Units

HED 140 F Health Science 3
NUTR 210 F Human Nutrition 3
PE 243F Stress Management 3
PE 244 F Techniques and Principles of Coaching 3
PE 248 F Psychology of Sport 3
PE 266 F Physical Fitness as a Lifelong Concept 3
Any physical education activity course
WELL 230 F The Body-Mind Connection
Total Units

## Interdisciplinary Studies: Emphasis in Social Sciences Associate in Arts Degree

PROGRAM CODE: 2A18165

These courses emphasize the perspective, concepts, theories and methodologies of the variety of disciplines that comprise study in the social sciences. Students will study human experience in the context of the larger society. Students will study how individuals, social subgroups, and societies operate in relation to each other. This emphasis includes lower division coursework that prepares students for majors in the social sciences.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate a critical understanding, appreciation and expression of historical, philosophical, and cultural sensibilities in historical and contemporary contexts.
Outcome 2: Examine and analyze the impacts of changes in demographics and increased diversity in US culture.

Choose 18 units of coursework, including
two or more disciplines, from the following list: Units
ANTH 101 F Physical Anthropology or
ANTH 101HF Honors Physical Anthropology 3

ANTH 101LF Physical Anthropology Lab
ANTH 102 F Cultural Anthropology or
ANTH 102HF Honors Cultural Anthropology
ANTH 103 F Introduction to Archaeology
ANTH 105 F Language and Culture
ANTH 107 F Anthropology of Magic,Witchcraft, and Religion

3
ANTH 209 F Cultures of Latin America 3
ANTH 211 F Celtic Cultures 3
BUS 240 F Legal Environment of Business or 3
BUS 240HF Honors Legal Environment of Business 3
BUS 242 F International Business Law 3
CDES 120 F Child Development 3
COUN 135 F Introduction to Leadership Development 3
COUN 151 F Career/Life Planning 3
COUN 152 F Diversity in the World of Work 3
COUN 163 F Personal Growth and Life Transitions 3
ECON 101 F Principles of Economics-Micro or
ECON 101HF Honors Principles of Economics-Micro
ECON 102 F Principles of Economics-Macro or
ECON 102HF Honors Principles of Economics-Macro
ETHS 101 F American Ethnic Studies
ETHS 129 F Introduction to African-American Studies
ETHS 130 F African-American History I
ETHS 131 F African-American History II
ETHS 140 F Introduction to Chicano/Chicana Studies
ETHS 141 F Chicana/Chicano History
ETHS 142 F The Chicano-a/Latino-a in Contemporary Society
ETHS 160 F History of the Native Americans
ETHS 170 F Introduction to Asian Pacific American Studies

3
ETHS 171 F Asian Pacific American History
GEOG 100 F Global Geography or
GEOG 100HF Honors Global Geography
GEOG 120 F Global Environmental Problems

GEOG 130 F
GEOG 160 F Culturna Geography
GEOG 160 F Cultural Geography
GEOG 262 F Economic Geography

- 3

HIST 110 F Western Civilization I or 3
HIST 110HF Honors Western Civilization I 3
HIST 111 F Western Civilization II or 3
HIST 111HF Honors Western Civilization II 3
HIST 112 F World Civilizations I or 3
HIST 112HF Honors World Civilizations I 3
HIST 113 F World Civilizations II or 3
HIST 113HF Honors World Civilizations II 3
HIST 127 F Survey of American History 3
HIST 151 F Survey of British History I 3
HIST 152 F Survey of British History II 3
HIST 154 F Ancient Egypt 3
HIST 160 F Asian Civilizations I 3
HIST 161 F Asian Civilizations II 3
HIST 165 F Introduction to the Middle East or 3
HIST 165HF Honors Introduction to the Middle East 3
HIST 170 F History of the United States I or 3
HIST 170HF Honors History of the United States I 3
HIST 171 F History of the United States II or 3
HIST 171HF Honors History of the United States II 3
HIST 190 F History of the Americas I 3
HIST 191 F History of the Americas II 3
HIST 270 F Women in United States History 3
HIST 275 F History of California 3
JOUR 110 F Mass Media Survey 3
POSC 100 F American Government or 3
POSC 100HF Honors American Government 3
POSC 110 F Contemporary American Politics or 3
POSC 110HF Honors Contemporary American Politics 3
POSC 120 F Introduction to Political Theory 3
POSC 150 F California Government and Politics 3
POSC 200 F Introduction to the Study of Politics 3
POSC 215 F Comparative Politics 3
POSC 216 F Government and Politics of the Middle East 3
POSC 220 F Introduction to Public Administration 3
POSC 230 F Introduction to International Relations 3
POSC 275 F Introduction to Public Law 3
PSY 101 F General Psychology or 3
PSY 101HF Honors General Psychology 3
PSY 131 F Cross Cultural Psychology 3
PSY 145 F Child Psychology 3
PSY 202 F Research Methods in Psychology or 4
PSY 202HF Honors Research Methods in Psychology 4
PSY 221 F The Brain and Behavior 3
PSY 222 F Abnormal Psychology 3
PSY 233 F The Psychology of Adjustment 3
PSY 251 F Social Psychology or
PSY 251HF Honors Social Psychology
SOC 101 F Introduction to Sociology or
SOC 101HF Honors Introduction to Sociology
SOC 102 F Social Problems
SOC 201 F Dying and Death
SOC 225 F Sociology of Women or
SOC 225HF Honors Sociology of Women
SOC 230 F Sociology of Gender or

| SOC 250 F | Sociology of Aging | 3 |
| :--- | :--- | ---: |
| SOC 275 F | Marriage and Family or | 3 |
| SOC 275HF | Honors Marriage and Family | 3 |
| SOC 277 F | Sociology of Religion or | 3 |
| SOC 277HF | Honors Sociology of Religion | 3 |
| SOC 285 F | Drugs and Society | 3 |
| SOC 290 F | Sociology of Race and Ethnicity | 3 |
| SOC 292 F | Introduction to Criminology | 3 |
| WMNS 100 F | Introduction to Women's Studies or | 3 |
| WMNS 100HF | Honors Introduction to Women's Studies | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 8}$ |

## INTERIOR DESIGN

## Interior Design Assistant Associate in Science Degree

PROGRAM CODE: 2503860

Curriculum leads to the Interior Design Assistant Associate in Science Degree and/or employment in the field of interior design assistant. The degree requires completion of the Interior Merchandising - Level I Certificate (27 units) plus the following 21 units for a total of 48 units. This program does not fulfill requirements for transfer to any four-year state university.

## Program Level Student Learning Outcomes

Outcome 1: Identify the basic ethical issues necessary to operate an interior design practice.
Outcome 2: Identify basic legal issues necessary to operate an interior design practice.

| Completion of Interior Merchandising - |  |  |
| :--- | :--- | ---: |
| Level I Certificate ( $\mathbf{2 7}$ units) |  |  |
| Plus the following $\mathbf{2 1}$ units: | Units |  |
| ARCH 113 F | Architectural Drawing I | 3 |
| IDES 170 F | Space Planning | 3 |
| IDES 180 F | History of Interior Architecture I | 3 |
| IDES 190 F | History of Interior Architecture II | 3 |
| IDES 200 F | Interior Illustration | 2 |
| IDES 210 F | Fundamentals of Lighting | 3 |
| IDES 215 F | Interior Design Studio II | 2 |
| IDES 240 F | Interior Design Internship | $\mathbf{2}$ |
| Total Units |  | $\mathbf{4 8}$ |

## Commercial Design Certificate

PROGRAM CODE: 2 C10626
Curriculum leads to employment as an Interior Design Assistant. The Commercial Design Certificate Program requires the completion of 48-49 units of which 35-36 units are in required courses. An additional 13 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify and understand the sequential Interior Design Process from discovery to post evaluation of an interior design project.
Outcome 2: Produce and demonstrate comprehensive solutions to advanced interior design projects.

| Required Courses (35-36 units) | Units |  |
| :--- | :--- | ---: |
| ARCH 113 F | Architectural Drawing I | 3 |
| ARCH 124 F | Architectural CAD I | 3 |
| IDES 100 F | Fundamentals of Interior Design | 3 |
| IDES 105 F | Interior Design Studio I | 2 |
| IDES 130 F | Applied Color and Design Theory | 4 |
| IDES 147 F | Office Planning | 3 |
| IDES 150 F | Interior Materials \& Products | 4 |
| IDES 190 F | History of Interior Architecture II | 3 |
| IDES 210 F | Fundamentals of Lighting | 3 |
| IDES 215 F | Interior Design Studio II | 2 |
| IDES 230 F | Business and Professional Practice | 3 |
| IDES 240 F | Interior Design Internship | $2-3$ |
|  |  |  |
| Restricted Electives (13 units) | Units |  |
| ARCH 924 F | Architectural CAD II | 3 |
| CSTR 030 F | Construction Blueprint Reading | 3 |
| IDES 120 F | Interior Design Careers | 2 |
| IDES 180 F | History of Interior Architecture I | 3 |
| IDES 200 F | Interior Illustration | 2 |
| IDES 248AF | Restaurant/Hotel Design | 2 |
| IDES 248BF | Medical/Health Design | 2 |
| IDES 249AF | Study/Internat'I Arch \& Design | 1 |
| IDES 249BF | Study/Internat'I Arch \& Design | 2 |
| IDES 249CF | Study/Internat'I Arch \& Design | 3 |
| Total Units |  | 489 |

ARCH 113 F Architectural Drawing I 3
ARCH 124 F Architectural CAD I 3
IDES 100 F Fundamentals of Interior Design 3
IDES 105 F Interior Design Studio I 2
IDES 130 F Applied Color and Design Theory 4
IDES 147 F Office Planning 3
IDES 150 F Interior Materials \& Products 4
DES 190 F History of Interior Architecture II 3
IDES 215 F Interior Design Studio II 2
IDES 230 F Business and Professional Practice 3
IDES 240 F Interior Design Internship 2-3
Restricted Electives (13 units) Units
ARCH 924 F Architectural CAD II 3
CSTR 030 F Construction Blueprint Reading 3
IDES 120 F Interior Design Careers 2
IDES 180 F History of Interior Architecture I 3
IDES 248AF Restaurant/Hotel Design 2
IDES 248BF Medical/Health Design 2
IDES 249AF Study/Internat'I Arch \& Design 1
IDES 249BF Study/Internat'l Arch \& Design 2

Total Units 48-49

## Interior Merchandising - Level I Certificate PROGRAM CODE: 2C10625

The Interior Merchandising - Level I Certificate Program requires the completion of the 27 units listed below. This certificate is Level I of the Regional Interior Design Program. A minimum grade of "C" is required for all courses.

## Program Level Student Learning Outcomes

Outcome 1: Analyze and produce solutions for the space plan of an interior environment.
Outcome 2: Produce a criteria program as a basis for a space plan.

## Required Courses: (27 units)

 UnitsARCH 124 F Architectural CAD I 3
ARCH 924 F Architectural CAD II 3
IDES 100 F Fundamentals of Interior Design
IDES 105 F Interior Design Studio I 2
IDES 110 F Beginning Drafting for Interior Design 3
IDES 120 F Interior Design Careers 2
IDES 130 F Applied Color and Design Theory 4
IDES 150 F Interior Materials \& Products 4
MKT 208 F Principles of Selling 3
Total Units

## Residential Design Certificate <br> PROGRAM CODE: 2C13209

The Residential Design Certificate Program requires a completion of not less than 49-50 units of which 32-33 units are in required courses. An additional 17 units must be chosen from the restricted units listed below. A minimum grade of "C" is required for all courses.

## Program Level Student Learning Outcomes

Outcome 1: Identify and understand the sequential Interior Design Process from discovery to post evaluation of an interior design project.
Outcome 2: Apply basic entry-level drafting skills to draw an accurate floor plan.

## Required Courses (32-33 units)

## Units

FASH 206 F Textiles 3
IDES 100 F Fundamentals of Interior Design 3
IDES 105 F Interior Design Studio I 2
IDES 110 F Beginning Drafting for Interior Design
IDES 130 F Applied Color and Design Theory
IDES 150 F Interior Materials \& Products 4
IDES 170 F Space Planning 3
IDES 180 F History of Interior Architecture I 3
IDES 190 F History of Interior Architecture II 3
IDES 215 F Interior Design Studio II 2
IDES 240 F Interior Design Internship 2-3
Restricted Electives (17 units) ..... Units
ARCH 113 F Architectural Drawing I ..... 3
ARCH 124 F Architectural CAD I ..... 3
ART 112 F Art History: Ancient to Medieval ..... 3
ART 113 F Art History: Renaissance to Modern or ..... 3
ART 114 F Art History: Impressionism to Present ..... 3
ART 120 F Basic Design ..... 3
ART 179 F Drawing for Non-Art Majors ..... 2
ART 182 F Basic Drawing ..... 3
CSTR 006 F Residential Plumbing and Mechanical Systems ..... 3
FASH 202 F Visual Merchandising ..... 2
IDES 085 F Kitchen \& Bath Design ..... 2
IDES 120 F Interior Design Careers ..... 2
IDES 200 F Interior Illustration ..... 2
IDES 210 F Fundamentals of Lighting ..... 3
IDES 230 F Business \& Professional Practi ..... 3
IDES 249AF Study/Internat'l Arch \& Design ..... 1
IDES 249BF Study/Internat'I Arch \& Design ..... 2
Total Units ..... 49-50

## JOURNALISM

## Journalism Associate in Arts Degree for Transfer PROGRAM CODE: 2A32845

The Associate in Arts in Journalism for Transfer, also called the Journalism AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Journalism or Communications. Ed Code Section 66746-66749 states that students earning the Journalism AA-T Degree will be granted priority for admission as Journalism or Communications major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Journalism relates to print, broadcast, visual and multimedia reporting as well as public relations. This degree is designed for students who want to develop skills in communication and reporting for today's media or working in the public relations field. The Journalism AA-T Degree requires a total of 18-20 units of required courses and restricted electives as listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify the seven elements that determine news value.
Outcome 2: Compose a summary news lead in an article for publication.
Outcome 3: Identify Associated Press style within a news story. Outcome 4: Compose a well-researched article for publication.

| Required Core (9 Units) |  | Units |
| :---: | :---: | :---: |
| JOUR 101 F | Reporting and Writing | 3 |
| JOUR 110 F | Mass Media Survey | 3 |
| JOUR 222 F | Introduction to News Media Production or | 3 |
| JOUR 132 F | Introduction to Magazine Production or | 3 |
| JOUR 271 F | Introduction to Spanish-Language Reporting | 3 |
| List A (Select | 3 units) | Units |
| JOUR 210 F | Multimedia Reporting | 3 |
| JOUR 102 F | Advanced Reporting and Writing | 3 |
| JOUR 140 F | Public Relations/Publicity | 3 |
| JOUR 219 F | Photojournalism | 3 |
| JOUR 133 F | Beginning Magazine Production or | 3 |
| JOUR 223 F | Beginning News Media Production or | 3 |
| JOUR 272 F | Beginning Spanish-Language Reporting | 3 |
| List B (Select 6-8 units) |  | Units |
| PHOT 111 F | Introduction to Photography from Analog to Digital | 3 |
| MATH 120 F | Introductory Probability and Statistics or | 4 |
| MATH 120HF | Honors Introductory Probability and Statistics or | 4 |
| PSY 161 F | Elementary Statistics for Behavioral Science or | 4 |
| PSY 161HF | Honors Elementary Statistics for Behavioral Science or | 4 |
| SOSC 120 F | Introduction to Probability and Statistics | 4 |
| ECON 101 F | Principles of Economics-Micro or | 3 |
| ECON 101HF | Honors Principles of Economics-Micro or | 3 |
| ECON 102 F | Principles of Economics-Macro or | 3 |
| ECON 102HF | Honors Principles of Economics-Macro | 3 |
| POSC 100 F | American Government or | 3 |
| POSC 100HF | Honors American Government | 3 |
| POSC 215 F | Comparative Politics | 3 |
| ENGL 103 F | Critical Reasoning and Writing or | 4 |
| ENGL 103HF | Honors Critical Reasoning and Writing | 4 |
| PHIL 170 F | Logic and Critical Thinking | 3 |
| PHIL 172 F | Critical Thinking and Writing | 3 |
| SPCH 135 F | Essentials of Argumentation | 4 |
| Total Units |  | 18-20 |

## Journalism Associate in Arts Degree

PROGRAM CODE: 2A03829
The Journalism Associate in Arts Degree Program requires a total of 18 units all of which are in required courses listed below. The degree provides a sound base for students interested in journalism, and could lead to employment at a media outlet.

## Program Level Student Learning Outcomes

Outcome 1: Assess the news value of an article.
Outcome 2: Construct a factual, well-sourced article for publication.
Outcome 3: Create a multimedia story suitable for publication.
Outcome 4: Evaluate a written or broadcast story and identify libel or slander.
Required courses (18 units)

Units
JOUR 101 F Reporting and Writing ..... 3
JOUR 102 F Advanced Reporting and Writing ..... 3
JOUR 110 F Mass Media Survey ..... 3
JOUR 222 F Introduction to News Media Production or ..... 3
JOUR 132 F Introduction to Magazine Production ..... 3
PHOT 111 F Introduction to Photography from
Analog to Digital ..... 3
CRTV 129 F Broadcast News or ..... 3
JOUR 210 F Multimedia Reporting ..... 3
Total Units ..... 18

## Journalism Certificate

PROGRAM CODE: 2 C21264
The Journalism Certificate Program will provide students with sufficient background for reporting, writing and production jobs on community newspapers and weekly publications. The Certificate requires a total of 30 units of which 24 units are in required courses. An additional 6 units must be completed from the restricted electives listed below. A minimum grade of " C " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Construct a well-researched factual news story suitable for publication.
Outcome 2: Evaluate and assess written articles for compliance to Associated Press style and proper grammar.
Outcome 3: Identify Associated Press style in writing 90 percent of the time.
Outcome 4: Identify libel or slander in a print or broadcast story.

## Required Courses (24 units) <br> Units

DART 140 F Digital Publishing I 3
JOUR 102 F Advanced Reporting and Writing 3
JOUR 110 F Mass Media Survey 3
JOUR 132 F Introduction to Magazine Production 3
JOUR 140 F Public Relations/Publicity 3
JOUR 222 F Introduction to News Media Production 3
CRTV 129 F Broadcast News or 3
JOUR 210 F Multimedia Reporting 3
JOUR 101 F Reporting and Writing 3
Restricted Electives (6 units) Units
ART 145 F Publication Design 3
DART 146 F Digital Publishing II 3
JOUR 133 F Beginning Magazine Production 3
JOUR 199 F Journalism Independent Study 1-3
JOUR 219 F Photojournalism
JOUR 223 F Beginning News Media Production
JOUR 271 F Introduction to Spanish-Language Reporting 3
PHOT 111 F Introduction to Photography from Analog to Digital

## Total Units

## Public Relations Certificate <br> PROGRAM CODE: 2 C08403

The Public Relations Certificate will help students learn skills needed when working in the public relations field. The program requires the completion of 24 units, of which 18 units are required. An additional 6 units must be selected from the restricted electives below. A minimum grade of " C " is required for each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Compose a newsworthy press release.
Outcome 2: Create a complete media kit.
Outcome 3: Determine news value of an article.
Outcome 4: Identify proper Associated Press style $80 \%$ of the time.

## Required Courses (18 units)

## Units

JOUR 101 F Reporting and Writing 3
JOUR 102 F Advanced Reporting and Writing 3
JOUR 110 F Mass Media Survey 3
JOUR 132 F Introduction to Magazine Production 3
JOUR 140 F Public Relations/Publicity
JOUR 222 F Introduction to News Media Production

## Restricted Electives (6 units)

## Units

MKT 100 F Introduction to Marketing 3
MKT 103 F Principles of Advertising 3
MKT 201 F Small Business Promotions 3
MKT 208 F Principles of Selling 3
PHOT 111 F Introduction to Photography from Analog to Digital
JOUR 210 F Multimedia Reporting 3
JOUR 271 F Introduction to Spanish-Language Reporting3
Total Units

## LATIN AMERICAN STUDIES

## Latin-American Studies Associate in Arts Degree PROGRAM CODE: 2 A08438

The Latin-American Studies Associate in Arts Degree is an interdisciplinary program that combines courses from multiple academic departments to give students a broad background encompassing the historical, political, social, cultural, and geographic aspects as well as the language of the region. A degree in Latin American Studies affords students access to a wide range of career opportunities in the United States and abroad. The continuing importance of Latin America for the U.S. and the growing Latin population in the U.S. has produced an increasing need for trained persons with a knowledge of the region to work in government, teaching, business and other fields. The Latin-American Studies Associate in Arts Degree requires 19 units of which 13 units are required courses. An additional 6 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate proficiency in intermediate Spanish.
Outcome 2: Identify important events, themes, and concepts of Latin American history and society.
Outcome 3: Investigate problems and issues relating to Latin America by consulting primary and secondary sources, and formulating a thesis.
Required Courses (13 units): ..... Units
HIST 190 F History of the Americas I and ..... 3
HIST 191 F History of the Americas II and ..... 3
GEOG 100 F Global Geography or ..... 3
GEOG 100HF Honors Global Geography and ..... 3
SPAN 203 F Intermediate Spanish III or ..... 4
SPAN 204 F Intermediate Spanish IV ..... 4
Restricted Electives: (6 units) ..... Units
HIST 110 F Western Civilization I or ..... 3
HIST 110HF Honors Western Civilization I ..... 3
HIST 111 F Western Civilization II or ..... 3
HIST 111HF Honors Western Civilization II ..... 3
GEOG 160 F Cultural Geography ..... 3
ANTH 102 F Cultural Anthropology or ..... 3
ANTH 102HF Honors Cultural Anthropology ..... 3
ECON 101 F Principles of Economics - Micro or ..... 3
ECON 101HF Honors Principles of Economics - Micro ..... 3
ECON 102 F Principles of Economics-Macro or ..... 3ECON 102HF Honors Principles of Economics-MacroSOC 101 F Introduction to Sociology orSOC 101 HF Honors Introduction to SociologyPOSC 215 F Comparative PoliticsBUS 131 F Principles of International BusinessSPAN 206 F Introduction to Latin American Literature
Total Units

## MACHINE TECHNOLOGY

## CNC Operator Skills Certificate <br> PROGRAM CODE: 2 C00060

The CNC Operator Certificate Program requires a total of 14 units of which 14 units are in required courses with a minimum grade of "C" in each course taken. At least one-half of the units toward the certificate must be completed at Fullerton College. The goal of this certificate is to prepare students for entry-level employment as CNC (Computer Numerical Control) machine tool operators and to enhance the skills of machinists who are currently employed in the trade.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the ability to set fixture offsets, tool length offsets, geometry and wear offsets to manufacture parts to blueprint specifications.
Outcome 2: Organize cutting tools, set-up documentation and numerical control programs to successfully set-up computer numerical controlled machinery.

## Required courses (14 units)

 UnitsMACH 091 F Introduction to Machine Tools
5
MACH 086 F CNC Machine Set-up \& Operation
3
MACH 087 F CNC Parts Programming
3
MACH 088 F Advanced CNC Machining
3

Total Units

## Computer Numerical Control (CNC) Certificate PROGRAM CODE: 2 C08416

The Computer Numerical Control (CNC) Certificate Program requires the completion of 41-44 units of which 32-35 units are in required courses. An additional 9 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Design and create work-holding devices to manufacture parts on computer numerical controlled milling and turning machines.
Outcome 2: Prepare CNC programs from blueprints for machines with four and five axis of control.

| Required Courses (32-35 units) |  | Units |
| :---: | :---: | :---: |
| DRAF 070 F | Blueprint Reading for the Metal Trades | 2 |
| DRAF 140 F | AutoCAD for Industry | 2 |
| DRAF 173 F | Geometric Dimensioning and Tolerancing | 2 |
| MACH 050 F | CNC Programming Using Mastercam | 3 |
| MACH 060 F | CNC Programming Using SURFCAM | 3 |
| MACH 052 F | Adv CNC Program w/ Mastercam or | 3 |
| MACH 062 F | Advanced CNC Programming Using SURFCAM | 3 |
| MACH 086 F | CNC Machine Set-up \& Operation | 3 |
| MACH 087 F | CNC Parts Programming | 3 |
| MACH 091 F | Introduction to Machine Tools or | 5 |
| MACH 116 F | Machine Tools | 2 |
| METL 192 F | Fundamentals of Metallurgy | 3 |
| TECH 081 F | Technical Mathematics I | 3 |
| TECH 108 F | Manufacturing Processes | 3 |
| Restricted Electives (9 units) |  | Units |
| DRAF 145 F | CAD/CAM | 2 |
| MACH 040 F | CNC Wire EDM Programming and Operations | 3 |
| MACH 088 F | Adv CNC Set-up and Operations | 3 |
| MACH 092 F | Intermediate Machine Tools | 5 |
| TECH 088 F | Technical Science | 3 |
| TECH 127 F | Industrial Safety | 1 |
| WELD 121AF | Introduction to Welding | 2 |
| Total Units |  | 41-44 |

## Machine Technology Level II Certificate PROGRAM CODE: 2 C10624

The Machine Technology - Level II Certificate Program requires the completion of 31-34 units of which 22-25 units are in required courses. An additional 9 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate basic procedures for the set-up and operation of engine lathes, milling machines, surface grinders and support equipment.
Outcome 2: Determine operational sequences, selection of machine tools, work-holding devices and cutting tools.

## Required Courses (22-25 units)

## Units

DRAF 070 F Blueprint Reading for the Metal Trades
DRAF 173 F Geometric Dimensioning and Tolerancing
MACH 086 F CNC Machine Set-up \& Operation
DEGREES \& CERTIFICATES

| Restricted Electives (9 units) | Units |  |
| :--- | :--- | ---: |
| DRAF 171 F | Fundamentals of Drafting | 2 |
| MACH 010 F | Machining Skills Lab | 1 |
| MACH 040 F | CNC Wire EDM Programming and |  |
|  | Operations | 3 |
| MACH 088 F | Advanced CNC Machining | 3 |
| METL 192 F | Fundamentals of Metallurgy | 3 |
| TECH 108 F | Manufacturing Processes | 3 |
| TECH 127 F | Industrial Safety | 1 |
| WELD 121AF | Introduction to Welding | 2 |
| Total Units |  | $\mathbf{3 1 - 3 4}$ |

## Mastercam Skills Certificate

## PROGRAM CODE: 2 C00046

The Mastercam Certificate requires a total of 6 units. Both classes must be completed with a grade of " $B$ " or better.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the use of Mastercam software to accurately program multi axis CNC machine tools.

## Required Courses (6 units)

## MACH 050 F CNC Programming Using Mastercam

## Total Units

## Surfcam Skills Certificate <br> PROGRAM CODE: 2 C00047

The Surfcam Certificate Program requires a total of 6 units. Both classes must be completed with a grade of " $B$ " or better.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate the use of Surfcam software to accurately program multi axis CNC.

## Required Courses ( 6 units)

MACH 062 F Advanced CNC Programming Using SURFCAM

## Total Units

## MANUFACTURING TECHNOLOGY

## Manufacturing Technology <br> Associate in Science Degree <br> PROGRAM CODE: 2503842

Curriculum leads to the Associate in Science Degree. The Manufacturing Technology Major incorporates courses from a number of departments within the Technology and Engineering Division. A student pursuing the Manufacturing Technology Major must take core courses from all of these departments in addition to a concentration in one or more of the major areas. The areas of concentration are: Drafting, Machine Technology, and Welding. Requires 24 units from courses listed.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate welding on 16-gage steel with inert gas welding equipment.
Outcome 2: Develop manufacturing procedure for metal sub-assemblies.
Required Courses: (9 units) ..... Units
DRAF 171 F Fundamentals of Drafting ..... 2
MACH 116 F Machine Tools ..... 2
TECH 108 F Manufacturing Processes ..... 3
WELD 121AF Introduction to Welding ..... 2
Additional (15 units) ..... Units
Drafting Courses - Any drafting coursesMachine Technology Courses - Any machine technologycourse
Welding Courses - Any welding courses except
WELD 095 F Welding Skills Lab.
Technology-Related Courses -
METL 192 F Fundamentals of Metallurgy (3)
TECH 127 F Industrial Safety (1)
Total Units24
MARKETING MANAGEMENT
Marketing ManagementAssociate in Science Degree
PROGRAM CODE: 2503825
The Associate in Science Degree in Marketing Managementrequires a total of 31-33 units, all of which are required courses.Completion of this degree will provide the skills necessary toobtain employment in a marketing capacity at an organization.

## Program Level Student Learning Outcomes

Outcome 1: Identify the various marketing functions (product development, pricing, promotion, and distribution) and how organizations utilize these to produce goods and services that satisfy the needs and wants of the consumer.
Outcome 2: Utilize a working vocabulary of business terminology. Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.
Required Courses (7 units)

## Units

MKT 100 F Introduction to Marketing and
CIS 100 F Introduction to Personal Computers or
CIS 111 F Introduction to Information Systems3
Choose one course from the following for a total of 3-5 units: ..... Units
ACCT 001 F Accounting for Small Business ..... 3
ACCT 100BF Financial Accounting Principle ..... 3
ACCT 101AF Financial Accounting ..... 5
Choose one course from the following for a total of 3 units: ..... Units
BUS 111 F Business Communications ..... 3
BUS 211 F Writing for Business ..... 3
Choose one course from the following for a total of 3 units: ..... Units
BUS 100 F Introduction to Business ..... 3
BUS 180 F Small Business Management ..... 3
Choose one course from the following for a total of 3 units: ..... Units
BUS 162 F Business Economics ..... 3
ECON 101 F Principles of Economics - Micro ..... 3
BUS 170 F Principles of E-Business ..... 3
Choose one course from the following for a total of 3 units: (See counselor for determination of correct course) Units
BUS 240 F Legal Environment of Business ..... 3
BUS 241AF Business Law ..... 3
Choose three courses from the following for a total of 9 units: ..... Units
MKT 103 F Principles of Advertising ..... 3
MKT 151 F New Media Marketing ..... 3
MKT 201 F Small Business Promotions ..... 3
MKT 205 F Understanding Multicultural Markets in U.S. ..... 3MKT 208 F Principles of Selling3
BUS 224 F
BUS 224 F International Marketing BUS 224 F ..... 3
Total Units ..... 31-33

## MATHEMATICS

## Mathematics Associate in Science for Transfer PROGRAM CODE: 2530708

The Mathematics Associate in Science Degree for Transfer, also called the Mathematics AS-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in mathematics. Students earning the Mathematics AS-T Degree will be granted priority for admission as a Mathematics major to a local CSU, as determined by the CSU campus to which the student applies (see section titled "Degrees for Transfer" in the catalog for more information). This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Students with a degree in mathematics may pursue careers in a variety of industries such as education, finance, insurance, information technology, engineering and operations, manufacturing, consulting, analysis, research, and more. The Mathematics AS-T Degree requires a total of 18 units of required courses as indicated below.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a mathematical function.
Outcome 2: Determine and use an appropriate method to solve a mathematical problem.

Required Courses: (18 units) Units MATH 150AF Calculus I or 4 MATH 150HF Honors Calculus I 4 MATH 150BF Calculus II 4
MATH 250AF Multivariable Calculus 4
MATH 250BF Linear Algebra and Differential Equations 4
MATH 250CF Additional Topics in Linear Algebra 2
Total Units

## Mathematics Associate in Science Degree PROGRAM CODE: 2503871

The Mathematics Associate in Science Degree prepares students to transfer to colleges and universities that offer bachelor's degrees in mathematics. Students with a degree in mathematics may pursue careers in a variety of industries such as education, finance, insurance, information technology, engineering and operations, manufacturing, consulting, analysis, research, and more. The Mathematics Associate in Science Degree requires 18-20 units of which 12 units are in required courses. An additional 6-8 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in all courses. NOTE: Students planning to transfer to a local CSU may also want to consider the Mathematics AS-T Degree.

Program Level Student Learning Outcomes
Outcome 1: Analyze a mathematical function.
Outcome 2: Determine and use an appropriate method to solve a mathematical problem.

Required Courses: (12 units) Units
MATH 150AF Calculus I or
MATH 150HF Honors Calculus I
MATH 150BF
MATH 250AF Multivariable Calculus

Restricted Electives: (6-8 units)
Units
CSCI 123 F Introduction to Programming Concepts in C++
MATH 120 F Introductory Probability and Statistics or 4
MATH 120HF Honors Introductory Probability and Statistics
MATH 171 F Discrete Mathematics 4
MATH 172 F Graph Theory and Linear Algebra
MATH 250BF Linear Algebra and Differential Equations
MATH 250CF Additional Topics in Linear Algebra
PHYS 221 F General Physics I
Total Units

## MEDICAL TECHNOLOGY

## Medical Technology Associate in Arts Degree PROGRAM CODE: 2A18799

The Medical Technology Associate in Arts Degree Program requires a total of 18 units chosen from the courses listed below.

## Program Level Student Learning Outcomes

Outcome 1: Safe and proficient use of laboratory equipment and techniques.
Outcome 2: Knowledge of biological processes from the molecular and cellular perspectives.

| Select 18 units from the following: | Units |  |
| :--- | :--- | ---: |
| ANAT 231 F | General Human Anatomy | 4 |
| ANAT 240 F | Human Physiology | 5 |
| BIOL 266 F | General Zoology | 5 |
| BIOL 272 F | Cell and Molecular Biology | 4 |
| CHEM 101 F | Chemistry for Allied Health Science | 5 |
| CHEM 107 F | Preparation for General Chemistry | 5 |
| CHEM 111AF | General Chemistry I | 5 |
| CHEM 111BF | General Chemistry II | 5 |
| MATH 141 F | College Algebra | 4 |
| MATH 142 F | Trigonometry | 4 |
| MICR 220 F | Medical Microbiology | 4 |
| MICR 262 F | General Microbiology | 5 |
| PHYS 205 F | Physics for the Life Sciences I | 4 |
| PHYS 206 F | Physics for the Life Sciences II | 4 |
| Total Units |  | $\mathbf{1 8}$ |

## MICROBIOLOGY

## Microbiology Associate in Science Degree <br> PROGRAM CODE: 2503821

This Associate in Science Degree is designed to introduce the student to the field of microbiology. Students who complete this degree will be prepared for further study in microbiology or related disciplines, or for entry level work in a biological sciences lab. This degree requires a total of 18-19 units of which 9 units are in required courses. An additional 9-10 units must be chosen from the list of restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in microbiology.
Outcome 2: Demonstrate safe and proficient use of laboratory equipment and techniques.
Outcome 3: Explain how molecular and cellular structures contribute to function.

| Required Courses (9 units) | Units |  |
| :--- | :--- | ---: |
| BIOL 272 F | Cell and Molecular Biology | 4 |
| MICR 262 F | General Microbiology | 5 |
|  |  | Units |
| Restricted Electives: (9-10 units) | 4 |  |
| BIOL 276 F | Genetics and Evolutionary Biology | 5 |
| CHEM 111AF | General Chemistry I | 5 |
| CHEM 111BF | General Chemistry II | 5 |
| CHEM 211AF | Organic Chemistry I | 5 |
| CHEM 211BF | Organic Chemistry II | 4 |
| MATH 141 F | College Algebra | 4 |
| MATH 142 F | Trigonometry | 4 |
| PHYS 205 F | Physics for the Life Sciences I | 4 |
| PHYS 206 F | Physics for the Life Sciences II | $\mathbf{4}$ |
| Total Units |  | $\mathbf{1 8 - 1 9}$ |

BIOL 272 F Cell and Molecular Biology 4
MICR 262 F General Microbiology 5
Restricted Electives: ( $9-10$ units) Units
BIOL 276 F Genetics and Evolutionary Biology 4
CHEM 111AF General Chemistry I 5
CHEM 111BF General Chemistry II 5
CHEM 211AF Organic Chemistry I 5
CHEM 211BF Organic Chemistry II 5
MATH 141 F College Algebra 4
MATH 142 F Trigonometry 4
PHYS 205 F Physics for the Life Sciences I 4

Total Units 18-19

## MUSIC

## Music Associate in Arts Degree for Transfer PROGRAM CODE: 2A31530

The Music Associate in Arts Degree for Transfer, also called the Music AA-T Degree, prepares students to transfer to California State University campuses that offer bachelor's degrees in Music. Ed Code Section 66746-66749 states that students earning the Music AA-T Degree will be granted priority for admission as Music major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 23 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. This degree is designed to prepare students to demonstrate competence and discipline in the study of music in all of its facets, read and audiate music, and demonstrate proficiency in ensemble skills and solo performance skills. While a baccalaureate degree is recommended for a possible career in music production, performance, and music education, completion of this curriculum will demonstrate commitment to the serious study of Music in practice and in theory, and provide comprehensive preparation for upper-division work. The Music AA-T Degree program requires 23 units in required courses and restricted electives as indicated below.

## Program Level Student Learning Outcomes

Outcome 1: Sophomore level skill in solo performance on instrument of chosen concentration (Orchestral Instrument, Voice, Piano, Guitar).
Outcome 2: Working knowledge and successful execution of Sophomore level Music Theory and Musicianship.
Outcome 3: Sophomore level proficiency in ensemble rehearsal and performance.
Outcome 4: Sophomore level proficiency in identifying genres, styles, and periods of music.

## Required Courses: (23 units)

## Units

MUS 106 F Introduction to Music Theory 3
MUS 107 F Harmony I 3
MUS 109 F Harmony II 3
MUS 203 F Counterpoint 3
MUS 103 F Beginning Musicianship
MUS 104 F Intermediate Musicianship
MUS 204 F Advanced Musicianship
MUSA 200 F* Applied Music-Individual Private Study
*MUSA 200 F must be taken 4 times to complete degree

| Four semesters of Music ensembles, |  |
| :--- | :--- |
| selected from the list below: |  |
| Large Ensembles: |  |
| MUS 180 F | Collegiate Chorale |
| MUS 181 F | Women's Chorale |
| MUS 271 F | Fullerton College Symphony |
| MUS 274 F | Fullerton College Symphonic Winds |
| MUS 281 F | Concert Choir |
| MUS 282 F | Fullerton College Master Chorale |
| MUS 285 F | Chamber Singers |


| Ensembles: |  | Units |
| :--- | :--- | ---: |
| MUS 260 F | Guitar Ensemble | 1 |
| MUS 261 F | String Ensemble | 1 |
| MUS 262 F | Woodwind Ensemble | 1 |
| MUS 263 F | Brass Ensemble | 1 |
| MUS 264 F | Percussion Ensemble | 1 |
| MUS 265 F | Piano Ensemble | 1 |
| MUS 266 F | Jazz Combo | 1 |
| MUS 268 F | Jazz Guitar Ensemble | 1 |
| MUS 269 F | Alternative Jazz Lab Ensemble | 1 |
| MUS 270 F | Electronic Music Ensemble | 1 |
| MUS 276 F | Jazz Band | 1 |
| MUS 277 F | Jazz Lab Band | 1 |
| MUS 287 F | Vocal Jazz Ensemble | 1 |

The Music Department also recommends the completion of the following classes in preparation for a transfer to a California State University: Units
MUS 108 F Introduction to Music Technology

MUS 120 F Survey of Music History
The Music Department also recommends successful completion of MUSA 132 F or successful passage of a Piano Proficiency Exam. Total Units

## Commercial Music Associate in Arts Degree PROGRAM CODE: $2 A 03849$

Curriculum leads to the Music: Commercial Associate in Arts Degree and provides training for those who do not plan to transfer to a four-year university or college. The emphasis is upon preparation of the performer, composer, or arranger. While most of the courses suggested are transferable, the curriculum does not meet the general education requirements for the lower division of a four-year university or college. This degree requires 22 units of which 19 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Describe and execute the basic concepts of songwriting in respect to melody, harmony and rhythm.
Outcome 2: Explain the basics of intellectual property laws and copyright and Trademark protection.
Outcome 3: Produce basic songs in a variety of commercial music genres using Digital Audio Workstation.
Outcome 4: Perform or participate in a contemporary music production.

| Required Courses (19 units) |  | Units |
| :---: | :---: | :---: |
| MUS 108 F | Introduction to Music Technology | 2 |
| MUS 123 F | Concert Hour | 2 |
| MUS 135BF | Piano | 1 |
| MUS 207 F | Pop/Commercial Arranging/Composing | 3 |
| MUS 224 F | Recording Studio II: |  |
|  | Intermediate Techniques | 3 |
| Performance group each semester (1, 1, 1, 1) |  | 4 |
| Applied music class each semester (1, 1, 1, 1) (200 level) |  | 4 |
| Restricted electives (3 units) |  | Units |
| MUS 112 F | The Music Business | 2 |
| MUS 113 F | Jazz History - An Appreciation | 3 |
| MUS 119 F | History of Rock Music | 3 |
| MUS 120 F | Survey of Music History | 3 |
| MUS 156 F | Beginning Jazz Improvisation Instrumental or | 1 |
| MUS 157 F | Beg Vocal Styling \& Improv | 1 |
| MUS 208 F | Music Copying and Notation Software | 2 |
| MUS 256 F | Adv Jazz Improv - Instrumental or | 1 |
| MUS 257 F | Adv Vocal Styling \& Improv | 1 |
| Total Units |  | 22 |

## Music Associate in Arts Degree <br> PROGRAM CODE: 2 A03848

The Music Associate in Arts Degree is designed to provide students with the basic musical knowledge and academic skills to either transfer to a four-year academic institution or lead to employment in the music industry. This degree is designed to prepare students to demonstrate competence and discipline of music in all of its facets, read and audiate music, and demonstrate proficiency in ensemble skills and solo performance skills. Completion of this curriculum will demonstrate commitment to the serious study of Music in practice and in theory. This Degree may lead to employment in many fields of entertainment and different genres, including jazz, vocal, choral, instrumental, classical, rock, and music criticism. This degree requires a total of $36-37$ units of which 26 units are in required courses. An additional 4 units are required from Applied Music classes. An additional 4 units are required from Performance Ensembles. An additional 2-3 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: College sophomore level skill in solo performance on instrument of chosen concentration (Orchestral Instrument, Voice, Piano, Guitar).
Outcome 2: Working knowledge and successful execution of college sophomore level Music Theory and Musicianship.
Outcome 3: College sophomore level proficiency in ensemble rehearsal and performance.
Outcome 4: College sophomore level proficiency in identifying genres, styles, and periods of music through concert attendance and listening of recorded music.

## Required Courses (26 units) <br> Units

MUS 103 F Beginning Musicianship 1
MUS 104 F Intermediate Musicianship 1
MUS 106 F Introduction to Music Theory 3
MUS 107 F Harmony I 3
MUS 108 F Introduction to Music Technology 2
MUS 109 F Harmony II 3
MUS 120 F Survey of Music History 3
MUS 203 F Counterpoint or 3
MUS 205 F Pop/Commercial Music Theory 3
MUS 204 F Advanced Musicianship or 1
MUS 206 F Pop/Commercial Musicianship 1
MUSA 104 F Introduction to Concert Hour 1
MUSA 105 F Beginning Concert Hour 1
MUSA 106 F Intermediate Concert Hour 1
MUSA 107 F Advanced Concert Hour 1
MUSA 131 F Keyboard Skills I 1
MUSA 132 F Keyboard Skills II 1
Applied Music:
Select 1 unit per term for 4 terms
from the following list:

## Units

MUSA 200 F* Applied Music-Individual Private Study 1
*MUSA 200 F may be taken 4 times for credit
MUSA 201 F* Advanced Applied Music-Individual Private Study
*MUSA 201 F may be taken 2 times for credit
MUSA 210 F Advanced Voice
MUSA 220 F Classical Guitar: Renaissance to Baroque
MUSA 236 F Advanced Piano: Baroque to Classical
MUSA 240 F Advanced Strings
MUSA 250 F Advanced Woodwinds I
MUSA 260 F Advanced Brass I
MUSA 270 F Advanced Percussion I

## Performance groups:

Select 1 unit per term for 4 terms Units
MUS 260 F Guitar Ensemble 1
MUS 261 F String Ensemble 1
MUS 262 F Woodwind Ensemble 1
MUS 263 F Brass Ensemble 1
MUS 264 F Percussion Ensemble 1
MUS 265 F Piano Ensemble 1
MUS 266 F Jazz Combo 1
MUS 268 F Jazz Guitar Ensemble 1
MUS 269 F Alternative Jazz Lab Ensemble 1
MUS 270 F Electronic Music Ensemble 1
MUS 271 F Fullerton College Symphony 1
MUS 273 F Concert Band
MUS 274 F Fullerton College Symphonic Winds
MUS 275 F Pep Band
MUS 276 F Jazz Band
MUS 277 F Jazz Lab Band
MUS 281 F Concert Choir
MUS 282 F Fullerton College Master Chorale
MUS 285 F Chamber Singers
MUS 287 F Vocal Jazz Ensemble

## Restricted electives -

One of the two required (2-3 units)
Units
MUS 207 F Pop/Commercial Arranging/Composing
MUS 208 F Music Copying and Notation Software
Total Units

## Music Recording/Production Certificate <br> PROGRAM CODE: 2 C08420

The Music Recording/Production Certificate is designed as a four semester program to provide the technical skills and theoretical background for a career in the music recording/music production field. The certificate requires a total of 31-32 units of required courses and restricted electives with a minimum grade of " $C$ " in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Understand and apply signal flow of the Recording Process on a real analog recording console as well as in a DAW.
Outcome 2: Write music in a variety of musical genres and is able to record individual components of his or her compositions.

| Required Courses (25 units) |  | Units |
| :---: | :---: | :---: |
| MUS 108 F | Introduction to Music Technology | 2 |
| MUS 110 F | Electronic Music I: Beginning |  |
|  | Music Production | 3 |
| MUS 112 F | The Music Business | 2 |
| MUS 116 F | Music Appreciation or | 3 |
| MUS 119 F | History of Rock Music | 3 |
| MUS 124 F | Recording Lab I: Beginning Techniques | 3 |
| MUS 224 F | Recording Studio II: |  |
|  | Intermediate Techniques | 3 |
| MUS 226 F | Recording Studio III: Advanced Techniques | 3 |
| MUS 291 F | Electronic Music II: Intermediate |  |
|  | Music Production | 3 |
| MUS 292 F | Electronic Music III: Advanced |  |
|  | Music Production | 3 |
| Restricted Electives (6-7 units) |  | Units |
| MUS 101 F | Music Fundamentals or | 3 |
| MUS 106 F | Introduction to Music Theory | 3 |
| MUS 103 F | Beginning Musicianship and | 1 |
| MUS 107 F | Harmony I | 3 |
| MUS 125 F | Recording Techniques Workshop for Performers | 3 |
| Total Units |  | 31-32 |

## Piano Teaching Certificate <br> PROGRAM CODE: 2 C08419

The Piano Teaching Certificate is a two-semester program that is intended for anyone seeking to expand their teaching and playing skills. The certificate program is for potential piano teachers and the sequence of courses is designed to provide the technical skills, theoretical background, musical understanding and historical background needed for effective teaching. The Piano Teaching Certificate Program requires a total of 30 units of which 24 units are in required courses. MUS 021 F and MUS 022 F Piano Pedagogy must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate effective piano teaching skills.
Outcome 2: Assess proper method books and supplementary materials appropriate for individual student age and level.
Required courses (24 units) ..... Units
MUS 021 F Piano Pedagogy I ..... 3
MUS 022 F Piano Pedagogy II ..... 3
MUS 103 F Beginning Musicianship ..... 1
MUS 104 F Intermediate Musicianship ..... 1
MUS 107 F Harmony I ..... 3
MUS 109 F Harmony II ..... 3
MUS 120 F Survey of Music History ..... 3
MUSA 137 F Intermediate Piano Sight-Reading ..... 1
MUSA 200 F* Applied Music-Individual Private Study ..... 1
MUS 265 F* Piano Ensemble ..... 1
course must be taken for two semesters*
MUSA 236 F Advanced Piano: Baroque to Classical ..... 1
MUSA 237 F Advanced Piano: Romantic to Contemporary ..... 1
Restricted Electives (6 units): ..... Units
BUS 100 F Introduction to Business ..... 3
BUS 180 F Small Business Management ..... 3
CDES 115 F Introduction to Early Childhood Education Curriculum ..... 3
CDES 119 F Music Education in Early Childhood ..... 2
MUSA 136 F Beginning Piano Sight-Reading ..... 1
Total Units ..... 30

## Music Major General Requirements

As a music major, you are expected to declare a performance area (voice, piano, or other instrument), to participate in at least one large performing group each semester, to be enrolled in Concert Hour each semester, to be enrolled in music theory and musicianship each semester, and to perform for student recitals and faculty juries on your major instrument each semester unless special exemption has been allowed. In addition to studying your major instrument each semester, you are urged to develop as much facility on the piano as possible because of its importance in other areas of your musical training.

APPLIED MUSIC: Four-year colleges vary in the amount of applied music credit that may be applied to the Baccalaureate degree. Students are cautioned to check the catalog of the college they plan to attend for its specific statement on the amount of applied music credit that will count toward the degree.

## NUTRITION

## (see Foods and Nutrition)

## OFFICE TECHNOLOGY

## Legal Office Administration Associate in Science Degree <br> PROGRAM CODE: 2508392

The Legal Office Administration Associate in Science Degree is designed to prepare students for employment in a legal office, governmental agency, or private industry. This degree requires 32-34 units of which 27-28 are in required courses. An additional 5-6 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Compose, create and edit word processing documents unique to the legal environment for use as business letters, trial briefs, pleadings as well as generate templates for use in the legal office.
Outcome 2: Summarize, assess, and evaluate the roles of the legislature, courts, and administrative agencies in the legal environment.
Outcome 3: Demonstrate timely completion of all assignments, exercises and projects similar to the time constraints imposed on all attorneys and paralegals working in a legal environment.
Outcome 4: Plan and conduct effective legal research in California sources and basic federal sources, inclusive of statutes, court opinions, administrative regulations and administrative hearing opinions.

| Required Courses (24 units) |  | Units |
| :---: | :---: | :---: |
| BUS 111 F | Business Communications | 3 |
| BUS 266 F | Human Relations in Business | 3 |
| CIS 123 F | Word Processing | 3 |
| PLEG 101 F | Introduction to Paralegal Studies | 3 |
| PLEG 104 F | Introduction to Legal Research and |  |
|  | Terminology | 3 |
| PLEG 201 F | Civil Litigation I | 3 |
| PLEG 202 F | Civil Litigation II | 3 |
| PLEG 225 F | Law Office Management | 3 |
| Choose one for 3-4 units: |  | Units |
| CIS 100 F | Introduction to Personal Computers | 4 |
| CIS 102 F | Introduction to Open Source Software | 3 |
| Restricted Electives (5-6 units) |  | Units |
| BUS 290 F | Managerial Communications | 3 |
| CIS 104 F | Presentation Graphics | 3 |
| CIS 106 F | Beginning Spreadsheet (MS Excel) | 3 |
| CIS 109 F | Personal Computer Security | 2 |
| CIS 124 F | Advanced Word | 3 |
| CIS 142 F | Database I | 3 |
| CIS 150 F | Introduction to the Internet | 3 |
| PLEG 105 F | Introduction to Legal Writing | 3 |
| Total Units |  | 32-34 |

Required Courses (24 units)3
BUS 266 F Human Relations in Business ..... 3
Word Processing
3
PLEG 104 F Introduction to Legal Research andTerminology3
PLEG 201 F Civiligation
3
PLEG 225 F Law Office Management ..... 3
Choose one for 3-4 units:4
CIS 102 F Introduction to Open Source Software ..... 3
Restricted Electives (5-6 units) ..... Units
BUS 290 FPresentation Graphics3
CIS 106 F Beginning Spreadsheet (MS Excel) ..... 3
CIS 124Advanced WordCIS 150 FIntroduction to the InternetIntroduction to Legal Writing32-34

## PARALEGAL STUDIES

The Fullerton College's Paralegal Studies Program approved by the American Bar Association (ABA) offers an Associate in Science Degree and a Certificate to qualified students. The goal of the program is to educate students to become paralegals who perform effectively in a variety of legal settings and adapt to changes in the ever-evolving field of law. This program prepares the student for a career as a paralegal working under the supervision of an attorney in either the public or private sector.

The objectives of the program are as follows:

- To maintain a program that is dedicated to quality education and occupational competency for the paralegal student in the field of law;
- To ensure that students receive specific instruction and training in the skills necessary to succeed in any legal environment;
- To offer an ever-expanding curriculum which provides not only a broad understanding of the substantive law, but demonstrates and teaches the practical application of this knowledge in today's legal environment;
- To stress the importance of upholding the general principles of ethics, professional responsibility, and the prohibitions against the unauthorized practice of law;
- To periodically review and revise the curriculum in response to the recommendations of the Fullerton College Paralegal Studies' Advisory Committee, the demands of the legal community and the American Bar Association, as well as statutory provisions contained within California's Business and Professions Code;
- To provide the student with the opportunity to apply the skills and knowledge taught in the program by offering the student the ability to enroll and participate in an internship, thereby providing the student with a modicum of legal experience before entering the job market.

Students who wish to transfer course work into the Fullerton College Paralegal Studies Program from another ABA-approved program will be able to transfer in no more than six (6) units of legal specialty classes provided the course is the same as a course offered at Fullerton College and awards exactly the same amount of units. Students who wish to attain an Associate in Science Degree or a Certificate from Fullerton College's Paralegal Studies Program must complete the 24 units of required courses for the major at Fullerton College.

## Paralegal Studies Associate in Science Degree PROGRAM CODE: 2508434

Curriculum leads to the Associate in Science Degree and/ or employment in a paraprofessional capacity as an assistant to an attorney in private practice, in a governmental agency, or in private industry. This degree requires 27 units, of which 24 are in required courses; an additional 3 units must be chosen from the restrictive electives listed below. A minimum grade of "C" is required in each course taken. Paralegals may perform many tasks under the supervision of a licensed attorney including preparation of forms and pleadings, interviewing of clients, researching and writing legal documents, managing a law office, and preparing word processing forms and documents. This program is not intended to prepare students for the practice of law. The Paralegal studies program is approved by the American Bar Association (ABA).

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate ethical requirements required of a paralegal as required by state law and apply rules of professional conduct to resolve any issues.
Outcome 2: Research and perform substantive legal work under the direct supervision of an attorney in any legal environment in any state in the United States.
Outcome 3: Differentiate and describe the organization and function of the United States' Judicial, Executive and Legislative branches of government.
Outcome 4: Demonstrate sensitivity through adaptability and flexibility in working with a diverse group of people from every socioeconomic level.
Outcome 5: Use computers and other technology for document production, law office management, trial preparation, and other tasks performed by paralegals.
Required Courses: (24 units)
PLEG 101 F Introduction to Paralegal Studies ..... 3
PLEG 104 F Introduction to Legal Research and Terminology ..... 3
PLEG 105 F Introduction to Legal Writing ..... 3
PLEG 116 F Computers in the Law Office I ..... 3
PLEG 201 F Civil Litigation I ..... 3
PLEG 202 F Civil Litigation II ..... 3
PLEG 207 F Computer-Assisted Legal Research ..... 3
PLEG 216 F Computers in the Law Office II ..... 3
Restricted Electives: (3 units)
PLEG 090 F Contemporary Issues in the Law ..... 1-3
PLEG 203 F Personal Injury ..... 3
PLEG 204 F Family Law ..... 3
PLEG 205 F Probate, Wills and Trusts ..... 3
PLEG 206 F Bankruptcy Law \& Procedure ..... 3PLEG 208 F Workers' Compensation Law
3PLEG 209 F Criminal Law and Procedures
PLEG 210 F Paralegal Internship ..... 1-4
PLEG 211 F Real Property Law and Procedures ..... 3
PLEG 212 F Medical Records Review ..... 1.5
PLEG 213 F Employment \& Labor Law ..... 3
PLEG 214 F Contract Law Procedure ..... 3
PLEG 215 F Discovery in Electronic Age ..... 3
PLEG 217 F Immigration Law ..... 3
PLEG 218 F Entertainment and Sports Law ..... 3
PLEG 219 F Intellectual Property ..... 3
PLEG 220 F Elder Law ..... 1.5
PLEG 225 F Law Office Management ..... 3
Total Units ..... 27

## Paralegal Studies Certificate PROGRAM CODE: 2 C21275

The Paralegal Studies Certificate requires the completion of 30 units of which 24 are in required courses. An additional 6 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in each course taken. The Paralegal Studies Certificate will be awarded to those students possessing an Associate in Science Degree, an Associate in Arts Degree, a Bachelor's or higher degree from a regionally accredited college or university. All students with an Associate degree must have their transcripts evaluated for General Education requirements as listed in the General Education requirements for the Associate in Science Degree in Paralegal Studies. The Paralegal Studies Program is approved by the American Bar Association (ABA). This program is not intended to prepare students for the practice of law.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate ethical requirements required of a paralegal as required by state law and apply rules of professional conduct to resolve any issues.
Outcome 2: Research and perform substantive legal work under the direct supervision of an attorney in any legal environment in any state in the United States.
Outcome 3: Differentiate and describe the organization and function of the United States' Judicial, Executive and Legislative branches of government.
Outcome 4: Demonstrate sensitivity through adaptability and flexibility in working with a diverse group of people from every socioeconomic level.
Outcome 5: Use computers and other technology for document production, law office management, trial preparation, and other tasks performed by paralegals.

## Required Courses: (24 units)

PLEG 101 F Introduction to Paralegal Studies
PLEG 104 F Introduction to Legal Research
and Terminology
PLEG 105 F Introduction to Legal Writing
PLEG 116 F Computers in the Law Office I
PLEG 201 F Civil Litigation I
PLEG 202 F Civil Litigation II
PLEG 207 F Computer-Assisted Legal Research
PLEG 216 F Computers in the Law Office II

## Restricted Electives: (6 units)

## Units

PLEG 090 F Contemporary Issues in the Law
PLEG 203 F Personal Injury
PLEG 204 F
Family Law
PLEG 205 F Probate, Wills and Trusts
PLEG 206 F Bankruptcy Law \& Procedure
PLEG 208 F Workers' Compensation Law
PLEG 209 F Criminal Law and Procedures
PLEG 210 F Paralegal Internship 1-4
PLEG 211 F Real Property Law and Procedures
PLEG 212 F Medical Records Review
PLEG 213 F Employment \& Labor Law
PLEG 214 F Contract Law Procedure
PLEG 215 F Discovery in Electronic Age
PLEG 217 F Immigration Law
PLEG 218 F Entertainment and Sports Law
PLEG 219 F Intellectual Property
PLEG 220 F Elder Law
PLEG 225 F Law Office Management
Total Units

## PHILOSOPHY AND RELIGIOUS STUDIES

## Philosophy Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A32438

The Associate in Arts for Transfer Degree in Philosophy, also called the Philosophy AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in philosophy. Ed Code Section 66746-66749 states, students earning the Philosophy AA-T degree will be granted priority for admission as a Philosophy major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units, including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The study of philosophy includes: (1) the development of critical thinking and writing skills; (2) the investigation of conceptual problems encountered in the course of reflecting about experience; (3) the assessment of assumptions underlying other sciences and arts; and (4) the exploration of intellectual and cultural history from a broad perspective. The Philosophy Associate in Arts Degree for Transfer requires 18 units, of which 6 units are in required "core" courses, and the remaining 12 units are chosen from restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Identify and explain major philosophical terms and concepts.
Outcome 2: Compare and contrast the principles of at least two of the following ethical approaches: Utilitarianism, Kantian ethics, Natural law, Virtue ethics, Feminist Ethics.
Outcome 3: Evaluate patterns of deductive and inductive reasoning.
Outcome 4: Compare and contrast the philosophical systems of at least two philosophers from each of the ancient, modern, and contemporary eras.
"Core" Course: 1 course/3 units

## Units

PHIL 100 F Introduction to Philosophy 3

PHIL 100HF Honors Introduction to Philosophy
PHIL 160 F Introduction to Ethics
List A: Select 1 course ( 3 units) minimum.
Any course not selected from the Core, OR
PHIL 201 F History of Philosophy: Ancient and Medieval 3
PHIL 202 F History of Philosophy: Modern and Contemporary

## List B: Select 2 courses (6 units minimum) from the following.

Any course(s) not selected from List A, OR
HIST 110 F Western Civilization I
HIST 110HF Honors Western Civilization I
HIST 111 F Western Civilization II
HIST 111HF Honors Western Civilization II
PHIL 101 F Introduction to Religious Studies
PHIL 135 F Social and Political Philosophy
List C: Select 1 course (3 units)
Any course(s) not selected from List A or List B
Total Units

## Philosophy Associate in Arts Degree <br> PROGRAM CODE: 2A03868

The study of philosophy includes: (1) the development of critical thinking and writing skills; (2) the investigation of conceptual problems encountered in the course of reflecting about experience; (3) the assessment of assumptions underlying other sciences and arts; and (4) the exploration of intellectual and cultural history from a broad perspective. Majoring or minoring in philosophy is an excellent way of preparing for law school and other careers that involve facility in reasoning, analysis and information processing. The Philosophy Associate in Arts Degree Program requires 18 units of which 15 units are required courses. An additional 3 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify and explain major philosophical terms and concepts.
Outcome 2: Compare and contrast the principles of at least two of the following ethical approaches: Utilitarianism, Kantian ethics, Natural law, Virtue ethics, Feminist ethics.
Outcome 3: Evaluate patterns of deductive and inductive reasoning.
Outcome 4: Compare and contrast the epistemological and metaphysical systems of Plato, Aristotle, and at least one medieval philosopher.
Outcome 5: Compare and contrast the epistemological systems of Rationalism, Empiricism, Kantianism, and at least one nineteenth century and one contemporary philosopher.

## Required Courses: (15 units)

Units
PHIL 100 F Introduction to Philosophy or 3
PHIL 100HF Honors Introduction to Philosophy
PHIL 160 F Introduction to Ethics
3
PHIL 170 F Logic and Critical Thinking or
PHIL 172 F Critical Thinking/Writing
PHIL 201 F History of Philosophy: Ancient and Medieval
PHIL 202 F History of Philosophy: Modern and Contemporary

Restricted Electives: (3 units)

Units

PHIL 101 F Introduction to Religious Studies 3
PHIL 105 F World Religions 3
PHIL 135 F Social and Political Philosophy 3
PHIL 195 F Women's Issues in Philosophy 3
PHIL 200 F Introduction to Christianity 3
PHIL 210 F Introduction to Judaism 3
PHIL 225 F The American Religious Experience 3
PHIL 220 F The Holocaust 3
PHIL 250 F The Religion of Islam 3
PHIL 270 F Introduction to Asian Religions 3
Total Units

## Religious Studies Associate in Arts Degree <br> PROGRAM CODE: $2 A 03869$

The Religious Studies Associate in Arts Degree is designed for those who want a humanities undergraduate background focusing on religion as a preparation for further study in such fields as education, law, social work, counseling and government service; wish to pursue further studies in religion with the aim of teaching and/or doing research in the subject, or are considering a career in various religious ministries or in religious education. Religious Studies examines Hinduism, Buddhism, Sikhism, Judaism, Christianity, Islam and other less familiar traditions. Studying religious traditions develops habits of mind that are very important for life in our multicultural society. Familiarity with the world's religions is necessary for an understanding of church-state issues in America and of geo-political conflicts in South Asia, the Middle East and elsewhere. The Religious Studies Associate in Arts Degree Program requires 18 units of which 12 are in required courses. An additional 6 units must be chosen from restricted elective courses.

## Program Level Student Learning Outcomes

Outcome 1: Compare and contrast at least two methods used to study religion.
Outcome 2: Compare and contrast at least two of the major religious traditions, focusing on an ethical aspect and on an aspect of worship.
Outcome 3: Identify and explain at least two major theological issues dividing Protestantism, Roman Catholicism and Eastern Orthodoxy.
Outcome 4: Identify and explain at least two aspects of the world-views held by at least two of the major Asian religious traditions.

## Required Courses (12 units)

(Honors versions of any required course and/or restricted elective course are considered equivalent courses)

Units
PHIL 101 F Introduction to Religious Studies
PHIL 105 F World Religions or
PHIL 105HF Honors World Religions
PHIL 200 F Introduction to Christianity
PHIL 270 F Introduction to Asian Religions

| Restricted Electives (6 units) | Units |  |
| :--- | :--- | ---: |
| ENGL 243 F | Folklore and Mythology or | 3 |
| ENGL 243HF | Honors Folklore and Mythology | 3 |
| HIST 112 F | World Civilizations I or | 3 |
| HIST 112 HF | Honors World Civilizations I | 3 |
| HIST 113 F | World Civilizations II or | 3 |
| HIST 113HF | Honors World Civilizations II | 3 |
| HIST 154 F | Ancient Egypt | 3 |
| HIST 160 F | Asian Civilizations I | 3 |
| HIST 165 F | Introduction to the Middle East or | 3 |
| HIST 165HF | Honors Introduction to the Middle East | 3 |
| PHIL 100 F | Introduction to Philosophy or | 3 |
| PHIL 100HF | Honors Introduction to Philosophy | 3 |
| PHIL 160 F | Introduction to Ethics | 3 |
| PHIL 170 F | Logic and Critical Thinking | 3 |
| PHIL 172 F | Critical Thinking/Writing | 3 |
| PHIL 201 F | History of Philosophy: Ancient and Medieval | 3 |
| PHIL 202 F | History of Philosophy: Modern and |  |
|  | Contemporary | 3 |
| PHIL 210 F | Introduction to Judaism | 3 |
| PHIL 225 F | The American Religious Experience | 3 |
| PHIL 220 F | The Holocaust | 3 |
| PHIL 250 F | The Religion of Islam | 3 |
| Total Units |  |  |

## PHOTOGRAPHY

## Photography Associate In Arts Degree

PROGRAM CODE: 2A19452
Curriculum leads to the Associate in Arts Degree. Preparing students for transfer to a four year degree program. This degree requires a total of 18 units. The degree provides a sound foundation for students interested in photography and could lead to entry-level employment with photo studios, public relation firms, advertising agencies, service bureaus, print shops, and entertainment industry.

## Program Level Student Learning Outcomes

Outcome 1: Qualified for entry-level employment and/or transfer to a four year university.

## Required Courses (9 units)

PHOT 101 F Introduction to Photography
PHOT 221 F Studio Specialties I
PHOT 290 F Internship in Photography I or
PHOT 291 F Internship in Photography II
(must enroll for 3 units in one internship course, or in both internship courses for 2 or more units each to meet requirement)
and one course ( 3 units) from the following: Units
PHOT 111 F Introduction to Photography from Analog to Digital or
PHOT 112 F Introduction to Professional Digital Photography
and one course ( 3 units) from the following: ..... Units
PHOT 103 F Intermediate Photography or ..... 3
PHOT 216 F Advanced Digital Photography ..... 3
and one course ( 3 units) from the following: Units
PHOT 109 F Portrait Photography or ..... 3
PHOT 114 F Professional Portrait Photography I ..... 3
Total Units18
Professional Photography Certificate
PROGRAM CODE: 2C19453
The Photography Certificate program requires the completionof 18 units. All courses must be completed with a grade of " $C$ "or better. This certificate is designed to prepare the student forentry-level occupational positions in photo studios, public relationfirms, entertainment industry, service bureaus, print shops, andmarketing firms.

## Program Level Student Learning Outcomes

Outcome 1: Be able to produce a variety of lighting diagrams necessary to be qualified for entry-level employment.

| Required Courses (9 units) | Units |
| :---: | :---: |
| PHOT 101 F Introduction to Photography | 3 |
| PHOT 221 F Studio Specialties I | 3 |
| PHOT 290 F Internship in Photography I or | 2-4 |
| PHOT 291 F Internship in Photography II | 2-4 |
| (must enroll for 3 units in one internship course, or in both internship courses for 2 or more units each to meet requirement) |  |
| and one course (3 units) from the following: | Units |
| PHOT 111 F Introduction to Photography from |  |
| Analog to Digital or | 3 |
| PHOT 112 F Introduction to Professional Digital Photography | 3 |
| and one course (3 units) from the following: | Units |
| PHOT 103 F Intermediate Photography or | 3 |
| PHOT 216 F Advanced Digital Photography | 3 |
| and one course ( 3 units) from the following: | Units |
| PHOT 109 F Portrait Photography or | 3 |
| PHOT 114 F Professional Portrait Photography I or | 3 |
| PHOT 104 F Wedding Photography | 3 |
| Total Units | 18 |

## PHYSICAL EDUCATION

## Kinesiology Associate in Arts <br> Degree for Transfer <br> PROGRAM CODE: 2A31581

The Associate in Arts in Kinesiology for Transfer (AA-T), also called the Kinesiology AA-T Degree, prepares students to transfer to CSU campuses that offer a bachelor's degree in Kinesiology. Ed Code Section 66746-66749 states that students earning the Kinesiology AA-T Degree will be granted priority for admission as a Kinesiology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 21-24 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade "C" or better in all major coursework. There are no additional graduation requirements. Students with a degree in Kinesiology may pursue careers in a variety of health science professions including physical training, physical therapy, fitness instruction, coaching and athletics. The completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. The Kinesiology AA-T Degree requires a total of 21-24 units in required courses and restricted electives from the categories below as indicated.

## Program Level Student Learning Outcomes

Outcome 1: Transfer to CSU campuses that offer a bachelor's degree in Kinesiology. The degree will provide the knowledge and experience necessary to continue their education towards a bachelor degree.
Outcome 2: Understand the relation of the kinesiology and physiology of the anatomy as it relates to movement.

## Required Courses (15 Units)

WELL 265 F Kinesiology
ANAT 231 F General Human Anatomy
ANAT 240 F Human Physiology

## Movement Based Courses

Take one unit from any three of the following five categories: Dance, Aquatics/Combatives, Fitness, Team Sports, Individual Sports

## Aquatics

PE 134 F Swimming 1
PE 149 F Swim for Fitness 1
PE 151 F Aqua Aerobics 1

## Combative

PE 103 F Aikido
PE $112 \mathrm{~F} \quad$ Fencing

## Fitness

PE 102 F Yoga 1
PE 114 F Cardiovascular Conditioning 1
PE 129 F Step Aerobics 1
PE 148 F Non-Impact Aerobics 1
PE 182 F Body Building, Development and
PE 193 F Weight Training/Weight Lifting 1
Dance
DANC 112 F Jazz II

## Individual Sports

PE 117 F Gymnastics 1
PE 127 F Racquetball-Indoors 1
PE 142 F Mountaineering/Rock Climbing 1

## Restricted Electives

Select courses (minimum 6 units)
from the following (6-9 units total) Units
MATH 120 F Introductory Probability and Statistics or 4

| SOSC 120 F | Introduction to Probability and <br>  <br> Statistics or |
| :--- | :--- |

PSY 161 F $\quad \begin{aligned} & \text { Elementary Statistics for Behavioral } \\ & \text { Science }\end{aligned}$
BIOL 102 F Human Biology and 3
BIOL 102LF Human Biology Laboratory 1
CHEM 101 F Introduction to Chemistry or 5
CHEM 111AF General Chemistry I 5
PHYS 205 F Physics for the Life Sciences I or 4
PHYS 210 F Physics with Calculus for the Life Sciences I 4
PE 235 F First Aid, CPR, \& Safety Education 3
Total Units 21-24

## Physical Education Associate in Arts Degree

PROGRAM CODE: 2A17369
Curriculum leads to the Physical Education Associate in Arts
Degree. Specifically, it is designed for student who will transfer to a four-year institution, obtaining a bachelor's degree through a California State University program. Course and degree requirements vary at respective universities. It is important to consult with a Fullerton College Counselor and respective university transfer representatives to confer program requirements and transferable work. The Program requires a total of 18-20 units of which 16-17 units are in required courses. An additional 2-3 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Identify concepts and theories of sport exercise psychology that can be applied, in coaching and teaching.
Outcome 2: Identify and apply four related fields of Physical Education: Fitness/Wellness, Teaching/Coaching, Sport Careers, Sport/Exercise.
Outcome 3: Identify athletic injuries and demonstrate a physical remedy for each.

## Required courses: (16-17 units)

## Units

PE 235 F* First Aid, CPR, and Safety Education 3
PE 236 F Prevention and Care of Athlete Injuries 3
PE 248 F Psychology of Sport
PE 252 F Introduction to Kinesiology
ANAT 231 F General Human Anatomy or
ANAT 240 F Human Physiology
*American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 3 units from restricted electives.

## Restricted Electives: (2-3 units) <br> Units <br> 2-3 Different Activity Courses <br> Total Units <br> 18-20

## Physical Education - Fitness <br> Associate in Science Degree <br> PROGRAM CODE: 2503832

The Physical Education - Fitness Associate in Science Degree is designed to educate students that are entering into the fitness industry or those that are interested in coaching, exercise training and fitness training. This program requires a total of 19 units of which 14 units are in required courses. An additional 5 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Design their own exercise program.
Outcome 2: Identify athletic injuries and demonstrate the physical remedy for each.
Outcome 3: Have a working knowledge of how the body's metabolism is affected by muscle, cardio respiratory, and functional exercise on the body.

## Required Courses: (14 Units)

## Units

BIOL 102 F Human Biology and
BIOL 102LF Human Biology Laboratory
PE 154 F Fitness Testing with Exercise Prescription
2
PE 235 F* First Aid, CPR, and Safety Education 3
PE 248 F Psychology of Sport
3
WELL 200 F Applied Exercise Physiology
2
*American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 3 units from restricted electives.

## Restricted Electives: (5 Units)

ACCT 001 F Accounting for Small Business 3
FOOD 060 F Foods for Fitness 2
PE 150 F Rhythmic Aerobic Exercise
PE 182 F Body Building, Development \& Weightlifting
PE 236 F Prevention and Care of Athletic Injuries 3
WELL 020 F Fitness Assessment 0.5
WELL 230 F The Body-Mind Connection
Total Units

## Aquatic Specialist Certificate

PROGRAM CODE: 2 C10615
The Aquatic Specialist Certificate Program requires the completion of 18-21 units, 17-18 of which are in required courses. An additional 1-3 units must be chosen from restricted electives below; minimum grade of "C" required.

## Program Level Student Learning Outcomes

Outcome 1: Define the mechanical principles used for the successful development of aquatic techniques.
Outcome 2: Distinguish the basic water safety concepts.

## Required Courses (17-18 units) <br> Units

PE 235 F* First Aid, CPR, and Safety Education 3
PE 236 F Prevention and Care of Athlete Injuries 3
PE 238 F Water Safety Instruction 3
PE 239 F Open Water Scuba Diving 3
PE 245 F Lifesaving, Basic Rescue and CPR 2
PE 199 F Physical Education: Independent Study 1-2
PE 154 F Fitness Test W/Exercise Prescription 2
*American Red Cross certification can be substituted at the discretion of the division. Student must take an additional 3 units from restricted electives.

| Restricted | Elective (1-3 unit) | Units |
| :--- | :--- | ---: |
| PE 134 F | Swimming | 1 |
| PE 149 F | Swim for Fitness | 1 |
| PE 151 F | Aqua Aerobics | 1 |
| PE 165 F | Lifetime Fitness | 1 |
| PE 192 F | Water Polo | 1 |
| PE 248 F | Psychology of Sport | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 8 - 2 1}$ |

## Athletic Coach Certificate <br> PROGRAM CODE: 2 C10616

The Athletic Coach Certificate Program is designed to educate and prepare students to become Certified Athletic Coaches in the recreational and competitive sports industry. Upon successful completion, students will earn a certificate and be more qualified to coach interscholastically and within sport organizations and private business. A final interview will conclude completion of the certificate. This certificate requires the completion of 18-21 units, of which 15-17 are in required courses. An additional 3-4 units must be chosen from the restricted electives shown below.

## Program Level Student Learning Outcomes

Outcome 1: Formulate a season plan to the level of the participants
Outcome 2: Implement a personal philosophy conducive of the development of the participants

## Required Courses (15-17 units)

## Units

PE 236 F Prevention and Care of Athletic Injuries
3
PE 244 F Techniques and Principles of Coaching
PE 247 F Sports Management
PE 248 F Psychology of Sport
PE 245 F * Lifesaving, Basic Rescue and CPR or 2
PE 235 F * First Aid, CPR, and Safety Education
3
PE 199 F Physical Education Independent Study 1-2
*American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 2-3 units from restricted electives.

## Restricted Electives (3-4 units)

## Units

## PE 202 F Baseball

 2PE 203 F Intercollegiate Basketball - Men 1
PE 204 F Intercollegiate Basketball - Women 1
PE 205 F Cross Country - Men \& Women 2
PE 207 F Football 2
PE 208 F Intercollegiate Golf - Women
PE 209 F Intercollegiate Soccer - Men and Women
PE 210 F Intercollegiate Softball - Women
PE 211 F Swimming - Men
PE 212 F Swimming - Women
PE 214 F Intercollegiate Tennis
PE 215 F Track - Men/Women
PE 217 F Intercollegiate Sand Volleyball-Women
PE 218 F Intercollegiate Volleyball - Women
PE 219 F Intercollegiate Water Polo
PE 280 F Professional Activities-Theory of Baseball
PE 281 F Professional Activity: Theory of Basketball
PE 282 F Theory of Coaching Softball
PE 283 F Professional Activities/Theory of Football
PE 284 F Theory of Coaching Soccer
PE 285 F Professional Activities - Theory of Volleyball
PE 240 F Sports Officiating for Men
PE 250 F Sports and Society
PE 252 F Introduction to Kinesiology
PE 270 F Exercise Nutrition
PE 154 F Fitness Testing with Exercise Prescription
Total Units

## Personal Trainer Certificate

PROGRAM CODE: 2 C10617
The Personal Trainer Certification Program requires a total of 23-27 units of which 19-23 units are in required courses. An additional 4 units must be chosen from the restricted units listed below.

## Program Level Student Learning Outcomes

Outcome 1: Have the information, training and practical skills to qualify for work as a Personal Trainer.
Outcome 2: Design appropriate exercise programming as measured by ability to following guidelines and recommendation for scientific exercise programming during internship.

| Required Courses: (19-23 units) | Units |  |
| :--- | :--- | ---: |
| ANAT 231 F | General Human Anatomy or | 4 |
| BIOL 102 F | Human Biology and | 3 |
| BIOL 102LF | Human Biology Laboratory | 1 |
| NUTR 210 F | Human Nutrition | 3 |
| PE 154 F | Fitness Test with Exercise Prescription | 2 |
| PE 235 F* | First Aid, CPR, \& Safety Education | 3 |
| WELL 119 F | Applied Biomechanics | 2 |
| WELL 200 F | Applied Exercise Physiology | 2 |
| WELL 221 F | Personal Training Internship | 2 |

*American Red Cross certification can be substituted at the discretion of the Division. Students must take an additional 3 units from restricted electives.

## Restricted Electives: (4 units)

## Units

PE 152 F Fitness Training Lab (Circuit) .5-2
PE 159 F Strength Training-Olympic Weights .5-2
PE 165 F Lifetime Fitness
PE 266 F Physical Fitness As Lifelong Concept 2
WELL 230 F The Body-Mind Connection 3
Total Units

## Pilates Certificate

## PROGRAM CODE: 2 C31128

The Pilates Program requires 18 units. It is designed to educate and prepare students to become Certificated Pilates Instructors in the health and wellness industry. Upon successful completion, students will earn a certificate and be qualified to teach matwork and exercises utilizing Pilates equipment, including Reformer, Cadillac, Spine Corrector and Chair at facilities which offer Pilates. Students must present current CPR and First Aid cards to receive certificate.

## Program Level Student Learning Outcomes

Outcome 1: Identify Pilates and Movement Principles, major musculature and core muscles.
Outcome 2: Identify safe practices that relate to Pilates exercises.
Outcome 3: Conduct interviews and make assessments with clients.

## Required Courses (18 units)

Units
PE 223 F Pilates Mat I
PE 226 F Pilates Apparatus 2
PE 227 F Effective Teaching Methods for Pilates 2
PE 228 F Pilates Internship
PE 229 F Pilates Clinic 2

PE 236 F Prevention and Care of Athletic Injuries 2

PE 271 F Beginning/Intermediate Reformer
WELL 265 F Kinesiology
PE 224 F Pilates Mat II
Total Units

## Therapeutic and Sports Massage Therapist Level I Certificate <br> PROGRAM CODE: 2C15762

The Therapeutic and Sports Massage Therapist Level I Certificate Program requires a total of 34 units (792 hours) of required courses. This program prepares students with the knowledge, skills, and abilities necessary for entry-level massage therapist positions. All classes must be completed with a "C" or better. Students must present current CPR and First Aid cards to receive certificate.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate knowledge of the various systems of the body and pathologies of these systems that can contraindicate or benefit from massage.
Outcome 2: Use the results of health intake forms and physical assessments to formulate and administer effective individualized massage treatments.

## Required Courses (34 Units)

## Units

These courses must be taken at Fullerton College
BIOL 102 F Human Biology
BIOL 102LF Human Biology Laboratory
WELL 110 F Pathology: The Massage Connection 3
WELL 230 F The Body-Mind Connection 3
WELL 232 F Basic Introduction to Massage 4
WELL 233 F Intermediate Massage 3
WELL 234 F Advanced Massage 3
WELL 236 F Sports Massage
3
WELL 240 F Massage and Bodywork Skills Lab 2
WELL 250 F Clinical Massage and Bodywork 2
WELL 265 F Kinesiology 3
WELL 270 F Sports Internship 2
WELL 290 F Adaptive Therapeutic Massage and Bodywork
Total Units

## PHYSICS

## Physics Associate in Science Degree for Transfer <br> PROGRAM CODE: 2531521

The Associate in Science in Physics for Transfer, also called the Physics AS-T Degree, prepares students to transfer to fouryear universities that offer bachelor's degrees in physics. A student earning the Physics AS-T Degree will be granted priority for admission as a physics major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU-transferable units including completion of CSU GE or IGETC, 12 units in physics, and 16 units in mathematics with a cumulative GPA of 2.0 or better. Title V requires that students earn a grade of " C " or better in all major coursework. There are no additional graduation requirements. The main purpose of an AS-T degree in physics is to provide the lower-division coursework needed in order to continue in a bach-elor's-degree program; however, the AS-T also provides valuable quantitative and problem-solving skills that are in demand by employers hiring, e.g., lab technicians, or in a variety of fields such as manufacturing and education. Of people who obtain a terminal bachelor's degree in physics, about half work in industry, in fields such as aerospace, military, software, and electronics. Most of the other half work either as high school teachers or as lab technicians at universities or government-funded laboratories. PhD's in physics are qualified for teaching at the university level and for scientific research, as well as for higher-level jobs in the same areas as those with bachelor's degrees. The Physics AS-T Degree requires a total of 28 units of required courses as indicated below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore topics in physics.
Outcome 2: Demonstrate the ability to apply physics concepts to solve problems.

## Required Courses <br> Units

PHYS 221 F General Physics I 4
PHYS 222 F General Physics II 4
PHYS 223 F General Physics III 4
MATH 150AF Calculus I 4
MATH 150BF Calculus II 4
MATH 250AF Multivariable Calculus 4
MATH 250BF Linear Algebra and Differential Equations 4
Total Units 28

## POLITICAL SCIENCE

## Political Science Associate in Arts <br> Degree for Transfer <br> PROGRAM CODE: 2A31523

The Associate in Arts Degree in Political Science for Transfer, also called the Political Science AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Political Science. Ed Code Section 66746-66749 states that students earning the Political Science AA-T Degree will be granted priority for admission as a Political Science major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Political Science is the scientific study of government. As such, it encompasses a wide range of interdisciplinary subjects, including economics, history, law, and philosophy. One major concern of political science is educating each generation to how democracy works, what are its benefits relative to other governmental systems. Lacking such knowledge can threaten our very existence since democracy is dependent upon a well-informed and civic-minded citizenry. This degree is an excellent general preparation for careers in conflict resolution, criminal justice, diplomacy, education, elections, journalism, the practice of law, public administration and public policy, public service, and research. The Political Science AA-T Degree requires a total of 18-19 units of required courses and restricted electives. A minimum grade of " $C$ " is required in all courses

## Program Level Student Learning Outcomes

Outcome 1: Describe the major theories and philosophical principles that were applied to establish the American political system, e.g., federalism, confederation, and states' rights.

Outcome 2: Identify some of the theories and philosophical principles that were used to establish political systems, i.e., liberalism, conservatism, fascism, communism.
Outcome 3: Differentiate among the different forms of government, i.e., parliamentary, federalism, one-party rule.
Outcome 4: Identify some of the critical periods in the evolution of international relations. Such theories and concepts will also include "balance-of-power," "bipolar versus multipolar world," and the "realist school" versus the "idealist school."
Required Core: 3 units

Units

POSC 100 F American Government or 3

POSC 100HF Honors American Government
3

| List A (select three): 9-10 units | Units |  |
| :--- | :--- | ---: |
| POSC 120 F | Introduction to Political Theory | 3 |
| POSC 200 F | Introduction to the Study of Politics | 3 |
| POSC 215 F | Comparative Politics | 3 |
| POSC 230 F | Introduction to International Relations | 3 |
| SOSC 120 F | Introduction to Probability and Statistics | 4 |
|  |  |  |
| List B (select two): 6 units | Units |  |
| POSC 110 F | Contemporary American Politics or | 3 |
| POSC 110HF | Honors Contemporary American Politics | 3 |
| POSC 150 F | California Government and Politics | 3 |
| POSC 216 F | Government and Politics of the |  |
|  | Middle East | 3 |
| POSC 275 F | Introduction to Public Law | 3 |
| Total Units |  | $\mathbf{1 8 - 1 9}$ |

## Political Science Associate in Arts Degree PROGRAM CODE: 2A03885

The Political Science Associate in Arts Degree program requires a total of 18-19 units of which 12 units are in required courses. An additional 6-7 units must be chosen from restricted elective courses. This degree is designed to prepare students to acquire basic historical, constitutional, theoretical, governmental knowledge and academic skills both to transfer to a four year institution and to understand the causes of past and present social and political events.

## Program Level Student Learning Outcomes

Outcome 1: Describe the major theories and philosophical principles that were applied to establish the American political system, e.g., federalism, confederation, and states' rights.

Outcome 2: Identify some of the theories and philosophical principles that were used to establish political systems, i.e., liberalism, conservatism, fascism, communism.
Outcome 3: Differentiate among the different forms of government, i.e., parliamentary, federalism, one-party rule.
Outcome 4: Identify some of the critical periods in the evolution of international relations. Such theories and concepts will also include "balance-of-power," "bipolar versus multipolar world," and the "realist school" versus the "idealist school."
Required Courses (12 units)
Required Course - 3 Units
(Honors versions of any required course equivalent courses)Units
POSC 100 F American Government
Category A - 6 Units from the following:
POSC 110 F Contemporary American Politics
POSC 120 F Introduction to Political Theory
POSC 150 F California Government and PoliticsPOSC 275 F Introduction to Public Law
Category B - 3 Units from the following: ..... Units
POSC 200 F Introduction to the Study of PoliticsPOSC 215 F Comparative Politics3
POSC 216 F Government and Politics of the Middle East3
POSC 230 F Introduction to International Relations ..... 3
Restricted Electives (6-7 units)
Select two of the following categories andchoose one course from each category:
Units
Category A
ETHS 101 FETHS 130 FETHS 141 FHIST 270 F Women in United States History
SOC 225 FAmerican Ethnic Studies43SOC 225 FCategory B
Units
HIST 111 FHIST 113 F World Civilizations II
HIST 127 F Survey of American History
HIST 152 FHIST 161 FHIST 170 FHIST 171 F History of the United States II
Category CANTH 102 FGEOG 100 FGEOG 160 FPOSC 180 FCultural AnthropologyGlobal GeographyCultural GeographyCapital Field Trip: Sacramento Seminar
Category DECON 102 FPrinciples of Economics-Macro
Units
PHIL 160 F
Introduction to EthicsTotal Units

## PRE-NURSING

## Pre-Nursing Associate in Arts Degree <br> PROGRAM CODE: 2A18800

This Associate in Sciences Degree is designed to give students the necessary background needed to enter the field of nursing. This degree prepares students for further study toward an Associate's or Bachelor's Degree in Nursing. 18-19 units are required from the course list below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of how the scientific method is used to explore anatomy, physiology, and microbiology.
Outcome 2: Demonstrate safe and proficient use of laboratory equipment and techniques including microscopes, dissection, aseptic handling of microorganisms, basic biochemical testing protocols, etc.
Outcome 3: Distinguish between normal and pathological phenomena.
Required Courses (18-19 units) ..... Units
ANAT 231 F General Human Anatomy ..... 4
ANAT 240 F Human Physiology ..... 5
CHEM 101 F Chemistry for Allied Health Science ..... 5
MICR 220 F Medical Microbiology or ..... 4
MICR 262 F General Microbiology ..... 5
Total Units ..... 18-19
PRINTING TECHNOLOGY
Printing Technology Associate in Science Degree
PROGRAM CODE: 2503837

Curriculum leads to the Printing Technology Associate in Science Degree and attainment of the skills necessary for employment in the printing industry. This major requires 24 units in Printing Technology. This degree program provides the skills needed to enter the printing industry at entry level and teaches skills in digital imaging systems, offset lithographic presswork, prepress for offset and flexography, screen printing, flexographic presswork and applications of graphic design.

## Program Level Student Learning Outcomes

Outcome 1: Produce a four-color poster with proper registration and color densities to industry standards with a multicolor sheet-fed offset printing press.
Outcome 2: View printed samples and identify printing defects.
Complete 24 units from the following list: Units
PRNT 973 F Advanced Offset Presswork ..... 6
PRNT 085 F Introduction to Flexography ..... 4
PRNT 086 F Advanced Flexography ..... 4
PRNT 101 F Introduction to Printing ..... 3
PRNT 161 F Sheetfed Offset Presswork ..... 4
PRNT 162 F Intermediate Sheetfed Offset Presswork4
PRNT 963 F Advanced Sheetfed Offset Presswork ..... 4
PRNT 070 F Quick Print \& In-Plant Graphics ..... 2
PRNT 072AF Photo-Silk Screen ..... 2
PRNT 072BF Intermediate Photo-Silk Screen ..... 2
PRNT 072CF Advanced Photo-Silk Screen ..... 2
PRNT 171 F Offset Presswork ..... 6
PRNT 172 F Intermediate Offset Presswork ..... 6
PRNT 075 F Electronic Prepress I ..... 6
Total Units24

## Advanced Sheetfed Offset Presswork Certificate PROGRAM CODE: 2C10619

The Advanced Sheetfed Offset Presswork Certificate Program requires completion of 22 units of which 12 units are in required courses. An additional 10-12 units must be chosen from the restricted electives listed below. A minimum grade of " C " is required in each course taken. This certificate provides the skills needed to operate large offset presses and enter the commercial printing industry.

## Program Level Student Learning Outcomes

Outcome 1: Print a single color printed sample, determining proper corrective actions to produce a sample free of printing defects using the offset printing press.
Outcome 2: Determine proper paper selection for a process printing sample.

## Required Courses (12 units) <br> There are two options for completion of required courses. Choose Block A or Block B below.

Units

## Block A:

PRNT 161 F
PRNT 162 F
Sheetfed Offset Presswork
PRNT 963 F
Intermediate Sheetfed Offset Presswork 4

## Block B:

PRNT 171 F
PRNT 172 F
Offset Presswork

## Restricted Electives (10-12 units)

PRNT 070 F Quick Print \& In-Plant Graphics
2
PRNT 075 F Electronic Prepress I
6
PRNT 090 F Printing Skills Lab .5-6
PRNT 101 F Introduction to Printing 3
PRNT 973 F Advanced Offset Presswork
Total Units
22-24

## Customer Service Training Skills Certificate <br> PROGRAM CODE: 2 C00048

The Customer Service Training Skills Certificate requires a total of 15 units in required courses. This certificate provides the skills needed to understand and communicate with the commercial printing customers. These skills will provide students with the opportunity to enter the commercial printing industry as a customer service representative. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Produce a two-color brochure with proper registration and color balance with a sheet-fed offset printing press.
Outcome 2: Match colors on press using a PMS (pantone matching system) sample booklet.

| Required Courses - 15 units. | Units |  |
| :--- | :--- | ---: |
| PRNT 101 F | Introduction to Printing | 3 |
| BUS 111 F | Business Communications | 3 |
| BUS 151 F | Business Mathematics | 3 |
| ART 140 F | Introduction to Advertising and |  |
|  | Graphic Design | 3 |
| DART 100 F | Introduction to Digital Art | $\mathbf{3}$ |
| Total Units |  | $\mathbf{1 5}$ |

## Electronic Imaging Certificate <br> PROGRAM CODE: 2 C10618

The Electronic Imaging Certificate Program requires completion of 20 units of which 10 units are in required course work. An additional 10 units must be chosen from the restricted electives listed below with a minimum grade of "C" in each course. This certificate provides students with practical knowledge of the electronic imaging section of the printing industry.

## Program Level Student Learning Outcomes

Outcome 1: Design and output a multi-color flyer using In-Design page layout software.
Outcome 2: Design and produce a process color poster.
Required Courses (10 units) Units
PRNT 152 F Introduction to Electronic Prepress 4
PRNT 075 F Electronic Prepress I 6
Restricted Electives (10 units) Units
PRNT 085 F Introduction to Flexography 4
PRNT 086 F Advanced Flexography 4
PRNT 090 F Printing Skills Lab
DEGREES \& CERTIFICATES

## Flexography Skills Certificate

PROGRAM CODE: 2C00055
The Flexography Certificate provides the skills needed to operate a flexographic printing press and enter the commercial flexographic printing industry. This certificate requires completion of 11 units of required courses. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Design and print single color labels using page layout software, plate maker and a Mark Andy 830 flexographic printing press.
Outcome 2: Design and print multi-color labels using illustrator software, Backstage Pilot workflow software, digital plate material and a Mark Andy 2200 flexographic printing press.

| Required Courses (11 units) | Units |  |
| :--- | :--- | ---: |
| PRNT 101 F | Introduction to Printing | 3 |
| PRNT 085 F | Introduction to Flexography | 4 |
| PRNT 086 F | Advanced Flexography | 4 |
| Total Units |  | $\mathbf{1 1}$ |

## Graphic Communications Skills Certificate PROGRAM CODE: 2 C00049

The Graphic Communications Certificate Program requires a total of 15 units in required courses. This certificate provides the skills needed to enter the graphic communications industry. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Identify various printing processes.
Outcome 2: Identify cross media platforms.

## Required Courses (15 units)

Units
ART 140 F Introduction to Advertising and Graphic Design
DART 100 F Introduction to Digital Art 3
PRNT 101 F Introduction to Printing 3
BUS 111 F Business Communications
BUS 151 F Business Mathematics
Total Units

## Offset Duplicator Training Skills Certificate PROGRAM CODE: 2 C00050

The Offset Duplicator Training Certificate requires a total of 8 units of required coursework. This certificate provides the skills needed to operate an offset duplicator and enter the commercial printing industry. A minimum grade of " $C$ " is required in each course taken.

## Program Level Student Learning Outcomes

Outcome 1: Produce a single color notepad assignment printed with proper image location, registration, color density and consistency.
Outcome 2: Evaluate printed samples for print quality, identify print defects and determine corrective actions.

| Required Courses (8 units) | Units |  |
| :--- | :--- | ---: |
| PRNT 101 F | Introduction to Printing | 3 |
| PRNT 070 F | Quick Print \& In-Plant Graphics | 2 |
| BUS 110 F | Business English | 3 |
| Total Units |  | $\mathbf{8}$ |

## Printing Technology (General) Certificate

PROGRAM CODE: 2 C21269
The General Printing Technology Certificate Program requires the completion of 27 units of which 19 are in required courses. An additional 8 units must be chosen from the restricted electives listed below with a grade of "C" in each course. This certificate provides the student with a basic overall understanding of the printing industry and its allied fields.

## Program Level Student Learning Outcomes

Outcome 1: Operate various printing machines.
Outcome 2: Identify terminology used in printing industry.
Required Courses (19 units) ..... Units
PRNT 085 F Introduction to Flexography ..... 4
PRNT 072AF Screen Printing I ..... 2
PRNT 171 F Offset Presswork ..... 7
PRNT 075 F Electronic Prepress I ..... 6
Restricted Electives (8 units) ..... UnitsAny classes offered by the Printing Departmentcan be used for restrictive electives.
Total Units27

## Quick Print/In-Plant Graphics Certificate <br> PROGRAM CODE: 2C10620

The Quick Print/In-Plant Graphics Certificate requires the completion of 16 units of which 2 units are in required courses. An additional 14 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken. This certificate provides the skills needed to enter the small commercial printing industry.

## Program Level Student Learning Outcomes

Outcome 1: View printed samples and identify printing defects. Outcome 2: Operate an offset duplicator.

## Required Course (2 units) Units

PRNT 070 F Quick Print and In-Plant Graphics

## Restricted Electives (14 units)

## Units

PRNT 085 F
Introduction to Flexography
PRNT 090 F Printing Skills Lab 2
PRNT 101 F Introduction to Printing
3
PRNT 161 F Sheetfed Offset Presswork
PRNT 171 F Offset Presswork
PRNT 075 F Electronic Prepress I
6

Total Units

## Screen Printing Certificate <br> PROGRAM CODE: 2 C10621

The Screen Printing Certificate Program requires the completion of 12 required units. An additional 12 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in each course taken. This certificate provides the skills needed to enter the screen-printing industry.

## Program Level Student Learning Outcomes

Outcome 1: Produce a single color t-shirt assignment printed with proper image location and ink consistency.
Outcome 2: Demonstrate the process of producing an image on a screen.

Required Courses (12 units) Units
PRNT 072AF Screen Printing I 2
PRNT 072BF Screen Printing II 2
PRNT 072CF Screen Printing III 2
PRNT 075 F Electronic Prepress 6

## Restricted Electives (12 units)

PRNT 070 F Quick Print \& In-Plant Graphics
PRNT 101 F Introduction to Printing 2
$-3$
PRNT 152 F Introduction to Electronic Prepress
PRNT 161 F Sheetfed Offset Presswork 4
PRNT 171 F Offset Presswork
Total Units

## PSYCHOLOGY

## Psychology Associate in Arts Degree for Transfer

PROGRAM CODE: 2A30885
The Associate in Arts Degree in Psychology for Transfer, also called the Psychology AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in psychology. Students earning the Psychology AA-T degree will be granted priority for admission as a Psychology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 20-22 units in the major with a cumulative GPA of 2.0 or better. Title $V$ requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. The scientific field of psychology examines the psychological, cognitive, biological, social and cultural factors that describe, explain and influence behavior. The Psychology AA-T Degree provides students with a background that has both breadth and depth, and focuses on the science, theories and applications of psychology, with an emphasis on CSU transfer requirements. This degree will provide students with an understanding of psychology that prepares him/ her for transfer to CSU and a future degree in psychology, a career outside the field of psychology, and an understanding of behavior that is beneficial to one's personal life and professional career outside psychology. The Psychology AA-T Degree requires a total of 20-22 units of required courses and restricted electives from the categories below as indicated.

## Program Level Student Learning Outcomes

Outcome 1: Identify why psychology is considered a science.
Outcome 2: Identify appropriate statistical tests to be conducted on data for specific types of research studies.
Outcome 3: Summarize and critically evaluate research articles as well as information presented in the popular media.

| Required Core Courses (11 units) | Units |  |
| :--- | :--- | ---: |
| PSY 101 F | General Psychology or | 3 |
| PSY 101HF | Honors General Psychology | 3 |
| PSY 161 F | Elementary Statistics for Behavioral | 4 |
|  | Science or |  |
| PSY 161HF | Honors Elementary Statistics for Behavioral |  |
|  | Science |  |
| PSY 202 F | Research Methods in Psychology or | 4 |
| PSY 202HF | Honors Research Methods in Psychology | 4 |

List A (3-5 units) Units

PSY 221 F The Brain and Behavior 3
BIOL 100 F Principles of Biology
BIOL 101 F General Biology

## List B (3 units)

Units
PSY 139 F Developmental Psychology: Life Cycle
PSY 145 F Child Psychology
PSY 222 F Abnormal Psychology
PSY 251 F Social Psychology or
PSY 251HF Honors Social Psychology

| List C（3 units） |  |
| :--- | :--- |
| Any course from List B not already used．Or， |  |
| PSY 110 F | Introduction to Applied Psychology |
| PSY 131 F | Cross Cultural Psychology |
| PSY 219 F | The Human Services |
| PSY 120 F | Human Sexuality |
| Total Units |  |

Units
Any course from List B not already used．Or，
PSY 110 F Introduction to Applied Psychology 3
PSY 131 F Cross Cultural Psychology 3
PSY 219 F The Human Services

Total Units
20－22

## Psychology Associate in Arts Degree

PROGRAM CODE：2A03875
The Psychology Associate in Arts Degree provides students with a background that has both breadth and depth，and focuses on the science，theories and applications of psychology．This degree will give students an understanding of psychology that might be useful to his or her personal life，career outside of psychology，or future major and career in psychology．Coursework examines the biological and experiential factors that influence human behavior．Because of the scientific nature of psychology， most colleges require undergraduate psychology majors to take General Psychology，Statistics and a Research Methods class，and these three courses are the core requirements of the AA Degree in Psychology at Fullerton College，as well．These courses fulfill 11 of the 20 units required for this degree．An additional 9 units must be chosen from restricted electives．The 3 core courses， as well as the 3 （or more）electives will provide the opportunity for students to think critically about human behavior，to learn the diversity of human behavior and disorders，to learn how psychology affects us at different stages of life，and to apply psychology to real world situations or problems．NOTE：Students planning to transfer to a local CSU may also want to consider the Psychology AA－T Degree＊．

## Program Level Student Learning Outcomes

Outcome 1：Identify why psychology is considered a science．
Outcome 2：Identify appropriate statistical tests to be conducted on data for specific types of research studies．
Outcome 3：Summarize and critically evaluate research articles as well as information presented in the popular media．

## Required Courses（11 units）

（Honors versions of any required course and／or restricted elective course are considered equivalent courses）
Units
PSY 101 F General Psychology or
3
PSY 101HF Honors General Psychology and 3
PSY 161 F Elementary Statistics for Behavioral
Science or
PSY 161HF Honors Elementary Statistics for Behavioral Science and
PSY 202 F Research Methods in Psychology or
PSY 202HF Honors Research Methods in Psychology
Restricted Electives（9 units） Units
Select three of the following categories（ $\mathrm{A}, \mathrm{B}, \mathrm{C}$ and／or D ）and choose one 3 unit coursefrom each category：
Category A：（3 units）
PSY 139 F Developmental Psychology：Life Cycle or ..... 3
PSY 145 F Child Psychology ..... 3
Category B：（3 units）
PSY 110 F Introduction to Applied Psychology or ..... 3
PSY 219 F The Human Services or ..... 3
PSY 233 F The Psychology of Adjustment ..... 3
Category C：（3 units）
PSY 222 F Abnormal Psychology or ..... 3
PSY 251 F Social Psychology or ..... 3
PSY 251HF Honors Social Psychology or ..... 3
PSY 221 F The Brain and Behavior ..... 3
Category D：（3 units）
PSY 120 F Human Sexuality or ..... 3
PSY 131 F Cross Cultural Psychology ..... 3
Total Units ..... 20
REAL ESTATE
Real Estate Management Associate in Science Degree
PROGRAM CODE： 2503826
The Associate in Science Degree in Real Estate Managementrequires a total of 37－39 units to complete this program．

## Program Level Student Learning Outcomes

Outcome 1：Demonstrate proficiency of the basic principles of California real estate．
Outcome 2：Utilize a working vocabulary of business terminology．
Outcome 3：Analyze a routine business request and respond with a written letter that illustrates good business writing skills．

| Required Courses：（19 units） | Units |  |
| :--- | :--- | ---: |
| CIS 100 F | Introduction to Personal Computers | 4 |
| RE 101 F | Principles of Real Estate | 3 |
| RE 102 F | Legal Aspects of Real Estate | 3 |
| RE 201 F | Real Estate Practice | 3 |
| RE 202 F | Real Estate Finance | 3 |
| RE 203 F | Appraisal：Residential | 3 |
|  |  |  |
| One course from the following |  |  |
| for a total of 3－5 units： | Units |  |
| ACCT 001 F | Accounting for Small Business | 3 |
| ACCT 100BF | Financial Accounting Principle | 3 |
| ACCT 101AF | Financial Accounting | 5 |

CIS 100 F Introduction to Personal Computers 4
RE 101 F Principles of Real Estate 3
RE 102 F Legal Aspects of Real Estate 3
RE 201 F Real Estate Practice 3
Real Estate Finance
RE 203 F Appraisal：Residential
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One course from the following
for a total of 3 units: Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following
for a total of 3 units:
Units
BUS 100 F Introduction to Business 3
BUS 180 F Small Business Management 3
RE 207 F Mortgage Loan Brokering in California
One course from the following
for a total of 3 units (See counselor for determination of correct course) Units
BUS 240 F Legal Environment of Business 3
BUS 241AF Business Law 3

One course from the following
for a total of 3 units:
Units
CIS 150 F Introduction to the Internet 3
MKT 151 F New Media Marketing 3
One course from the following
for a total of 3 units:
Units
BUS 162 F Business Economics
3
ECON 101 F Principles of Economics - Micro
RE 206 F Real Estate Economics
Total Units
37-39

## Real Estate Management Certificate <br> PROGRAM CODE: 2C21260

By completing the Real Estate Management Certificate, the student will meet the educational requirements for the Real Estate Brokers' License. This certificate requires the completion of 37-39 units chosen from the required courses listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate proficiency of the basic principles of California real estate.
Outcome 2: Utilize a working vocabulary of business terminology. Outcome 3: Analyze a routine business request and respond with a written letter that illustrates good business writing skills.

Required Courses: (37-39 units) All courses below are required for a total of 19 units: Units
CIS 100 F Introduction to Personal Computers 4
RE 101 F Principles of Real Estate 3
RE 102 F Legal Aspects of Real Estate 3
RE 201 F Real Estate Practice
RE 202 F Real Estate Finance
RE 203 F Appraisal: Residential

One course from the following

for a total of 3-5 units:

Units

ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principle 3
ACCT 101AF Financial Accounting 5
One course from the following
for a total of 3 units:
Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business 3
One course from the following
for a total of 3 units:
Units
BUS 100 F Introduction to Business 3
BUS 180 F Small Business Management 3
RE 207 F Mortgage Loan Brokering in California 3
One course from the following
for a total of 3 units: (See counselor for determination of correct course) Units
BUS 240 F Legal Environment of Business 3
BUS 241AF Business Law 3
One course from the following
for a total of 3 units: Units
CIS 150 F Introduction to the Internet 3
MKT 151 F New Media Marketing 3
One course from the following
for a total of 3 units:
Units
BUS 162 F Business Economics 3
ECON 101 F Principles of Economics - Micro 3
RE 206 F Real Estate Economics 3
Total Units
37-39

## Real Estate Sales Skills Certificate <br> PROGRAM CODE: 2C00033

The Certificate in Real Estate Sales requires the completion of 15-16 units of which 12-13 must be chosen from the required courses listed below. An additional 3 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate proficiency of the basic principles of California real estate.
Outcome 2: Classify, record, and summarize financial transactions in journals and ledgers, manually and/or with computerized accounting software.

Required Courses: (12-13 units)
Units
ACCT 001 F Accounting for Small Business or
ACCT 100BF Financial Accounting Principles or
ACCT 101AF Financial Accounting
MKT 151 F New Media Marketing
RE 101 F Principles of Real Estate
RE 102 F Legal Aspects of Real Estate

## Restricted Electives: (3 units)

## Units

BUS 162 F Business Economics
ECON 101 F Principles of Economics - Micro
RE 090 F Current Issues in Real Estate
RE 201 F Real Estate Practice 3
RE 202 F Real Estate Finance 3

RE 203 F Appraisal: Residential 3
RE 204 F Appraisal: Income
RE 205 F Property Management
RE 206 F Real Estate Economics
Total Units
3

## RECREATION

## Outdoor Recreation and Safety Skills <br> PROGRAM CODE: 2 C00058

The Outdoor Recreation and Safety Program is designed to prepare students with necessary entry level environment knowledge, technical skill, and safety education for the foundation of employment in guided "adventure" tours or activities. The program requires a total of 9-10 units, of which 7 units are in required courses. An additional 2-3 units must be completed from the restricted electives below. A minimum of a " $C$ " is required in all required and restricted courses.

## Required Courses: (7 units)

## Units

PE 235 F First Aid, CPR, and Safety Education 3
PE 238 F Water Safety Instruction or
3
PE 246 F Advanced/Master SCUBA Diver
REC 111 F Camping and Our Bodyboarding
Environment
Restricted Electives: (2-3 units)

## Units

| PE 142 F | Mountaineering/Rock Climbing | 1 |
| :--- | :--- | :--- |
| PE 149 F | Swim for Fitness | 1 |

PE 199 F** Physical Education: Independent Study
REC 105 F Survival Arts
REC 107 F Wilderness Survival
Total Units
9-10

## SOCIOLOGY

## Sociology Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A30802

The Associate in Arts Degree in Sociology for Transfer, also called the Sociology AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in sociology. Ed Code Section 66746-66749 states students earning the Sociology AA-T degree will be granted priority for admission as a sociology major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students complete 60 CSU transferable units including completion of CSU GE or IGETC and 18-19 units in the major with a cumulative GPA of 2.0 or better. Title 5 requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Sociology is the systematic, scientific study of society and social behavior. Sociologists look beyond individual events and experiences to the broader social patterns and variables that influence individuals. Sociologists study individual and group behaviors and social structures such as racism, sexism, poverty, health care, family, crime and deviance, population and the environment. An associate's degree is intended to lead to transfer to colleges and universities which offer bachelor's degrees in sociology. The sociology major is designed to provide preparation leading to careers in sociology, social work, law, criminal justice, marketing research and counseling. The Sociology AA-T Degree requires a total of 19-20 units of required courses and restricted electives.

## Program Level Student Learning Outcomes

Outcome 1: Define the "sociological imagination" and identify how the discipline of sociology is relevant to the study of contemporary society.
Outcome 2: Differentiate between the major sociological theoretical perspectives - structural functionalism (functionalist), social conflict (conflict) and symbolic interactionism (interactionist).
Outcome 3: Demonstrate a reasonable knowledge of current social problems, including the ability to describe their effects on individuals as well as society at large.
Outcome 4: Demonstrate how the scientific method is used in the field of sociology, as well as demonstrate reasonable knowledge of descriptive and inferential statistics.

| Required Core (3 units): | Units |  |
| :--- | :--- | ---: |
| SOC 101 F | Introduction to Sociology or | 3 |
| SOC 101HF | Honors Introduction to Sociology | 3 |

SOC 101HF Honors Introduction to Sociology
3

AND any 2 courses ( $7-8$ units) from the following: Units
SOC 102 F Social Problems
3
SOSC 120 F Introduction to Probability and Statistics or
MATH 120 F Introductory Probability and Statistics or
MATH 120HF Honors Introductory Probability and Statistics

4
SOSC 125 F Introduction to Research Methods

## List A

Any 2 courses ( 6 units) from the following:
Units
SOC 225 F Sociology of Women or 3
SOC 225HF Honors Sociology of Women
SOC 230 F Sociology of Gender
SOC 275 F Marriage and Family or
SOC 275HF Honors Marriage and Family
SOC 290 F Sociology of Race and Ethnicity
SOC 292 F Introduction to Criminology
Any course not selected from above

## List B

Select 1 course (3 units):
Units
Any courses not selected above
SOC 201 F Dying and Death
SOC 250 F Sociology of Aging
SOC 277 F Sociology of Religion or
SOC 277HF Honors Sociology of Religion
SOC 285 F Drugs and Society
Total Units

## Sociology Associate in Arts Degree <br> PROGRAM CODE: 2A03886

Sociology is the systematic, scientific study of society and social behavior. Sociologists look beyond individual events and experiences to the broader social patterns and variables that influence individuals. Sociologists study individual and group behaviors and social structures such as racism, sexism, poverty, health care, family, crime and deviance, population and the environment. An associate's degree is intended to lead to transfer to colleges and universities which offer bachelor's degrees in sociology. The sociology major is designed to provide preparation leading to careers in sociology, social work, law, criminal justice, marketing research and counseling. The Sociology Associate in Arts Degree requires a total of 19-21 units, of which 10-11 units are in required courses. An additional 9-10 units must be chosen from restricted electives. NOTE: Students planning to transfer to a CSU should consider the Sociology AA-T Degree.

## Program Level Student Learning Outcomes

Outcome 1: Define the "sociological imagination" and identify how the discipline of sociology is relevant to the study of contemporary society.
Outcome 2: Differentiate between the major sociological theoretical perspectives - structural functionalism (functionalist), social conflict (conflict) and symbolic interactionism (interactionist).
Outcome 3: Demonstrate a reasonable knowledge of current social problems, including the ability to describe their effects on individuals as well as society at large.
Outcome 4: Demonstrate how the scientific method is used in the field of sociology, as well as demonstrate reasonable knowledge of descriptive and inferential statistics.

## Required Course (3 units)

Units
SOC 101 F Introduction to Sociology or
3
SOC 101HF Honors Introduction to Sociology

## Required Courses

Select any 2 courses (7-8 units) Units
SOC 102 F Social Problems 3
SOSC 120 F Introduction to Probability and Statistics or 4
MATH 120 F Introductory Probability and Statistics or 4
MATH 120HF Honors Introductory Probability and Statistics

4
SOSC 125 F Introduction to Research Methods 4
Restricted Electives (9-10 units) Units
SOC 198 F Sociology Internship 1
SOC 199 F Sociology Independent Study 1
SOC 201 F Dying and Death 3
SOC 225 F Sociology of Women or 3
SOC 225HF Honors Sociology of Women 3
SOC 230 F Sociology of Gender or 3
SOC 230HF Honors Sociology of Gender 3
SOC 250 F Sociology of Aging 3
SOC 275 F Marriage and Family or 3
SOC 275HF Honors Marriage and Family 3
SOC 277 F Sociology of Religion or 3
SOC 277HF Honors Sociology of Religion 3
SOC 285 F Drugs and Society 3
SOC 290 F Sociology of Race and Ethnicity 3
SOC 292 F Introduction to Criminology 3
SOC 299 F Sociology Independent Study: Advanced 1
Any courses not selected above.
Total Units
19-21

## SPANISH

## Spanish Associate in Arts Degree for Transfer <br> PROGRAM CODE: 2A33126

The Associate in Arts Degree in Spanish for Transfer, also called the Spanish AA-T, prepares students to transfer to CSU campuses that offer bachelor's degrees in Spanish. The Spanish AA-T Degree requires a total of 20-23 units of required courses and restricted electives from the categories below as indicated. This degree is designed to develop advanced communicative competence in listening, speaking, reading and writing in Spanish and provide an introduction to Spanish and Latin American literature and culture. While a baccalaureate degree is recommended preparation for those considering careers in fields such as teaching, education, international business, translation and interpretation, journalism, law, writing, training and development, sales, community relations, nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. Pursuant to SB1440, section 66746 states that students earning the Spanish AA-T Degree will be granted priority for admission as Spanish majors to a local CSU, as determined by the CSU campus to which the student applies. Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both the Intersegmental General Education Transfer Curriculum (IGETC) or
the California State University General Education-Breadth requirements. A minimum of 18-27 semester units in a major or area of emphasis, as determined by the community college district with a minimum grade point average of 2.0. Title 5 requires that students earn a grade of "C" or better in all major coursework. A " $P$ " (Pass) grade is not acceptable grade for courses in the major.

## Program Level Student Learning Outcomes

Outcome 1: Refine Spanish oral and written production in response to discourse related to self, family, social situations, school, work and societal issues.
Outcome 2: Refine Spanish oral and written production in response to written materials in Spanish.
Outcome 3: Interpret similarities and differences between the cultural practices and perspectives of the target language and those of other cultures.

## "Core" Courses: 16 units, minimum

Local departmental placement evaluation determines the course level where individual students begin the core courses. Credit or placement equivalent to two years of college level Spanish are required. If a student places out of any course and is not awarded units for that course, the student will have to take additional units to compensate for the course/units out of which they placed. Course substitutions are made at the discretion of the local college and may or may not be delineated in the local degree. Suggested substitutions include courses in List A. Additional suggested substitutions have also been provided below.

| SPAN 101 F | Elementary Spanish I or |
| :--- | :--- |
| SPAN 101HF | Honors Elementary Spanish I |
| SPAN 102 F | Elementary Spanish II or |
| SPAN 102HF | Honors Elementary Spanish II |
| SPAN 201 F | Spanish for the Spanish Speaker or |
| SPAN 203 F | Intermediate Spanish III |
| SPAN 204 F | Intermediate Spanish IV |

List A: Select a minimum of one course from the following:

Units
SPAN 205 F Introduction to Spanish Literature
3
SPAN 206 F Introduction to Latin American Literature
3
ITAL 101 F Elementary Italian I
ITAL 102 F Elementary Italian II
ITAL 203 F Intermediate Italian III
ITAL 204 F Intermediate Italian IV
FREN 101 F Elementary French I
FREN 102 F Elementary French II
FREN 203 F Intermediate French III
FREN 204 F Intermediate French IV
PORT 101 F Elementary Portuguese I
PORT 102 F Elementary Portuguese II

As noted, some students may need courses to substitute for units out of which they placed. Suggested course substitutions include courses from List A or the courses suggested below. Note that all course substitutions must be CSU transferable and students cannot be required to take more than one course that is not articulated.

Units
ANTH 102 F Cultural Anthropology or 3
ANTH 102HF Honors Cultural Anthropology 3
SPCH 120 F Intercultural Communication 3
ANTH 105 F Language and Culture 3
ENGL 210 F Introduction to Language Structure and Use

Total Units

## SPEECH

## Communication Studies Associate in Arts Degree for Transfer

PROGRAM CODE: 2A30803
The Associate in Arts Degree in Communication Studies for Transfer, also called the Communication Studies AA-T Degree, prepares students to transfer to CSUs that offer bachelor's degrees in Communication Studies. Ed Code Section 6674666749 states students earning the Communication Studies AA-T degree will be granted priority for admission as a Communication Studies major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU GE or IGETC and 19-20 units in the major with a cumulative GPA of 2.0 or better. Title $V$ requires that students earn a grade of "C" or better in all major coursework. There are no additional graduation requirements. Communication Studies prepares students to identify and solve communication problems, to facilitate effective communication in professional and interpersonal interactions to develop collaborative forms of problem solving and decision making. While a baccalaureate degree is recommended preparation for those considering communication focused careers in fields such as education, training and development, sales, community relations, public relations, the ministry, law, business, entertainment, nonprofit organizations and government, completion of this curriculum will demonstrate commitment to the field and provide comprehensive preparation for upper-division work. The Communication Studies AA-T Degree requires a total of 19-20 units of required courses and restricted electives from the categories below as indicated.

## Program Level Student Learning Outcomes

Outcome 1: Analyze, construct, and deliver speeches on contemporary socio-political issues.
Outcome 2: Criticize and evaluate a variety of public discourse.

## Required Course (4 units)

SPCH 100 F Public Speaking
Restricted Electives - Category A.
Select 6-7 units. Students may choose from the following courses:
SPCH 105 F Interpersonal Communication
SPCH 124 F Small Group Communication
SPCH 135 F Essentials of Argumentation
Restricted Electives - Category B.
Select minimum of 6 units. Students may choose from any course not used in List A and/or any of the following courses:
SPCH 120 F Intercultural Communication
SPCH $138 \mathrm{~F}^{*}$ Forensics 1-1.5
JOUR 110 F Mass Media Survey

Units

3
*SPCH 138 F is a variable unit course that may be taken up to three times for 1 to 1.5 units each time. Students may count up to three units of SPCH 138 F to Category B of the Communication Studies AA-T. If students do not complete three units of SPCH 138 F within the allowable number of times that it may be taken, they must complete another course in Category B to complete this requirement.

## Restricted Electives - Category C.

Select 3 units. Students may choose from
any course not used in Lists A or B or from any of the following courses: Units
ANTH 102 F Cultural Anthropology or 3
ANTH 102HF Honors Cultural Anthropology 3
JOUR 101 F Reporting and Writing
PSY 101 F General Psychology 3

SOC 101 F Introduction to Sociology or 3

SOC 101HF Honors Introduction to Sociology
Total Units

## Speech Associate in Arts Degree <br> PROGRAM CODE: $2 A 03867$

Curriculum leads to the Associate in Arts Degree. This degree requires a minimum of 18 units of which 13.5 to 17 units are in required courses. An additional 1 to 4.5 units must be chosen from the restricted electives listed below.

## Program Level Student Learning Outcomes

Outcome 1: Analyze, construct, and deliver speeches on contemporary socio-political issues.
Outcome 2: Criticize and evaluate a variety of public discourse.

## Required Courses (10 units) <br> Units

SPCH 100 F Public Speaking
4
SPCH 105 F Interpersonal Communication
3
PHIL 170 F Logic and Critical Thinking
Restricted Electives (1-4.5 units) Units
ENGL 100 F College Writing ..... 4
HIST 110 F Western Civilization I ..... 3
HIST 111 F Western Civilization II ..... 3
THEA 100 F Introduction to the Theatre ..... 3
CRTV 118 F Introduction to Radio, TV and Film ..... 3
Total Units ..... 18
THEATRE ARTS (DRAMA)

## Theatre Arts Associate in Arts

## Degree for Transfer

PROGRAM CODE: 2A31648
The Associate in Arts Degree in Theatre Arts for Transfer, also called the Theatre Arts AA-T Degree, prepares students to transfer to CSU campuses that offer bachelor's degrees in Theatre Arts. Ed Code Section 66746-66749 states that students earning the Theatre Arts AA-T Degree will be granted priority for admission as a Theatre major to a local CSU, as determined by the CSU campus to which the student applies. This degree requires students to complete 60 CSU transferable units including completion of CSU or IGETC and 18 units in the major with a cumulative GPA of 2.0 or better. Title $V$ requires that students earn a grade of "C" or better in all major coursework. This degree provides students with an understanding and an appreciation for the art of theatre and includes courses in acting, technical theatre, rehearsal and performance as well as an introduction to the theatre and play analysis. Completion of this curriculum will provide preparation for future theatre studies. The Theatre Arts AA-T Degree program requires 18 units of which 9 units are in required core courses. An additional 9 units are in restricted electives from the categories below as indicated.

## Program Level Student Learning Outcomes

Outcome 1: Develop, recognize, and apply criteria for judging the effectiveness and success of a theatrical production.
Outcome 2: Demonstrate the appropriate use of stage terminology and professional work ethics.
Outcome 3: Demonstrate the ability to execute character based motivations, mannerisms, vocal and physical choices as directed.
Outcome 4: Employ safe and effective technical Theatre practices in rehearsals and performances.
Outcome 5: Demonstrate and employ professional rehearsal skills.
Outcome 6: Evaluate the point of view, style and theme of the playwright and the director by utilizing script analysis.
Outcome 7: Compare and contrast the job responsibilities of all theatrical personnel

## Required core (9 units)

## Units

THEA 100 F Introduction to the Theatre
3
THEA 180 F Beginning Principles of Acting
3
THEA 130 F Acting Workshop or
3
THEA $149 \mathrm{~F}^{*}$ Introduction to Stage Crew Activity
*0.5-3 units per term for a total of 3 units.
List A: Select 9 units (3 courses) from the following Units
THEA 109 F Modern Dramatic Literature 3
THEA 143 F Stagecraft 4
THEA 144 F Lighting 3
THEA 145 F Beginning Theatrical Costuming and Design
THEA 147AF Stage Makeup
THEA 181 F Intermediate Principles of Acting
Total Units

## Theatre Arts (Drama) Associate in Arts Degree <br> PROGRAM CODE: 2A03850

The Theatre Arts (Drama) Associate in Arts Degree is designed to prepare students to acquire basic theatrical knowledge and academic skills to either transfer to a four-year academic institution or lead to employment in the specific areas of theater production as well as related areas in television, film, theme parks, education, and management. Related career opportunities include but are not limited to actor, director, costumer, makeup designer, playwright, drama coach, set designer, scenic artist, sound designer, lighting designer, stage hand, technician, wardrobe, stage manager, production manager, and educator. The Theatre Arts Drama AA Degree program requires 19-25.5 units of which 15-16.5 units are in required courses. An additional 4-9 units must be chosen from the various restricted electives. All courses must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Analyze and appraise the study and the making of theatre.
Outcome 2: Relate well with others as supportive team players and effective leaders.
Outcome 3: Determine and evaluate personal and career goals.
Outcome 4: Distinguish and relate effective time management, budget management, and production management skills.
Outcome 5: Examine and maintain a balance between creativity and critical judgment.
Outcome 6: Illustrate the confidence and skills to "do it right the first time."
Outcome 7: Compile and interpret a work ethic that exemplifies "know who you are and do it on purpose."
Outcome 8: Measure and perform in a "learn by doing" environment.

## Required courses:

(select 3 units from the following) Units
THEA 100 F Introduction to the Theatre 3
THEA 104 F Introduction to Theatre Appreciation 3
THEA 105 F Musical Theatre History 3
THEA 108 F Multicultural Perspectives in American Theatre 3

Required performance courses: (6.5 units)

Units

THEA $180 \mathrm{~F} \quad$ Beginning Principles of Acting 3
THEA 181 F Intermediate Principles of Acting 3
Note: THEA 181 F requires completion of THEA 180 F with a grade of "C" or better.

| Concurrent enrollment in one of the following |  |  |
| :--- | :--- | ---: |
| courses is required for THEA 180 F | Units |  |
| THEA 153 F | Introduction to Stage Crew Activity | 0.5 |
| THEA 159 F | Beginning Stage Crew Activity | 0.5 |
| THEA 249 F | Intermediate Stage Crew Activity | 0.5 |
| THEA 250 F | Advanced Stage Crew Activity | 0.5 |

Required production courses:
(select 2-3 units from the following) Units
THEA 130 F Acting Workshop 3
THEA 131 F Theatre Workshop 2
THEA 134 F Beginning Theatre Practicum 2
THEA 233 F Intermediate Theatre Practicum 2
THEA 176 F Beginning Playwrigh's Practicum 2
THEA 276 F Intermediate Playwright's Practicum 2
THEA 177 F Beginning Director's Practicum 2
THEA 277 F Intermediate Director's Practicum
THEA 178 F Beginning Musical Theatre Production
THEA 278 F Intermediate Musical Theatre Production

Required technical theatre courses:
(select 3.5-4 units from the following)
Units
THEA 141 F Introduction to Technical Theatre
THEA 143 F Stagecraft
THEA 146 F Scene Painting
THEA 160 F Introduction to Sound Technology
THEA 170 F Beginning Theatrical Lighting
THEA 171 F Beginning Theatrical Costuming and Design
THEA 172 F Stage Makeup
Concurrent enrollment in one of the following courses is required for THEA 146 F, THEA 160 F, THEA 170 F, THEA 171 F, THEA 172 F
THEA 153 F Introduction to Stage Crew Activity THEA 159 F Beginning Stage Crew Activity THEA 249 F Intermediate Stage Crew Activity
THEA 250 F Advanced Stage Crew Activity

## Restricted electives

(select a total of 4-9 units from the following):
Units
Performance courses recommended for actors:
(select 1-3 units from the following)
THEA 072 F Introduction to Movement and Performance Skills for Musical Theatre
THEA 073 F Beginning Movement and Performance Skills for Musical Theatre
THEA 074 F Intermediate Movement and Performance Skills for Musical Theatre
THEA 121 F Movement for Actors
THEA 123 F Acting Techniques
THEA 135 F Resident Theatre Company
THEA 136 F Touring Theatre Productions: Rehearsal and Performance3

THEA 183 F Advanced Principles of Acting II 3
THEA 184 F Beginning Musical Theatre I
THEA 185 F Beginning Musical Theatre II
THEA 284 F Intermediate Musical Theatre I
THEA 285 F Intermediate Musical Theatre II


3
3
Recter

Production courses recommended for actors and theatre technicians:
(select 2-3 units from the following)
Units
THEA 137 F Introduction to Summer Theatre Workshop 3
THEA 155 F Beginning Summer Theatre Workshop 3 THEA 156 F Intermediate Summer Theatre Workshop THEA 157 F Advanced Summer Theatre Workshop THEA 235 F Experimental Theatre


Recommended for all theatre arts students:
(select 2-3 units from the following) ..... Units
THEA 075 F Theatrical City Tours: New York ..... 2
THEA 076 F Theatrical City Tours: London ..... 2
THEA 106 F Beginning Principles of Playwriting ..... 3
THEA 109 F Modern Dramatic Literature ..... 3
THEA 122 F Improvisation for Television, Film and Theatre ..... 3
THEA 127 F Oral Interpretation ..... 3
THEA 129 F Voice for the Actor ..... 3
THEA 196HF Honors Creative Arts-Theater ..... 3
THEA 222 F Acting for the Camera ..... 3
THEA 225 F Stage Directing ..... 3

## Assistant Costume Designer Certificate <br> PROGRAM CODE: 2C19660

The Assistant Costume Designer Certificate provides the student with expertise in order to assist the Costume Designer in costuming for film, television, theme park entertainment and theater. The Assistant Costume Designer should be able to create patterns for costumes, assemble costumes suitable for the entertainment industry, illustrate fashion and utilize design skills. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry as an Assistant Costume Designer. The Assistant Costume Designer certificate program requires the completion of 38.5-46 units of which 29.5-37 units are in required courses and the remaining 9 units must be chosen from the restricted electives below. All courses must be completed with a grade of " $C$ " or better.

## Program Level Student Learning Outcomes

Outcome 1: Determine whether to pull, purchase or build costumes based upon the needs of the script, the show's budget and the time and workforce available.
Outcome 2: Create and maintain a show "bible".
Outcome 3: Construct a complete costume from several historical time periods.
Outcome 4: Create custom patterns to match an actor's measurements.
Outcome 5: Organize and load in costumes for a theatrical production.
Outcome 6: Design costumes suitable for the stage.

## Required courses: (29.5-37 units)

ART 139 F Fashion Sketching
FASH 101 F Basic Sewing Techniques 2
FASH 108 F Flat Pattern Methods and Design I 2
FASH 201 F Clothing II 2
FASH 242 F History of Costume 3
FASH 209 F Draping 2
THEA 100 F Introduction to the Theatre 3
THEA 130 F Acting Workshop or 3
THEA 131 F Theatre Workshop or 1-3
THEA 134 F Beginning Theatre Practicum or 1-2
THEA 178 F Beginning Musical Theatre Production 0.5-3
THEA 171 F Beginning Theatrical Costuming and Design
THEA 172 F Stage Makeup
THEA 246 F Intermediate Theatrical Costuming
THEA 256 F 16-18th Century Theatrical Costume Construction or
THEA 257 F 19th Century Theatrical Costume Construction or
THEA 258 F 20th Century Theatrical Costume Construction
THEA 259 F Pre-16th Century Theatrical Costume Construction
THEA 153 F Introduction to Stage Crew Activity or 0.5-3
THEA 159 F Beginning Stage Crew Activity or 0.5-3
THEA 249 F Intermediate Stage Crew Activity or 0.5-3
THEA 250 F Advanced Stage Crew Activity 0.5-3

| Restricted electives: (9 units) |  | Units |
| :---: | :---: | :---: |
| ART 186 F | Beginning Life Drawing | 3 |
| FASH 188 F | Apparel Production | 2 |
| FASH 190 F | Pattern Grading | 2 |
| FASH 205AF | Tailoring | 2 |
| FASH 206 F | Textiles | 3 |
| FASH 299 F | Fashion Industry Internship | 2-4 |
| THEA 075 F | Theatrical City Tours: New York | 2 |
| THEA 076 F | Theatrical City Tours: London | 2 |
| THEA 130 F | Acting Workshop | 3 |
| THEA 131 F | Theatre Workshop | 1-3 |
| THEA 159 F | Beginning Stage Crew Activity | 0.5-3 |
| THEA 233 F | Intermediate Theatre Practicum | 1-2 |
| THEA 249 F | Intermediate Stage Crew Activity | 0.5-3 |
| THEA 250 F | Advanced Stage Crew Activity | 0.5-3 |
| THEA 256 F | 16-18th Century Theatrical Costume Construction | 3 |
| THEA 257 F | 19th Century Theatrical Costume Construction | 3 |
| THEA 258 F | 20th Century Theatrical Costume Construction | 3 |
| THEA 259 F | Pre-16th Century Theatrical Costume Construction | 3 |
| ART 180 F | Perspective Drawing and Rendering | 3 |
| Total Units |  | 38.5-46 |

Restricted electives: (9 units)3
FASH 188 F Apparel Production ..... 2
Grading2
FASH 206 F ..... 3
THEA 075 F Theatrical City Tours: New York ..... 2
TEA 130 F Acarical City Tours. London3
THEA 131 F Theatre Workshop0.5-3
THEA 233 F Intermediate Theatre Practicum ..... 1-20.5-333

## Costume Cutter/Draper Certificate

PROGRAM CODE: 2C19663
The Costume Cutter/Draper Certificate provides the student with training to create patterns, cut and assemble costumes for the entertainment industry. Students also receive training in basic theatrical production process. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry as a Costume Cutter/Draper. This certificate program requires the completion of 24-29 units of which 18-23 units are in required courses and the remaining 6 units must be chosen from the restrictive electives below. All courses must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a costume design sketch/rendering to determine its patterning needs.
Outcome 2: Pattern a basic muslin/toile per the measurements of an actor.
Outcome 3: Create a custom muslin/toile for an actor.
Outcome 4: Create a historical pattern based upon the costume designer's sketch and the actor's measurements.
Outcome 5: Adapt a commercial pattern to match a designer's costume sketch.
Required courses: (18-23 units)

## Units

FASH 101 F Basic Sewing Techniques
FASH 108 F Flat Pattern Methods and Design I
FASH 201 F Clothing II
FASH 209 F Draping
THEA 130 F * Acting Workshop or
THEA 131 F * Theatre Workshop or
THEA 134 F Beginning Theatre Practicum or
THEA 178 F * Beginning Musical Theatre Production
THEA 171 F Beginning Theatrical Costuming and Design
THEA 246 F Intermediate Theatrical Costuming
THEA 256 F * 16-18th Century Theatrical Costume Construction or
THEA 257 F * 19th Century Theatrical Costume Construction or
THEA 258 F * 20th Century Theatrical Costume Construction or
THEA 259 F * Pre-16th Century Theatrical Costume Construction
THEA 153 F Introduction to Stage Crew Activity or
THEA 159 F * Beginning Stage Crew Activity or
THEA 249 F * Intermediate Stage Crew Activity or
THEA 250 F * Advanced Stage Crew Activity

## Restricted electives: (minimum of 6 units)

FASH 088 F CAD for Apparel
FASH 109 F Flat Pattern Methods and Design II
FASH 188 F Apparel Production
FASH 190 F Pattern Grading
FASH 206 F Textiles
FASH 242 F History of Costume
FASH 975 F Patternmaking: Collections
FASH 976 F Advanced Patternmaking: Collections 2
THEA 076 F Theatrical City Tours: London
THEA 130 F * Acting Workshop
THEA 131 F * Theatre Workshop
THEA 159 F * Beginning Stage Crew Activity
THEA 178 F * Beginning Musical Theatre Production
THEA 249 F * Intermediate Stage Crew Activity
THEA 250 F * Advanced Stage Crew Activity
THEA 256 F * 16-18th Century Theatrical Costume Construction
THEA 257 F * 19th Century Theatrical Costume Construction
THEA 258 F * 20th Century Theatrical Costume Construction
THEA 259 F * Pre-16th Century Theatrical Costume Construction
Total Units

## Units

2
2

## Costume Stitcher Certificate <br> PROGRAM CODE: 2 C19661

The Costume Stitcher Certificate provides the student with training in specialized sewing techniques and other skills necessary to build a variety of costumes required by the entertainment industry. Students also receive training in basic theatrical production practices. This certificate is designed to provide students with a course of study leading to certification and employment in the entertainment industry as a Costume Stitcher. This program requires the completion of 20-25 units, of which 14-19 units are in required courses and the remaining 6 units must be chosen from the restricted electives below. All courses must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Analyze if and how a garment can be altered to meet the needs of an actor.
Outcome 2: Create historical corsets and underpinnings.
Outcome 3: Demonstrate the application of theatrical closures including hook and eye tape, zippers and machine button holes.
Outcome 4: Construct a complete garment from a historical time period using a commercial pattern.
Outcome 5: Construct a period costume using a custom pattern with no written instructions.

| Required courses: (14-19) | Units |
| :---: | :---: |
| FASH 101 F Basic Sewing Techniques | 2 |
| FASH 201 F Clothing II | 2 |
| THEA 130 F Acting Workshop or | 3 |
| THEA 131 F Theatre Workshop or | 1-3 |
| THEA 134 F Beginning Theatre Practicum or | 1-2 |
| THEA 178 F Beginning Musical Theatre Production | 0.5-3 |
| Design | 3 |
| THEA 246 F Intermediate Theatrical Costuming | 3 |
| THEA 256 F * 16-18th Century Theatrical Costume Construction or | 3 |
| THEA 257 F * 19th Century Theatrical Costume Construction or | 3 |
| THEA 258 F * 20th Century Theatrical Costume Construction or | 3 |
| THEA 259 F * Pre-16th Century Theatrical Costume Construction | 3 |
| THEA 153 F Introduction to Stage Crew Activity or | 0.5-3 |
| THEA 159 F * Beginning Stage Crew Activity or | 0.5-3 |
| THEA 249 F * Intermediate Stage Crew Activity or | 0.5-3 |
| THEA 250 F * Advanced Stage Crew Activity | 0.5-3 |

FASH 101 F Basic Sewing Techniques 2
FASH 201 F Clothing II 2
THEA 130 F Acting Workshop or 3
THEA 134 F Beginning Theatre Practicum or 1-2
THEA 178 F Beginning Musical Theatre Production 0.5-3

| THEA 171 F | $\begin{array}{l}\text { Beginning Theatrical Costuming and } \\ \text { Design }\end{array}$ |
| :--- | :--- |

THEA 246 F - Intermediate Theatrical Costuming ee
$\begin{array}{ll}\text { THEA } 256 \text { F * } & \text { 16-18th Century Theatrical Costume } \\ & \text { Construction or }\end{array}$
$\begin{array}{ll}\text { THEA } 257 \mathrm{~F} * & \text { 19th Century Theatrical Costume } \\ & \text { Construction or }\end{array}$
$\begin{array}{ll}\text { THEA } 258 \mathrm{~F} * & \text { 20th Century Theatrical Costume } \\ \text { Construction or }\end{array}$
$\begin{aligned} \text { THEA } 259 \mathrm{~F} * & \text { Pre-16th Century Theatrical Costume } \\ & \text { Construction }\end{aligned}$
THEA 153 F Introduction to Stage Crew Activity or 0.5-3
THEA 159 F * Beginning Stage Crew Activity or 0.5-3
THEA 250 F * Advanced Stage Crew Activity 0.5-3

| Restricted electives: (minimum of 6 units) | Units |
| :---: | :---: |
| FASH 045 F Swim and Active Wear | 1 |
| FASH 085 F Bridal and Special Occasion Wear | 2 |
| FASH 090 F Creative Serging: Overlock Machine | 2 |
| FASH 188 F Apparel Production | 2 |
| FASH 205AF Tailoring | 2 |
| THEA 159 F * Beginning Stage Crew Activity | 0.5-3 |
| THEA 249 F * Intermediate Stage Crew Activity | 0.5-3 |
| THEA 250 F * Advanced Stage Crew Activity | 0.5-3 |
| THEA 256 F * 16-18th Century Theatrical Costume Construction | 3 |
| THEA 257 F * 19th Century Theatrical Costume Construction | 3 |
| THEA 258 F * 20th Century Theatrical Costume Construction | 3 |
| THEA 259 F * Pre-16th Century Theatrical Costume Construction | 3 |
| Total Units | 20-25 |

## Costume Wardrobe Certificate

PROGRAM CODE: 2 C18759
The Costume Wardrobe Certificate provides the student with the practical knowledge and experience necessary to work backstage preparing, changing and maintaining costumes before, during and after performances. Students are trained in basic costume techniques as well as basic theatrical production practices. This certificate is designed to provide the student with a course of study leading to certification and employment in the entertainment industry working in the area of Wardrobe. This program requires the completion of 15-20 units of which 9-14 units are in required courses and the remaining 6 units must be chosen from the restrictive electives below. All course work must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Analyze a script to determine the costume needs of actor including the how and when of fast changes.
Outcome 2: Assist an actor with a fast change.
Outcome 3: Solve and take care of minor costume repairs during the run of a show.
Outcome 4: Determine the proper methods for cleaning costumes and execute them.
Outcome 5: Organize other students in striking a theatrical production.
Required courses: (9-14 units) ..... Units
FASH 101 F Basic Sewing Techniques ..... 2
THEA 130 F * Acting Workshop or ..... 3
THEA 131 F * Theatre Workshop or ..... 1-3
THEA 134 F * Beginning Theatre Practicum or ..... 1-2
THEA 178 F * Beginning Musical Theatre Production ..... 0.5-3
THEA 171 F Beginning Theatrical Costuming and Design ..... 3
THEA 246 F Intermediate Theatrical Costuming ..... 3
THEA 153 F Introduction to Stage Crew Activity or ..... 0.5-3
THEA 159 F * Beginning Stage Crew Activity or ..... 0.5-3
THEA 249 F * Intermediate Stage Crew Activity or ..... 0.5-3
THEA 250 F * Advanced Stage Crew Activity ..... 0.5-3
Restricted Electives: (minimum of 6 units) ..... Units
FASH 201 F Clothing II ..... 2
THEA 130 F * Acting Workshop ..... 3
THEA 131 F * Theatre Workshop ..... 1-3
THEA 159 F * Beginning Stage Crew Activity ..... 0.5-3
THEA 178 F * Beginning Musical Theatre Production ..... 0.5-3
THEA 233 F Intermediate Theatre Practicum ..... 1-2
THEA 249 F * Intermediate Stage Crew Activity ..... 0.5-3
THEA 250 F * Advanced Stage Crew Activity ..... 0.5-3
THEA 256 F 16-18th Century Theatrical Costume Construction ..... 3
THEA 257 F 19th Century Theatrical Costume Construction ..... 3
THEA 258 F 20th Century Theatrical Costume Construction ..... 3
THEA 259 F Pre-16th Century Theatrical Costume Construction ..... 3
THEA 172 F Stage Makeup ..... 3
Total Units ..... 15-20
*This course cannot be credited for both restricted and required units.

## Lighting Technician Certificate

## PROGRAM CODE: 2 C18746

The Lighting Technician Certificate is designed to prepare the student for occupational competency as a Lighting Technician in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 28-29 units of which 23 units are in required courses. All courses must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Identify and explain the documentation required to implement the lighting for a theatrical production.
Outcome 2: Operate and evaluate theatrical lighting equipment by participating in the practices of hanging, circuiting and focusing for actual productions.
Outcome 3: Identify, explain and evaluate the safe operation of lighting equipment associated with theatrical productions.
Outcome 4: Identify, relate and explain the processes inherent in the theatrical lighting design process.

Outcome 5：Identify，describe and define terminology commonly associated with theatrical lighting．
Outcome 6：Analyze and evaluate the lighting requirements of a play or musical．

| Required courses：（16 units） | Units |  |
| :--- | :--- | ---: |
| ART 110 F | Introduction to Art | 3 |
| THEA 100 F | Introduction to the Theatre | 3 |
| THEA 141 F | Introduction to Technical Theatre | 4 |
| THEA 170 F | Beginning Theatrical Lighting | 3 |
| THEA 244 F | Intermediate Theatrical Lighting | 3 |

Note：THEA 170 F and THEA 244 F require concurrent enrollment in any level of Stage Crew Activity．

## Required lab courses（2 units）：

| THEA 153 F | Introduction to Stage Crew Activity | 0.5 |
| :--- | :--- | :--- |
| THEA 159 F | Beginning Stage Crew Activity | 0.5 |
| THEA 249 F | Intermediate Stage Crew Activity | 0.5 |
| THEA 250 F | Advanced Stage Crew Activity | 0.5 |

Required production courses：
（select a minimum of 5 units）Units
THEA 130 F Acting Workshop
3
THEA 131 F Theatre Workshop 1－3
THEA 134 F Beginning Theatre Practicum 1－2
THEA 233 F Intermediate Theatre Practicum 1－2
THEA 178 F Beginning Musical Theatre Production 0．5－3
THEA 278 F Intermediate Musical Theatre Production 0．5－3
Restricted electives：（5－6 units）Units
DANC 120 F Dance History 3
DRAF 171 F Fundamentals of Drafting 2
IDES 210 F Fundamentals of Lighting 3
MUS 116 F Music Appreciation 3
MUS 118 F Introduction to Opera
3
THEA 094 F Systems Maintenance and Troubleshooting for Theatre1

Total Units 28－29

## Musical Theatre Certificate <br> PROGRAM CODE： 2 C08422

The Musical Theatre Certificate Program is designed to prepare the student for performance competency in the field of Musical Theatre．The Musical Theatre Certificate requires a total of 36．5－37．5 units of which 34.5 are in required courses． Students who wish to complete the Musical Theatre Certificate with an emphasis in Dance are required to complete an addi－ tional 5－6 units．Students who wish to complete the Musical Theatre Certificate with an emphasis as a Singer are required to complete an additional 4 units．Students who wish to complete the Musical Theatre Certificate with an emphasis in Dance and the Musical Theatre Certificate with an emphasis as a Singer are required to complete a total of 45．5－47．5 units．

## Program Level Student Learning Outcomes

Outcome 1：Explain，discriminate and relate the professional work ethic of Musical Theatre．
Outcome 2：Identify and apply specific skills，knowledge，and creativity for professional development and employment in Musical Theatre．
Outcome 3：Demonstrate the ability to perform dance sequences．
Outcome 4：Describe and demonstrate rhythm and note reading skills in the sight－singing of vocal exercises．
Outcome 5：Employ analytical skills through written script anal－ ysis，written and verbal evaluation of peer performances and of live theatrical productions．

Required Dance courses：（5 units）Units
DANC 111 F Jazz I 1
DANC 113 F Tap Dance I 1
DANC 119 F Dance for Theatre 1
DANC 140 F Introduction to Ballet or 2
DANC 141 F Ballet I：Beginning Ballet 2
Required Music courses：（4 units）Units
MUS 102 F Music Reading or 3
MUS 106 F Introduction to Music Theory 3
MUSA 111 F Beginning Voice 1
Required Theatre Arts Musical Theatre courses：
（12 units）Units
$\begin{array}{lr}\text { THEA } 184 \text { F } & \text { Beginning Musical Theatre I }\end{array}$
THEA 185 F Beginning Musical Theatre II 3
THEA 284 F Intermediate Musical Theatre I 3
THEA 285 F Intermediate Musical Theatre II 3
Required Theatre Arts courses：（6．5 units）Units
THEA 180 F Beginning Principles of Acting 3
THEA 181 F Intermediate Principles of Acting 3
THEA 153 F Introduction to Stage Crew Activity or 0.5
THEA 159 F Beginning Stage Crew Activity or 0.5
THEA 249 F Intermediate Stage Crew Activity or 0.5
THEA 250 F Advanced Stage Crew Activity 0.5
THEA 180 F requires concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F ．Completion of THEA 180 F with a grade of＂ C ＂or better is required for enrollment in THEA 181 F ．THEA 181 F also requires concurrent enrollment in a technical theatre class．

## Required performance courses: (7 units)

Units
MUS 172 F Opera Theatre Workshop
THEA 178 F Beginning Musical Theatre Production
THEA 278 F Intermediate Musical Theatre Production or
THEA 137 F Introduction to Summer Theatre Workshop or
THEA 155 F Beginning Summer Theatre Workshop or 3
THEA 156 F Intermediate Summer Theatre Workshop or
THEA 157 F Advanced Summer Theatre Workshop
Completion of THEA 178 F with a grade of "C" or better is required for enrollment in THEA 278 F . Completion of THEA 137 F with a grade of " C " or better is required for enrollment in THEA 155 F. Completion of THEA 155 F with a grade of "C" or better is required for enrollment in THEA 156 F. Completion of THEA 156 F with a grade of " $C$ " or better is required for enrollment in THEA 157 F.

## Musical Theatre Certificate Singer Emphasis additional required courses: (4 units) <br> Units <br> MUSA 112 F Intermediate Voice I or 1 <br> MUS $180 \mathrm{~F} \quad$ Collegiate Chorale or 1 <br> MUS 281 F Concert Choir <br> MUS 285 F Chamber Singers

## Musical Theatre Certificate Dance Emphasis

 additional required courses: (5-6 units)DANC 112 F Jazz II
DANC 142 F Ballet II: Advanced Beginning Ballet or 2
DANC 143 F Ballet III: Intermediate Ballet 2
DANC 203 F Dance Production or
DANC 205 F Dance Ensemble or
DANC 214 F Dance Repertory

## Restricted Electives: (2-3 units)

THEA 075 F Theatrical City Tours: New York Units

THEA 076 F Theatrical City Tours: London 2

THEA 104 F Introduction to Theatre Appreciation
THEA 105 F Musical Theatre History
THEA 122 F Improvisation for Television, Film and Theatre
THEA 182 F Advanced Principles of Acting I
THEA 225 F Stage Directing
THEA 266 F Stage Management
Completion of THEA 181 F with a grade of "C" or better is required for enrollment in THEA 182 F .
Concurrent enrollment in a technical theatre class is required for enrollment in THEA 182 F.
Total Units
36.5-47.5

## Scenic Artist Certificate

PROGRAM CODE: 2 C18747
The Scenic Artist Certificate is designed to prepare the student for occupational competency as a Scenic Artist in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 35 units of which 29 units are in required courses. All courses must be completed with a grade of "C" or better.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate and evaluate general drawing and painting skills.
Outcome 2: Demonstrate, formulate and assess the principles of color theory and paint mixing.
Outcome 3: Discriminate and evaluate the relationships of pigment color to lighting, costuming, and scenery.
Outcome 4: Differentiate, formulate and select the appropriate paints and finishes as needed for various scenic materials.
Outcome 5: Compare, contrast and choose the appropriate brushes, rollers, and applicators as needed for various scenic materials.
Outcome 6: Identify, explain and evaluate the safe operation of scene painting equipment associated with theatrical productions.

Required courses: (25 units) Units
ART 118 F Color Theory 3
ART 180 F Perspective Drawing and Rendering 3
ART 182 F Basic Drawing 3
THEA 100 F Introduction to the Theatre 3
THEA 141 F Introduction to Technical Theatre 4
THEA 143 F Stagecraft 4
THEA 146 F Scene Painting 3
THEA 148 F Introduction to Theatre Crafts Lab 2
Note: THEA 146 F requires concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F .

Required lab courses: (select 4 units) Units
THEA 153 F Introduction to Stage Crew Activity 0.5
THEA 159 F Beginning Stage Crew Activity 0.5
THEA 249 F Intermediate Stage Crew Activity 0.5
THEA 250 F Advanced Stage Crew Activity 0.5
THEA 152 F Beginning Theatre Crafts Lab 2
THEA 252 F Intermediate Theatre Crafts Lab 2
THEA 253 F Advanced Theatre Crafts Lab 2
Restricted electives: (6 units) Units
ART 110 F Introduction to Art
Units
3
ART 189 F Beginning Painting
ART 197 F Mural and Faux Painting
THEA 151 F Properties: Design and Construction
Total Units
DEGREES \& CERTIFICATES

## Sound Technician Certificate <br> PROGRAM CODE: 2C18748

The Sound Technician Certificate is designed to prepare the student for occupational competency as a sound technician in educational, community and resident theatres as well as theme parks, television and motion picture studios. This certificate program requires a total of 33 units of which 27 units are in required courses. All courses must be completed with a grade of " C " or better.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate an understanding of basic technical theatre terminology as it relates to sound/audio.
Outcome 2: Identify and demonstrate the practical aspects of safe and effective use of tools associated with sound/audio for the theatre.
Outcome 3: Identify and demonstrate the practical aspects of safe and effective use of sound/audio equipment.
Outcome 4: Identify and describe the different types of drawings for theatrical sound/audio.
Outcome 5: Identify and explain collaboration and concept as it relates to the sound/audio design process.

Required courses: (19 units) Units
MUS 101 F Music Fundamentals 3
MUS 108 F Introduction to Music Technology 2
THEA 100 F Introduction to the Theatre 3
THEA 141 F Introduction to Technical Theatre
THEA 160 F Introduction to Sound Technology
THEA 161 F Sound Reinforcement Techniques
THEA 162 F Sound Design for the Theatre
Required lab courses: (2 units)
THEA 153 F Introduction to Stage Crew Activity 0.5
THEA 159 F Beginning Stage Crew Activity 0.5
THEA 249 F Intermediate Stage Crew Activity 0.5
THEA 250 F Advanced Stage Crew Activity
Required production courses:
(select a minimum of 6 units) Units
THEA 130 F Acting Workshop
THEA 131 F Theatre Workshop 2
THEA 134 F Beginning Theatre Practicum 2
THEA 233 F Intermediate Theatre Practicum
THEA 178 F Beginning Musical Theatre Production
2
THEA 278 F Intermediate Musical Theatre Production

$$
1
$$

Restricted Electives: (6 units)
CRTV 122 F Audio Production Techniques
MUS 124 F Recording Lab I: Beginning Techniques
Units

MUS 224 F Recording Studio II: Intermediate Techniques
THEA 137 F Introduction to Summer Theatre Workshop
THEA 155 F Beginning Summer Theatre Workshop

## Total Units

## Stage Management Certificate <br> PROGRAM CODE: 2 C18749

The Stage Management Certificate is designed to prepare the student for occupational competency as a Stage Manager in educational, community and resident theatre venues as well as theme park, television and motion picture studios. This certificate program requires a total of 37 units of which 31 units are in required courses. All courses must be completed with a grade of " $C$ " or better.

## Program Level Student Learning Outcomes

Outcome 1: Organize and create a prompt book relevant to a theatrical production.
Outcome 2: Analyze and evaluate the production requirements of a play or musical.
Outcome 3: Design, assemble and evaluate a theatrical play season.
Outcome 4: Identify and interpret common themes and purposes in producing a theatrical production.
Outcome 5: Evaluate and compare the job descriptions of theatrical production personnel.
Outcome 6: Identify and contrast the various theatrical unions and how they relate to a theatrical production.

| Required courses (21 units) | Units |  |
| :--- | :--- | ---: |
| ART 110 F | Introduction to Art | 3 |
| THEA 100 F | Introduction to the Theatre | 3 |
| THEA 141 F | Introduction to Technical Theatre | 4 |
| THEA 160 F | Introduction to Sound Technology | 3 |
| THEA 170 F | Beginning Theatrical Lighting | 3 |
| THEA 265 F | Theatre Management | 2 |
| THEA 266 F | Stage Management | 3 |

Note: THEA 170 F and THEA 160 F require concurrent enrollment in THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F .

Required Stage Crew Activity courses: (2 units) Units
THEA $153 \mathrm{~F} \quad$ Introduction to Stage Crew Activity 0.5
THEA 159 F Beginning Stage Crew Activity 0.5
THEA 249 F Intermediate Stage Crew Activity 0.5
THEA 250 F Advanced Stage Crew Activity 0.5
Student are required to fulfill stage management
positions for required production courses:
(select a minimum of 8 units) Units
$\begin{array}{llr}\text { (select a minimum of } 8 \text { units) } & \text { Units } \\ \text { THEA } 130 \mathrm{~F} & \text { Acting Workshop } & 3\end{array}$
THEA 131 F Theatre Workshop 2
THEA 134 F Beginning Theatre Practicum 2
THEA 233 F Intermediate Theatre Practicum
THEA 178 F Beginning Musical Theatre Production
THEA 278 F Intermediate Musical Theatre Production

| Restricted electives: (select a minimum of $\mathbf{6}$ units) | Units |  |
| :--- | :--- | ---: |
| BUS 262 F | Principles of Management | 3 |
| CIS 111 F | Introduction to Information Systems | 4 |
| MUS 116 F | Music Appreciation | 3 |
| MUS 118 F | Introduction to Opera | 3 |
| THEA 104 F | Introduction to Theatre Appreciation | 3 |
| THEA 137 F | Introduction to Summer Theatre Workshop | 3 |
| THEA 155 F | Beginning Summer Theatre Workshop | 3 |
| THEA 176 F | Beginning Playwright's Practicum | $1-2$ |
| THEA 276 F | Intermediate Playwright's Practicum | $1-2$ |
| THEA 177 F | Beginning Director's Practicum | $1-2$ |
| THEA 277 F | Intermediate Director's Practicum | $\mathbf{1 - 2}$ |
| Total Units |  | $\mathbf{3 7}$ |

## Technical Theatre Certificate <br> PROGRAM CODE: 2C18750

The Technical Theatre Certificate is designed to prepare the student for occupational competency as a theatre technician in educational, community and resident theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 35-37 units of which 29 units are in required courses. All courses must be completed with a grade of " $C$ " or better.

## Program Level Student Learning Outcomes

Outcome 1: Describe and explain technical theatre terminology.
Outcome 2: Identify, differentiate and evaluate the unique production aspects of proscenium, thrust, arena and black box configurations.
Outcome 3: Identify tools, hardware and equipment associated with the implementation of the various technical theater components.
Outcome 4: Illustrate, evaluate and employ the correct, safe and efficient use of tools, hardware and equipment associated with the implementation of the various technical theater components.
Outcome 5: Compare and interpret the different types of drawings that theatrical designers produce.
Outcome 6: Differentiate and explain the different types of construction techniques used in building theatrical scenery.

## Required courses: (17 units) Units

THEA 100 F Introduction to the Theatre 3
THEA 141 F Introduction to Technical Theatre 4
THEA 143 F Stagecraft
THEA 160 F Introduction to Sound Technology
THEA 170 F Beginning Theatrical Lighting
Required Theatre Crafts Lab Courses:
(select a minumum of 4 units)
Units
THEA 148 F Introduction to Theatre Crafts Lab
2
THEA 152 F Beginning Theatre Crafts Lab 2
THEA 252 F Intermediate Theatre Crafts Lab
2
THEA 253 F Advanced Theatre Crafts Lab

Required Stage Crew Activity Courses: (2 units) Units
THEA 153 F Introduction to Stage Crew Activity 0.5
THEA 159 F Beginning Stage Crew Activity 0.5
THEA 249 F Intermediate Stage Crew Activity 0.5
THEA 250 F Advanced Stage Crew Activity 0.5
Required production courses:
(select a minimum of 6 units) Units
THEA 130 F Acting Workshop 3
THEA 131 F Theatre Workshop 2
THEA 134 F Beginning Theatre Practicum 2
THEA 233 F Intermediate Theatre Practicum 2
THEA 178 F Beginning Musical Theatre Production 2
THEA 278 F Intermediate Musical Theatre Production 2
Restricted electives: (select 6-8 units) Units
DRAF 171 F Fundamentals of Drafting 2
THEA 092 F Automated Scenery for the Theatre 2
THEA 093 F Rigging for the Theatre 1
THEA 146 F Scene Painting 3
THEA 151 F Properties: Design and Construction 3
WELD 121AF Introduction to Welding 2
Total Units
35-37

## WELDING

## Welding Technology Certificate

PROGRAM CODE: 2 C08417
The Welding Technology Certificate Program requires the completion of not less than 29 units of which 24 units are in required courses. An additional 5 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

## Program Level Student Learning Outcomes

Outcome 1: Demonstrate one or more of the five core welding processes.
Outcome 2: Demonstrate code compliance requirements for Welding.
Required Courses (24 units)WELD 091AF Industrial Welding Fundamentals5
WELD 121AF Introduction to Welding ..... 2
WELD 121BF Fundamentals of Inert Gas Welding

WELD 091BF Semi-Automatic Welding Applications
WELD 091CF Manual Arc Welding Fundamentals
WELD 091DF Structural Welding Certification

## Restricted Electives (5 units)

DRAF 070 F Blueprint Reading for the Metal Trades
DRAF 171 F Fundamentals of Drafting
MACH 116 F Machine Tools
METL 192 F Fundamentals of Metallurgy
TECH 081 F Technical Mathematics I
TECH 108 F Manufacturing Processes
TECH 127 F Industrial Safety
Total Units

## Course Descriptions


#### Abstract

NOTE: This publication must be prepared well in advance of the time period it covers; therefore, changes in some programs and policies may occur. Courses as described are subject to change without notice, and some listed courses are not offered each year. In addition, some courses or programs that are offered may have to be canceled because of insufficient enrollment, elimination, or reduction in programs or for any other reason considered sufficient by the College president or designee.


All courses meet the standards and criteria for courses and classes set forth in the California Education Code Title V regulations, Section 55002 and 55806.

Courses fall into one of two categories: (1) an associate degree credit course or (2) a course.

An associate degree credit course is a course which has been designated as college level, which is appropriate to the associate degree in accordance with the requirements of Section 55805.5 and "which has been recommended by the college and/or district curriculum committee and approved by the district governing board as a collegiate course meeting the needs of the students eligible for admission."

Only courses that conform to the standards specified in Section 55002 and that fall into the following categories may be offered for associate degree credit:

1. All lower division courses accepted toward the baccalaureate degree by the California State University or University of California or designed to be offered for transfer.
2. Courses that apply to the major in non-baccalaureate occupational fields.
3. English courses not more than one level below the first transfer level composition course, typically known as English 1A or English 100. Each student may count only one such course as credit toward the associate degree.
4. All mathematics courses above and including Intermediate Algebra.
5. Credit courses in English and mathematics taught in or on behalf of other departments and which, as determined by the local board of trustees require entrance skills at a level equivalent to those necessary for the courses specified in subsections (3) and (4).

Non-degree credit courses are courses that earn credit but are not counted toward the 60 units required for the associate degree. Non-degree courses are intended to assist students in performing the skills needed for college level courses. Non-degree courses do apply toward: residency, athletic eligibility, work study and financial aid, veterans benefits, associated student body office, and full-time status.

## Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the ASSIST database at www.assist.org for specific information on C-ID course designations. Counselors can always help students interpret or explain this information.

## Course Numbering System Defined

Each course is designated by a number, the first number on the line. A descriptive title and the units allowed for the course follow the course number.

The following numbering system governs the applicability of courses toward completion of programs:

001-099 Courses numbered less than 100 are not designed for transfer. Courses numbered 001-099 are pre-collegiate, occupational and/or technical. Some of these courses are college preparatory. Course content is related to both skill development and acquisition of knowledge. Several courses that are typically intended for certificate and associate degree programs are included in this category. Occasionally these courses are accepted for transfer credit by four-year institutions. The determination of acceptance of these courses will be made by the receiving institution.

100-299 Courses numbered 100 and above are parallel to baccalaureate-level courses and, as such, are offered for transfer to colleges and universities. The California State University system accepts all courses in this number category for credit. The University of California system accepts only those courses that are also designated "UC" to the University of California system. Those courses that are not marked "UC" are not transferable to the University of California system.

As a general rule, numbers 200-299 are used to designate higher level courses and usually require introductory courses as prerequisites.

To expedite transfer acceptance, articulation agreements have been negotiated with several nearby institutions and the student is advised to consult his/her counselor to ensure proper transfer and acceptance of earned credits.

900 Courses numbered 900 are unique and currently do not have equivalent lower division courses offered at a California State University or University of California. However, these courses typically have the rigor and content of baccalaureate level courses. The transferability will be determined by the receiving institution. Students are advised to keep their syllabi and all assignments and work completed in class as a means to verify course content. Course outlines are available from the Fullerton College Office of Academic Services.

## Course Prefixes

| ACCT | Accounting |
| :--- | :--- |
| AJ | Administration of Justice |
| ANAT | Anatomy and Physiology |
| ANTH | Anthropology |
| ARAB | Arabic |
| ARCH | Architecture |
| ART | Art |
| AUTO | Automotive |
| BIOL | Biology |
| BUS | Business Management |
| CDES | Child Development and Education Studies |
| CHEM | Chemistry |
| CHIN | Chinese |
| CIS | Computer Information Systems |
| CISG | Computer Information Systems - Gaming |
| COSM | Cosmetology |
| COUN | Counseling and Guidance |
| CRTV | Cinema-Radio-Television |
| CSCI | Computer Science |
| CSTR | Construction Technology |
| DANC | Dance |
| DART | Art (Digital Arts) |
| DRAF | Drafting Technology |
| ECON | Economics |
| ENGL | English |
| ENGR | Engineering |
| ENVS | Environmental Sciences |


| ESC | Earth Sciences |
| :---: | :---: |
| ESL | English as a Second Language |
| ETHS | Ethnic Studies |
| FASH | Fashion |
| FOOD | Foods |
| FREN | French |
| GEOG | Geography |
| GERM | German |
| HED | Health Education |
| HIST | History |
| HORT | Horticulture |
| HUM | Humanities |
| IDES | Interior Design |
| INDS | Interdisciplinary Studies |
| ITAL | Italian |
| JAPN | Japanese |
| JOUR | Journalism |
| LIB | Library |
| MACH | Machine Technology |
| MATH | Mathematics |
| METL | Metallurgy |
| MICR | Microbiology |
| MKT | Marketing Management |
| MUS | Music |
| MUSA | Music (Applied) |
| NUTR | Nutrition |
| OT | Office Technology |
| PE | Physical Education |
| PHIL | Philosophy and Religious Studies |
| PHOT | Photography |
| PHYS | Physics |
| PLEG | Paralegal Studies |
| PORT | Portuguese |
| POSC | Political Science |
| PRNT | Printing Technology |
| PSY | Psychology |
| RE | Real Estate |
| READ | Reading |
| REC | Recreation |
| SOC | Sociology |
| SOSC | Social Sciences |
| SPAN | Spanish |
| SPCH | Speech |
| STSV | Student Support Services |
| TECH | Technology-Related Courses |
| THEA | Theatre Arts |
| WELD | Welding |
| WELL | Wellness |
| WKEX | Work Experience |
| WMNS | Women's Studies |
| WOOD | Wood Technology |

## Course Prerequisite, Corequisite, Advisory

Prerequisite - When a course has a prerequisite, it means that a student must have certain documentable skills and/or knowledge before entering the course. This knowledge is considered necessary for a student to succeed in the course. The prior knowledge may be a skill (types 35 words per minute), a license or certificate (possession of a current Cosmetology License), an ability (speaks and writes Spanish fluently), a test score (writing assessment test score), or successful completion of a prior course (ENGL 060 F with a grade of "C" or better). The student must complete the prerequisite successfully, with a grade of "C" or better, before enrolling in the course; D, F or NP grades are not acceptable.

Corequisite - When a course has a corequisite, it means that a student must take another specific course concurrently with the course for which it is required. In some cases, the corequisite course may be taken prior to the course for which it is required - however, in these instances the corequisite course must be completed with a grade of "C" or higher. For example, with many lab courses in the sciences, students may take the required lecture course either prior to the lab or concurrently with it.

Advisory - When a course has an advisory, it means that certain preparation is recommended before a student enters the course. The preparation is considered advantageous for a student to succeed in the course. Since the preparation is recommended, the student is advised, but not required, to meet the condition before or in conjunction with enrollment in the course or educational program. For example, an introductory course in design concepts is advised to help give students the skills to succeed in more specialized art courses.

Challenges or Exceptions - Prerequisites and corequisites for all courses will be listed in the college catalog under the entry for each class. Students are obligated to know and meet prerequisites and corequisites. Prerequisites and corequisites will be enforced, and students may be required to show proof of having met them. Challenges and exceptions may be granted only if students follow the appropriate challenge procedures. These procedures are found in the "Matriculation" section of the catalog. Students should go to the Counseling/Matriculation Office for copies of procedures and forms.

## Credit Values

The number in parentheses following the title of the course is the semester credit value of the course.

## Definition of Unit

Coursework at Fullerton College is measured in terms of semester units. A one-unit course requires a minimum of 54 hours of lecture, study and/or lab work on a semester system.

## Open Enrollment Policy

It is the policy of the 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 open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to Chapter 11 Division Two Part VI, Title 5 of the California Administrative Code, commencing with Section 51820.

## Repeatable Courses

A student may enroll more than once in credit courses that are designated as repeatable. For a description of what types of courses can be designated as repeatable refer to the section on the California Code of Regulations and Course Repeatability under Course Repetition. In addition if a course is an active participatory course in physical education, visual arts, and performing arts that is related in content and is not a repeatable course then a student is allowed to only take the course one time for credit. If the course is related in content to other active participatory courses (e.g., designated skill levels such as beginning, intermediate, and advanced) then a student is limited to a total of four enrollments within each group of these courses. If a student earns a grade of "W," this will count as one of the four attempts and all past enrollments will be used in the determination of a student's total number of enrollments. A student who has taken beginning volleyball three times and intermediate volleyball once has completed the maximum number of repetitions allowed for the group of volleyball courses even though there may be a number of higher level courses.

## Transfer Designation

All courses marked UC are transferable to the campuses of the University of California system. All courses with numbers of 100 and higher are transferable to the campuses of the California State University system. Those courses that are not marked UC are not transferable to the University of California campuses.

UC Credit Limitation indicates that there is a total maximum credit limitation of several courses. Students need to see the articulation agreement/counselor to determine the specific limitation.

In order to determine if a specific course meets a general education/breadth transfer requirement at a specific institution or if a course meets a specific major requirement at a transfer institution, students are advised to confer with their counselor regarding the transferability of the course to a particular college or university.

Some courses are marked by the following codes, they are defined as follows:

## AA GE

These courses meet the Fullerton College General Education Requirement for the Associate degree.

## CSU GE

These courses meet the lower division General Education requirements to the California State University (CSU) System.

## IGETC

These courses meet the lower division General Education requirements to either the University of California (UC) or California State University (CSU) System.

## MULT CULT REQ

Courses marked MULT CULT REQ meet the Multicultural Education Requirement for the Associate degree.

## Accounting (ACCT)

Business and Computer Information Systems Division
Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Accounting Courses

## ACCT 001 F Accounting for Small Business 3 Units

54 hours lecture per term. This course is ideal for the student who wishes to attain a solid foundation in the basic fundamentals of accounting. This includes business students who are planning more advanced studies of accounting and business at four-year institutions, as well as students who desire knowledge in accounting for small businesses, but do not necessarily intend to major in accounting or transfer to a four-year university. Topics include fundamentals of double entry journals; preparation of trial balances; worksheets and simple financial statements for service or retail types of businesses; use of controlling accounts; special journals; cash journals; accrual and cash basis accounting; cash controls and bank reconciliation; payroll accounting including employee earnings and deductions and employer's taxes and payments. (Degree Credit)

## ACCT 011 F Payroll Accounting <br> 2 Units

Prerequisite: ACCT 100AF or ACCT 101AF with a grade of "C" or better.
54 hours lecture per term. This course is designed to provide an overview of social security, state and federal payroll taxes. The course is of a non-technical nature and is intended to give business students a practical working knowledge of the current tax laws and actual experience in applying the regulations. (Degree Credit)

## ACCT 090 F Current Topics in Taxation . 5 to 3 Units

$0-54$ hours lecture and 0-54 hours lab per term. This course offers timely and contemporary income tax law-related topics designed to enhance job skills, expand the student's knowledge of the most current tax practice environment, and increase employment opportunities. Unit credit may vary in any given semester. Consult the class schedule to verify specific topics and credit offered in a particular semester.

## ACCT 100AF Financial Accounting Principle 3 Units

72 hours lecture per term. This course is the first part of a twopart financial accounting course that is equivalent to ACCT 101AF after the completion of ACCT 100AF and ACCT 100BF. This course covers the entire accounting cycle, cash, bank reconciliations, receivables, temporary investments, and incorporates a practical approach with the use of business papers and computer applications integrated into the homework. Not open to students who have completed ACCT 101AF with a grade of "C" or better. (CSU) (UC Credit Limitation) (Degree Credit)

## ACCT 100BF Financial Accounting Principle 3 Units

 Prerequisite: ACCT 100AF with a grade of "C" or better. 72 hours lecture per term. This course is a continuation of 100AF Financial Accounting Principles with emphasis on the basic concepts of accounting for plant assets, intangible assets, payroll, notes payable and other liabilities, partnerships and corporations, long term liabilities and investments in bonds, inventories, statement of cash flow, and analysis of financial statements. The practical approach is continued with the use of business papers and computer applications integrated into the homework. Upon completion of this course, the student will have fulfilled the equivalent of ACCT 101AF requirement. Not open to students who have completed ACCT 101AF with a grade of "C" or better. (CSU) (UC Credit Limitation) (Degree Credit)
## ACCT 101AF Financial Accounting

5 Units (C-ID ACCT 110)
90 hours lecture per term. This is a study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally-accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (CSU) (UC Credit Limitation) (Degree Credit)

## ACCT 101BF Managerial Accounting 5 Units (C-ID ACCT 120)

Prerequisite: ACCT 100BF with a grade of "C" or better or ACCT 101AF with a grade of "C" or better.
90 hours lecture per term. This course is the study of how managers use accounting information in decision making, planning, directing operations and controlling, and focuses on cost terms and concepts, cost behavior, cost structure and cost-volume profit analysis. Topics also include issues relating to cost systems, cost control, profit planning and performance analysis in manufacturing and service environments. (CSU) (UC) (Degree Credit)

## ACCT 102HF Honors Financial Accounting 5 Units (C-ID ACCT 110)

90 hours lecture per term. This Honors-enhanced course is a study of the financial information system, examining why it is important and how it is used by investors, creditors and others to make decisions. This course covers the accounting information system, including recording and reporting business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Topics include issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. (CSU) (UC Credit Limitation) (Degree Credit)

ACCT 104 F Computerized Accounting
2 Units
Prerequisite: ACCT 100AF or ACCT 101AF with a grade of "C" or better.
27 hours lecture and 27 hours lab per term. This course provides hands-on experience in accounting on a microcomputer. Systems included are the general ledger, accounts receivable and accounts payable, financial statements analysis, depreciation, inventory, and payroll. (CSU) (Degree Credit)

## ACCT 107 F QuickBooks

2 Units
27 hours lecture and 27 hours lab per term. This course will introduce students to basic financial record keeping software using the double-entry system for recording transactions. Emphasis will be placed on how to use accounting application software in a small business environment. (CSU) (Degree Credit)

## ACCT 112 F Income Tax Procedure

3 Units
54 hours lecture per term. This course offers a simple and non-technical presentation of the information needed in preparing Federal Income Tax returns for individuals whose income is derived from wages and other various sources. Tax deductions and credits are also covered in detail. (CSU) (Degree Credit)

## ACCT 113 F Income Tax Procedure Business

3 Units
54 hours lecture per term. This course offers a basic and nontechnical presentation of the information needed in preparing Federal Income Tax returns for corporations and partnerships. Tax deductions and credits are also covered in detail. (CSU) (Degree Credit)

## ACCT 201AF Intermediate Accounting

5 Units
Prerequisite: ACCT 100BF with a grade of "C" or better or ACCT 101AF with a grade of "C" or better or ACCT 102HF with a grade of "C" or better.
90 hours lecture per term. This second-year accounting course deals with adjustments, working papers, cash and receivables, inventories, plant and equipment, intangibles, deferred charges, liabilities, income tax allocation and accounting for premiums. This course is required of all vocational accounting majors. (CSU) (Degree Credit)

## ACCT 201BF Intermediate Accounting

5 Units
Prerequisite: ACCT 100BF with a grade of "C" or better or ACCT 101AF with a grade of "C" or better or ACCT 102HF with a grade of "C" or better.
90 hours lecture per term. This second-year accounting course deals with earnings per share, revenue recognition, accounting for pensions and other post-employment benefits, accounting changes and error corrections, cash flow statements, the impact of changing prices, and financial statement analysis. This course is required of all vocational Accounting majors. (CSU) (Degree Credit)

ACCT 202 F Introduction to Cost Accounting 4 Units Prerequisite: ACCT 101BF with a grade of "C" or better. 90 hours lecture per term. This course covers the theory of cost accounting including job order costs, estimated costs, standard costs, miscellaneous costs, and distribution cost systems as applied to the control and management of business through cost accounting procedures. Parallels cost accounting courses in fouryear colleges. Required of all vocational accounting majors. (CSU) (Degree Credit)

## ACCT 203 F Auditing <br> 3 Units

Prerequisite: ACCT 100BF or ACCT 101AF or ACCT 102HF, with a grade of "C" or better.
54 hours lecture per term. This course emphasizes internal auditing with questions and separate cases. Incorporated into the course is one long case for application of auditing principles. (CSU) (Degree Credit)

ACCT 204 F Analysis of Financial Statements 3 Units Prerequisite: ACCT 101AF or ACCT 100BF or ACCT 102HF, with a grade of "C" or better.
54 hours lecture per term. This course deals with characteristics of financial statements and financial statement analysis. A study of goals, methods, and tools for analysis is studied. In addition, accounts receivable, inventories, projected statements, cash budgets, and cash flow are studied. Emphasis is placed on financial analysis from a banking viewpoint. (CSU) (Degree Credit)

## ACCT 205 F Ethics in Accounting

3 Units Prerequisite: ACCT 100BF or ACCT 101AF or ACCT 102HF, with a grade of "C" or better.
54 hours lecture per term. This course examines the professional responsibility of ethical behavior in accounting and a study of truth in financial disclosures, ethical theory, code of conduct, auditing, managerial, and tax ethics. This course is now required in order to take the CPA Exam. (CSU) (Degree Credit)

# Administration of Justice (AJ) 

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Administration of Justice Courses

## AJ 059AF Basic Police Academy Extended Format I

Prerequisite: AJ 094 F with a grade of "Pass" or pre-service status with a law enforcement agency. No felony convictions. A valid California driver's license is required.
450 hours lecture and 108 hours lab per term. This is the first semester of a course that meets all the requirements set forth by the California Commission on Peace Officer Standards and Training. A course study of statutory and case law relating to arrests, searches, seizures, related legal provisions governing the performance of peace officers, and Spanish for law enforcement. This includes the decision making process and moral and legal aspects of the use of force in making arrests. A study of the most modern firearm safety principles, capabilities and techniques of today's weapons and public and organizational policies involving the use of deadly force, in addition to other updated facets of a peace officer's functions. The academy stresses community oriented policing as a value system, a philosophy or management style that permits equal partnerships between the community and law enforcement to address crime and the fear of crime. Additionally, group discussions are held to increase the student's knowledge of Orange County demographics, the diversity of communities and other aspects of community policing. (Degree Credit)

## AJ 059BF Basic Police Academy Extended Format II

Prerequisite: AJ 059AF with a grade of " C " or better.
450 hours lecture and 108 hours lab per term. This is the second semester of a course that meets all the requirements set forth by the California Commission on Peace Officer Standards and Training. A course study of statutory and case law relating to arrests, searches, seizures, related legal provisions governing the performance of peace officers, and Spanish for law enforcement. This includes the decision making process and moral and legal aspects of the use of force in making arrests. A study of the most modern firearm safety principles, capabilities and techniques of today's weapons and public and organizational policies involving the use of deadly force, in addition to other updated facets of a peace officer's functions. The academy stresses community oriented policing as a value system, a philosophy or management style that permits equal partnerships between the community and law enforcement to address crime and the fear of crime. There is instruction to enhance the student's perception of law enforcement from a citizen's perspective. Additionally, group discussions are held to increase the student's knowledge of Orange County demographics, the diversity of communities and other aspects of community policing. (Degree Credit)


#### Abstract

AJ 068 F Parolee Contacts Prerequisite: Peace Officer Status. Pass/No Pass only. 24 hours lecture per term. This course is designed to improve the police officer's ability to understand and deal with state prison paroles in many types of settings. It covers a basic understanding of the California prison system, typical parolee behavior, communicating with parolees and understanding conditions of parole. It also emphasizes teaching the officer the cognitive skills needed in a law enforcement field environment including proper field interrogation. Investigative recourses within the Department of Corrections are discussed as well as controlled interviews. (Degree Credit)


## AJ 069 F Drug Influence

## . 5 Units

Pass/No Pass only.
8 hours lecture per term. This course is designed to improve the police officer's ability to recognize the objective symptoms of drug intoxication, with emphasis placed on the proper application of California Health and Safety Code 11550. The course covers how the peace officer can develop techniques to better identify signs of specific drug ingestion, use proper drug testing methods and write effective reports to aid in successful prosecution. (Degree Credit)

## AJ 070 F Emergency Management

### 1.5 Units

 Pass/No Pass only.24 hours lecture per term. This course is designed to introduce important tactical concepts when planning for natural and technological disasters and other critical incidents that require law enforcement response. It focuses on basic emergency management principles, including disaster preparedness, mitigation, response and recovery. Emphasis is placed on the use of the Standardized Emergency Management (SEMS) and Law Enforcement Incident Command (ICS) Systems. (Degree Credit)

## AJ 071 F Preventing Racial Profiling

. 5 Units
Pass/No Pass only.
9 hours lecture per term. This course is designed to familiarize students with the conceptual and legal issues surrounding the unlawful practice of racial profiling. It examines critical cultural, legal and societal factors that ultimately lead to racial profiling as a discriminatory practice. The course emphasizes the need for the student to develop an understanding and respect for racial and cultural differences, and non-combative methods of carrying out law enforcement duties in a racially and culturally diverse environment. (Degree Credit)

## AJ 072 F Investigating Domestic Terrorism 1 Unit

 Pass/No Pass only.18 hours lecture per term. This course is designed to give the student essential background information about domestic terrorism and demonstrate how law enforcement personnel can properly investigate terrorist crimes. An analysis of the historical, legal and political perspective of terrorist activity as well as assessing philosophical and psychological typologies of terrorists. The curriculum emphasizes how law enforcement can develop investigative and intelligence capabilities to counter terrorist activity as a part of American national security policy.

## AJ 075 F Cultural Diversity

Pass/No Pass only.
18 hours lecture per term. This course is designed to give students a perspective of public safety professionals and their relationship to major cultural, racial, and ethnic groups including persons with disabilities as well as gays and lesbians. This course will also examine law enforcement personnel issues that deal with gender, sexual harassment, diversity, affirmative action, and other contemporary challenges. (Degree Credit)

## AJ 077 F Organized Crime

1 Unit Pass/No Pass only.
16 hours lecture per term. This course will analyze the effects of International Organized Crime Groups in the United States and the American law enforcement effort to combat those criminal organizations. (Degree Credit)

## AJ 078 F Multi-Agency Task Forces

. 5 Units
Pass/No Pass only.
9 hours lecture per term. This course will analyze the needs, benefits, and procedures in the establishment of federal, state, and local task forces. Emphasis will be placed on working together in a multi-agency environment and achieving desired outcomes. (Degree Credit)

## AJ 079 F Law Enforcement Career Preparation

Pass/No Pass only.
9 hours lecture per term. This course will assist the student in identifying and utilizing effective performance strategies toward entry-level law enforcement employment examinations. Emphasis is placed on specific civil service testing procedures, including written exams, physical agility tests, oral board interviews, and the background investigation process. (Degree Credit)

## AJ 080 F Lifetime Fitness for Law <br> 2 Units

 EnforcementPass/No Pass only.
36 hours lecture per term. This course is designed to introduce important wellness concepts to law enforcement personnel. Through the use of lecture, group discussion and practical demonstration, this course discusses how those in law enforcement can develop and maintain successful fitness habits and minimize job related stress. The course design emphasizes proper fitness assessment, effective anaerobic/aerobic fitness principles, the prevention of physical disablers through stress reduction, current nutrition guidelines and proper fitness program design. Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers. (Degree Credit)

## AJ 084 F Domestic Violence

Pass/No Pass only.
9 hours lecture per term. This course will demonstrate to the student that the intent of the Legislature in domestic violence cases is to stress enforcement of the laws to protect the victim and communicate the attitude that violent behavior is criminal behavior and will not be tolerated. The investigative process, arrest, court protective orders and victim assistance will be stressed. (Degree Credit)

## AJ 085 F Police Vehicle Pursuits

2 Units
Pass/No Pass only.
36 hours lecture per term. This course is a study of police pursuits in California and the nation. Specific emphasis on California laws, both criminal and civil, affecting public agencies and violators involved in police pursuits. An analysis of officer and violator behavioral patterns both during and after police pursuits. This class will establish a better understanding of the dynamics and contemporary issues associated with high speed police chases.

## AJ 089 F Child Abuse/Child Pornography

. 5 Units
Pass/No Pass only.
9 hours lecture per term. This course will prepare the student to identify, arrest and investigate child abuse and child pornography crimes. (Degree Credit)

## AJ 091 F Law Enforcement Instructor Development

## Pass/No Pass only.

36 hours lecture per term. This course is designed to assist both current and future law enforcement instructors to maximize their instructional skills and improve the learning process. The course will introduce law enforcement instructors to current adult learning techniques and developing instructional technology. The instructors will be required to participate in both group and individual activities designed to enhance instructional skills. (Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers.)

## AJ 092 F Crime Scene Investigation 1 Unit Pass/No Pass only.

13.5 hours lecture and 13.5 hours lab per term. This class will give the police officer the knowledge and practical application to collect and preserve evidence at crime scenes. Students are required to supply 35 mm SLR/camera, two rolls of 24 exposure film and the cost of processing the film. (Degree Credit)

## AJ 093 F DNA Genetic Fingerprinting <br> . 5 Units

Pass/No Pass only.
9 hours lecture per term. The class will prepare the officer/student to properly handle DNA evidence collection and preservation. An understanding of the fundamentals of DNA and the current techniques of analysis will be presented. (Degree Credit)

## AJ 094 F Basic Police Academy Orientation Pass/No Pass only.

18 hours lecture and 9 hours lab per term. This course is designed to have the student complete a series of competitive tests and evaluations which are a prerequisite to being admitted into the upcoming Police Academy. An in-depth dissemination of the recruit curriculum, which is specifically designed to achieve technical competence and physical proficiency in all areas of police training. (Degree Credit)

## AJ 095 F Preventing Sexual Harassment

. 5 Units Pass/No Pass only.
9 hours lecture per term. To provide the student with a basic understanding of the diverse and changing work force, a brief history and an in-depth study of the current laws which define discrimination/sexual harassment. (Degree Credit)

## AJ 096 F CAD/Crime Scene Application

. 5 Units Pass/No Pass only.
9 hours lecture and 15 hours lab per term. This 24 -hour short course to provide the student with a working knowledge of CAD functions utilized in crime scene investigation by using computer drafting to draw various applications for criminal and traffic collision investigations.

## AJ 100 F Introduction to Law Enforcement <br> 3 Units

 (C-ID AJ 100)54 hours lecture per term. This course acquaints the student with the historical development of the criminal justice system, criminal behavior, the purpose of criminal law, and the advancement of the ethics and professionalism in the justice system. Provides an overview of the organization of local, state, and federal law enforcement agencies and an analysis of professional career opportunities. (CSU) (UC) (Degree Credit)

## AJ 102 F Introduction to Probation and Parole <br> (C-ID AJ 200)

## 3 Units

54 hours lecture per term. This course examines the organization and operations of correctional, probation and parole agencies as part of the United States criminal justice system. It introduces the learner to the basic principles of parole and probation at the federal, state and local levels of government. Emphasis is placed on how the parole and probationary functions impact the justice process, particularly at the law enforcement and court levels. (CSU) (Degree Credit)

## AJ 110AF Criminal Law <br> (C-ID AJ 120)

## 3 Units

54 hours lecture per term. This course covers the legal orientation of crime and the nature of criminal responsibility. Legal philosophy, processes and institutions are examined. Topics also include leading principles of law and examination of the United States Constitution and the Bill of Rights. (CSU) (UC Credit Limitation) (Degree Credit)

## AJ 110BF Advanced Criminal Law <br> 3 Units

Corequisite: Completion of AJ 110AF or taken concurrently. 54 hours lecture per term. This course is a study of the elements of crimes against persons, property, and the State as they are recognized in the Penal Code and General Laws of California. Parties in crime, culpability, and incomplete offenses are presented from the point of view of the peace officer and the courts. (CSU) (UC Credit Limitation) (Degree Credit)

## AJ 135 F Weaponless Defense

1 Unit
18 hours lecture and 18 hours lab per term. Provides the student an opportunity to develop proficiency in the utilization of the police baton, the control of combative individuals, and the handling of passive, uncooperative, or armed-aggressive individuals. This course meets one semester of physical education requirement. (CSU) (Degree Credit)

## AJ 137 F Firearms <br> 1 Unit

Prerequisite: AJ 110AF with a grade of "C" or better.
18 hours lecture and 18 hours lab per term. This course covers the moral aspects, legal provisions, safety precautions and restrictions covering the use of firing of the sidearm and shotgun. (CSU) (Degree Credit)

## AJ 140 F Juvenile Procedures

3 Units

## (C-ID AJ 220)

54 hours lecture per term. This course is a study of juvenile crime, laws and social issues relating to youthful offenders. Examination of child abuse, domestic violence and gang membership. Law enforcement responses to issues relating to juveniles, including the courts, probation and the California Youth Authority. (CSU) (Degree Credit)

## AJ 151 F Police Report Writing 3 Units

54 hours lecture and 54 hours lab per term. This course examines the proper writing of police crime reports and their importance in the successful prosecution of cases. Emphasis is placed on developing the students' ability to accurately take notes, employ appropriate methods of obtaining information from victims, witnesses, and suspects, formulate investigative techniques, and recognize proper report language. (CSU) (Degree Credit)

## AJ 220 F Criminal Procedure

3 Units

## (C-ID AJ 122)

54 hours lecture per term. This course provides a background of operational procedures in California law. Sets forth those procedures necessary for the understanding of legal proceedings pertaining to laws of arrest, search and seizure, admissibility of evidence, and jurisdiction of the courts. (CSU) (Degree Credit)

## AJ 222 F Rules of Evidence <br> 3 Units

## (C-ID AJ 124)

54 hours lecture per term. This course is an introduction to the basic rules of evidence admissibility in criminal proceedings. Explains legal principles on how courts determine reliable, relevant and probative evidence in a court of law. Assesses how courts categorize and type evidence into a working framework for use in a criminal trial. Emphasis is placed on developing the law enforcement officer in courtroom evidentiary presentation. (CSU) (Degree Credit)

## AJ 223 F Criminal Investigation

3 Units

## (C-ID AJ 140)

54 hours lecture per term. This course involves preliminary investigation, follow-up investigation, and courtroom presentation relating to criminal offenses and includes specialist lectures on the scientific elements. Emphasis is placed on the investigative process and the legal requirements of criminal inquiry. (CSU) (Degree Credit)

## AJ 226 F Narcotics and Vice Control <br> 3 Units

54 hours lecture per term. This course covers the types of narcotics and their uses, with resultant law enforcement problems. Covers narcotics and vice enforcement, cures, and rehabilitation programs. (CSU) (Degree Credit)

## AJ 230 F Crime Scene Techniques

3 Units (C-ID AJ 150)
54 hours lecture per term. This course will introduce the student to field techniques for the collection and preservation of physical evidence at the scene of the crime. The course will cover physical and testimonial evidence, scene responsibilities, processing the scene, fingerprint evidence, trace evidence, blood and bodily fluids, impression evidence, firearms evidence, dangerous drugs and clandestine laboratories, sexual assaults, domestic abuse, elder abuse, burglaries and homicide crime scenes. (CSU) (Degree Credit)

## AJ 252 F Police Patrol

## 3 Units

54 hours lecture per term. This course covers the fundamentals of proper patrol procedures and techniques, with particular emphasis on officer safety, public relations, and crime prevention. Designed to develop competency in handling frequently encountered police problems through the analysis of actual situations. The course will focus on developing officer survival skills through threat-based decision making. (CSU) (Degree Credit)

AJ 276 F Investigation of Homicidal Behavior 3 Units 54 hours lecture per term. This course is a historical perspective of homicide in America today. Topics include motives for murder, psychology of murder, criminal investigation into homicide, victims of murder, those who murder and various methods of murder. The course will also examine the phenomena of serial and mass murderers. (CSU) (Degree Credit)

## AJ 278 F Multicultural Issues within Administration of Justice

54 hours lecture per week plus a series of practical exercises. This course is a theoretical and conceptual overview of multicultural concepts and issues; an application of those concepts and issues to Administration of Justice; identification of problems related to our increasingly diverse population; examination of strategies to overcome those problems, particularly in relation to the maintenance of social order. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) MULT CULT REQ

## AJ 279 F Contemporary Issues in Law Enforcement

54 hours lecture per term. This course explores major legal, societal and organizational issues affecting the law enforcement profession as it moves into the 21st century. Topics include ethics, police use of force, high-speed vehicle pursuits, cultural awareness, workplace diversity, and community-oriented policing and problem solving. The course emphasizes the development of problem solving strategies as a way to effectively deal with the challenges that police face. (CSU) (Degree Credit)

## AJ 901 F Organized Crime and the Criminal Justice System

54 hours lecture per term. This course will analyze the effects of international Organized Crime Groups on the United States and the American law enforcement effort to combat those criminal organizations. The class will review cooperative efforts between the United States and foreign governments to impact those organizations, the pitfalls encountered, and the successes and failures that result. It will also look into the secret world of the mafia Men of Honor. (Degree Credit)

# Anatomy and Physiology (ANAT) 

Natural Sciences Division
Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Anatomy and Physiology Courses

## ANAT 231 F General Human Anatomy <br> 4 Units <br> (C-ID BIOL 110B)

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
54 hours lecture and 54 hours lab per term. This course includes a logical analysis of body tissues, organs and systems. It stresses the microscopic, developmental and gross anatomy of mammals, with special emphasis on human anatomy. Special attention is given to pathological as well as normal conditions. The lab work includes study of the developmental, microscopic and gross anatomy of preserved specimens and models. This course is designed primarily for students interested in careers in various allied health fields. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ANAT 240 F Human Physiology 5 Units

## (C-ID BIOL 120B)

Prerequisite: ANAT 231 F and CHEM 101 F or equivalent, with a grade of "C" or better.
54 hours lecture and 108 hours lab per term. This course provides an in-depth study of human function. The focus of the course is maintenance of homeostasis. Organ systems are studied with respect to their interactions under normal and abnormal conditions. Lab experiences reinforce concepts studied in lecture and introduce students to clinical techniques. The course is designed for pre-health profession majors and other students that require a one semester course in physiology. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

# Anthropology (ANTH) 

Social Sciences Division<br>Office: Bldg 1400, Room 1415-714.992.7047<br>Dean: Kathy Bakhit<br>Website: http://socsci.fullcoll.edu/

## Anthropology Courses


#### Abstract

ANTH 101 F Physical Anthropology 3 Units (C-ID ANTH 110) 54 hours lecture per term. This course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State universities and other fouryear institutions, this course may be used for social sciences or biological science credit. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC


## ANTH 101HF Honors Physical Anthropology 3 Units (C-ID ANTH 110)

54 hours lecture per term. This Honors-enhanced course is a study of the theories of human origin and evolutionary development using genetic, fossil evidence, plus a comparison of humankind anatomically and behaviorally with the higher primates. This field includes current research on the intellectual and cultural equality of the human races. At a number of California State colleges and other four-year institutions, this course may be used for social sciences or biological science credit. This course will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments and a higher level of critical thinking. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ANTH 101LF Physical Anthropology Lab 1 Unit

Corequisite: ANTH 101 F with a grade of "C" or better.
54 hours lab per term. This course provides an introduction to lab methods used in research in physical (biological) anthropology. Topics include the classification, biology, and behavior of living primates, human skeletal and physiological anatomy, human genetics, methods of phylogenetic reconstruction, and evidence for the evolutionary history of humans and other primates. Emphasis is on practical experience. Students will examine skeletal materials from living and extinct primates, participate in experiments to illustrate analytical techniques used in modern physical anthropology, and observe the behavior of living primates through field trip and/or audio visual resources. In addition to lab exercises, one short research paper will be required. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ANTH 102 F Cultural Anthropology

## (C-ID ANTH 120)

54 hours lecture per term. This course is an introduction to the cultural aspects of man's behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, religion, language, and other basic topics. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, mUlt CULT REQ

## ANTH 102HF Honors Cultural Anthropology

3 Units (C-ID ANTH 120)
54 hours lecture per term. This Honors-enhanced course is an introduction to the cultural aspects of human behavior and the nature of culture. It includes the uniformities and variabilities of culture, social organization, family structure, religion, language, and other basic topics. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

ANTH 103 F Introduction to Archaeology 3 Units (C-ID ANTH 150)
54 hours lecture per term. This course covers a specialized branch of anthropology that studies cultural and physical anthropological evolutionary development; archaeology uses scientific methods and theories to trace human ecology from the past to the present. Archaeologists deal with remains of past societies such as tools, shelter, remains of animals eaten for food, and other objects that have survived. These remains, termed artifacts, are used to reconstruct past behavior. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ANTH 105 F Language and Culture 3 Units

54 hours lecture per term. This course covers the nature of language in relation to culture and how language processes develop and change. Students will examine how cultural knowledge is linguistically organized and how language shapes our perception of the world, and how it acts as a guide, both symbolic and practical, to understanding human actions. A basic introduction into the primary concepts of the discipline help students to understand what language reveals about human beings as bearers of culture. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ANTH 107 F Anthropology of Magic, <br> 3 Units Witchcraft and Religion

54 hours lecture per term. This course is an anthropological survey of systems of magic, witchcraft, and religion from the past and the present, from societies around the world. It examines beliefs and practices in cultural settings with respect to the role of the supernatural. Special topics include myth, religious healing, witchcraft and sorcery, ritual and millenarian movements. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ANTH 109 F Primate Behavior

3 Units
54 hours lecture per term. This course covers a survey of primates from around the world, with in-depth examinations of their behavior, ecology, taxonomy and anatomy. Students will gain experience in the collection and analyzing of behavioral data. Current issues in primate conservation will also be explored. Specific primate species will be used as case studies to further enhance students' knowledge of prosimians, monkeys, and apes. (CSU) (UC) (Degree Credit)

## ANTH 199 F Anthropology Independent Study 1 Unit

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the Social Sciences through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC credit limitation depending upon course content; UC review required.) (Degree Credit)

## ANTH 209 F Cultures of Latin America 3 Units

54 hours lecture per term. The scope of this course focuses on the exploration of the diverse cultures of ancient Latin America or Mesoamerica from the origins of civilization to the period of the Spanish conquest and some of the current issues indigenous people face in Latin America. The study of ancient Latin American cultures will be based on the four fields of anthropology. The study will be based on archaeological investigations, ethnographical research and various theoretical frameworks to enhance the understanding of the human experience in Latin America. The course will attempt to recreate the lifestyle, social structures, agricultural methods, religious practices and other various culture aspects of Meso-American civilizations in order to have a better understanding of the current conditions and aspects of the various diverse cultural groups from Latin America. The focus of this course will be on Mesoamerican civilizations as well as the Inca and other indigenous groups from South America. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ANTH 211 F Celtic Cultures

3 Units
54 hours lecture per term. This course will utilize data from archeology, genetics, historical linguistics and classical Greek and Roman texts to explore the origins, conquests and migrations of the ancient Celts. The complex whole that encompasses Celtic society and culture, from the past to the present, and in different geographic areas, will be studied including Celtic religion, myth and ritual, roles of females and males, art, warfare, ways of life, as well as current struggles for social, linguistic and political rights. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ANTH 231 F Field Course in Archaeology 3 Units

 36 hours lecture and 54 hours lab per term. This course is designed to provide a basic understanding of archaeological scientific field methods used in the investigation of an archaeological site. Field trips to local archaeological sites are a required part of instruction and will emphasize surveying and/or excavation. Site mapping, photography and other recordation techniques will be utilized. Cataloging, appropriate preservation, and the interpretation of surface and/or sub-surface artifacts will be completed. Students will begin the process of proper site survey report writing. Students repeating the course (second semester of 231 F ) will be expected to perform survey and excavation tasks at a higher skill level and to have rudimentary skills in tasks not expected of students taking the course for the first time (first semester of 231 F ). First five weeks of lecture in the classroom; remainder of lecture and lab hours in the field at a selected archaeological site. (CSU) (Degree Credit)
## Arabic (ARAB)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Arabic Courses

## ARAB 101 F Elementary Arabic I 5 Units

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading, and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Arabic-speaking countries. This course is conducted primarily in Arabic and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ARAB 102 F Elementary Arabic II

5 Units
Prerequisite: $A R A B 101$ F with a grade of " $C$ " or better OR one year of high school Arabic with a grade of "C" or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture and civilization of Arabic-speaking countries. This course is conducted primarily in Arabic and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Architecture (ARCH)

Technology and Engineering Division<br>Office: Bldg 700, Room 700-714.992.7115<br>Dean: Ken Starkman<br>Website: techneng.fullcoll.edu

## Architecture Courses

## ARCH 111 F Introduction to Architecture 3 Units

54 hours lecture per term. This course is designed for architecture majors as well as people interested in learning more about the architectural profession. The focus is split into two areas of emphasis. Architectural theory and history are explored from ancient civilizations to the present trends in design. The practical/ business side of architecture is discussed; the topics include education requirements and job opportunities as well as the architect's perceived role in our society. (CSU) (UC) (Degree Credit)

## ARCH 113 F Architectural Drawing I

3 Units
36 hours lecture and 72 hours lab per term. This course is designed to develop graphic and visualization skills, and its link as a means of externalizing, evaluating and communicating ideas. It will include both freehand and mechanically constructed type of orthographic, axonometric, oblique and lineal perspective drawings on two-dimensional surfaces. It is intended to develop the use of instruments, lettering, line weights, graphics and presentation layout. The media to be used will include pencil, ink, colored pencil and markers. (CSU) (UC) (Degree Credit)

## ARCH 114 F Architectural Materials and Methods

54 hours lecture per term. This course covers the various types of building materials used in construction and their applications in the formulation of specifications for building design. (CSU) (Degree Credit)

## ARCH 124 F Architectural CAD I <br> 3 Units

36 hours lecture and 54 hours lab per term. This is a beginning course in using the CAD system for architectural applications. The course covers elementary principles associated with the various menu and command structures in computer-assisted drafting. Topics included are file management, layering, symbol libraries, orthographic projection, dimensioning, line types and the generation of text. (CSU) (Degree Credit)

## ARCH 125 F Design Studio I

4 Units
Prerequisite: ARCH 113 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course introduces the student to the formal and spatial language of architecture. Assignments will be explored in the form of lab projects. Such projects will be the analysis of case studies, and their integration in the design process. (CSU) (Degree Credit)

## ARCH 215 F Design Studio II <br> 4 Units

Prerequisite: ARCH 125 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio I to further enhance skills in the development of a personal theory of design. Students will extend their understanding in such areas as visualization, decision making, and evaluation. (CSU) (Degree Credit)

## ARCH 225 F Design Studio III <br> 4 Units

Prerequisite: ARCH 215 F with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course is a continuation of Design Studio \| to further enhance skills in understanding the organization of design and emphasis on the means of architecture. Site analysis and building orientation will be explored. Two and three-dimensional drawings and model building will be produced. (CSU) (Degree Credit)

## ARCH 227 F Internship in Architecture <br> 2 to 4 Units

18 hours lecture and $90-360$ hours lab of supervised employment per term. This course is designed to provide learning opportunities through employment in an architectural firm or related type of business. No more than three units may be applied toward the degree or certificate. (CSU) (Degree Credit)

## ARCH 924 F Architectural CAD II <br> 3 Units

Advisory: ARCH 124 F or industry work in related areas.
36 hours lecture and 54 hours lab per term. This is an intermediate course that utilizes the CAD system for architectural applications. The course incorporates principles associated with the various menu and command structures in computer-assisted drafting to develop solutions to 2D and 3D design problems. (CSU) (Degree Credit)

## ARCH 934 F Architectural CAD III 3 Units

Advisory: ARCH 924 F or industry work in related areas.
36 hours lecture and 54 hours lab per term. This is an advanced course utilizing the CAD system to produce a set of construction documents. This course deals with two-story residential construction as applicable to the present professional standards in terms of technical drafting and 2-D and 3-D computer drafting. (CSU) (Degree Credit)

## Art (ART)

Fine Arts Division<br>Office: Bldg 1000, Room 1021-714.992.7034<br>Dean: John Tebay<br>Website: finearts.fullcoll.edu

## Art Courses


#### Abstract

ART 090 F Advanced Topics in Art 1 to 3 Units Advisory: 3-6 units of commercially related art or computer graphics courses, or professional equivalent. $18-54$ hours lecture and 18-162 hours lab per term. This course is designed to address new and emerging topics and trends and technology in Commercial Art and Design, as well as to provide personal growth to students in a variety of Art and computer graphics lab courses. This course will be offered in modules of advanced topics. Unit credit may range from 1 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic. (Degree Credit)


## ART 110 F Introduction to Art 3 Units

54 hours lecture per term. This course provides an introduction to art from prehistoric times to the present. Classroom presentations are supplemented by gallery and museum visits. While examining the role that the visual arts have played in the development of the cultures of the world, the student is exposed to a wide variety of artistic media. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 112 F Art History: Ancient to Medieval 3 Units (C-ID ART 110)

54 hours lecture per term. This course is a study of Western art, including architecture, sculpture and painting from Prehistory through the Middle Ages. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 113 F Art History: Renaissance to Modern 3 Units (C-ID ARTH 120)

54 hours lecture per term. This course is a survey of architecture, sculpture and painting from the Renaissance through the century. Art history courses may be taken in any sequence; at least two semesters are required of art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 114 F Art History: Impressionism to Present

54 hours lecture per term. This course is a survey of the development of modern architecture, sculpture and painting from their origins in the 19th century to the present. Art History courses are open to all students and course may be taken in any sequence; at least two semesters are required for art history majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 115 F Museum Survey

3 Units
Advisory: ART 110 F or completion of any Art History course.
54 hours lecture per term. This is a basic course in the study of museums and their collections. The course includes on-site lectures pertaining to the function of museums, the history of the art collections, the analysis and interpretation of the art in each collection and exhibition design. (CSU) (Degree Credit) AA GE

ART 116 F Art History: The Art of Mexico 3 Units 54 hours lecture per term. This course is a survey of the visual arts of Mexico from the earliest civilizations to contemporary Mexican and Chicano art. Both traditional and popular art forms are studied in the context of the cultures that produced them. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 117 F Art History: American Art

3 Units
54 hours lecture per term. This course is a survey of American art and architecture from the 17th century to the present. Lectures will present an overview of painting, sculpture, photography, and architecture from Colonial beginnings through recent PostModern developments. Emphasis will be placed on discovering what is American in American art. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 118 F Color Theory

## 3 Units

(C-ID ARTS 270)
36 hours lecture and 72 hours lab per term. This course is an introduction to fundamentals of color theory through lecture and applied exercises in paint and collage. Includes discussion of cultural differences in color symbolism and the historical development of conceptual models of color usage in both science and art. Theoretical focus will be on the Brewster, Munsell and Ostwald systems of color organization and the emphasis of the lab exercises is on practical applications of color theory in the visual arts professions. The course concludes with an introduction to digital color as used in computer graphics. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 120 F Basic Design

3 Units
(C-ID ARTS 100)
36 hours lecture and 72 hours lab per term. This is an introduction to strategies and techniques for the crafting, selecting and arranging visual elements in order to create artwork that engages the viewer. (CSU) (UC) (Degree Credit) AA GE, CSU GE

ART 121 F Three-Dimensional Design 3 Units (C-ID ARTS 101)
Advisory: ART 120 F.
36 hours lecture and 72 hours lab per term. This course is an introduction to three-dimensional design. This course defines the contrast of three-dimensional form to the two-dimensional format. The focus is on 360 degree design, in materials selected to best depict this contrast. This course involves the use of hand tools and some power equipment. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 122 F Museum Studies: Introduction to Gallery Practices

3 Units
36 hours lecture and 72 hours lab per term. This course provides an introduction to gallery practices through hands-on practice in installing art exhibitions in the Fullerton College Art Gallery. This course includes an introduction to the basic skills of installing art, lighting, advertising, and includes field trips to museums and galleries. Recommended for Art majors. (CSU) (Degree Credit)

## ART 123 F Business Practices in Art

3 Units
54 hours lecture per term. This course examines the basic business and professional practices needed to begin or continue a career in the visual arts. The class will require portfolio presentation, creation of resume and self-promotional pieces in addition to an understanding of proposals, contracts, and personal business practices. Also, a personal business notebook is to be kept by the students for future use. (CSU) (Degree Credit)

## ART 124 F Museum Studies - Exhibition 3 Units Production

Prerequisite: ART 122 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course provides increasing responsibility in exhibition planning, research, operation and management. This course introduces the creation of educational materials for the gallery visitor and the organizational structure of museums and includes field trips to museums and galleries. Recommended for Art Majors. (CSU) (Degree Credit)

## ART 125 F Museum Studies - Exhibition 3 Units Design and Careers

Prerequisite: ART 124 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course provides an introduction to exhibition design and museum careers. This course provides an opportunity to build gallery practice skills, and develop a deeper understanding of exhibition planning, research, operation and management of the Fullerton College Art Gallery. This course includes field trips to museums and galleries. Recommended for Art Majors. (CSU) (Degree Credit)

ART 127 F Applied Painting: Floral 2 Units Prerequisite: ART 188 F with a grade of " C " or better or ART 189 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course emphasizes realism as it applies to form, value and color. Students will learn the fundamentals of color harmony and structure; work is from nature, still life and photography in various painting media. (CSU) (UC) (Degree Credit) AA GE

## ART 128 F Portrait Painting

2 Units
Advisory: ART 186 F or ART 129 F and ART 189 F.
18 hours lecture and 54 hours lab per term. This course will offer the student the opportunity to develop portraiture through schematic studies and observational methods using models and plaster busts. Representational observation of facial features and varied facial types and expressions will be developed into portrait painting. Costume, setting, color harmony and historical and contemporary portraiture concepts to be studied. (CSU) (UC) (Degree Credit)

## ART 129 F Portrait Drawing

Advisory: ART 182 F and ART 186 F.
18 hours lecture and 54 hours lab per term. This is a basic course in portrait drawing based upon the study of the human head. Facial structure and the representation of many types of people in various art media are explored. (CSU) (UC) (Degree Credit)

ART 130 F Intermediate Portrait Drawing 2 Units Prerequisite: ART 129 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course covers the advanced study of portrait drawing through schematic studies and observational methods using models and plaster busts. Costume, setting, historical and contemporary portraiture concepts will be studied. Observation of facial features and varied facial types and expressions will be developed. (CSU) (UC) (Degree Credit)

## ART 131 F Introduction to Printmaking

## 3 Units

 (C-ID ARTS 220)Advisory: ART 120 F or ART 182 F.
36 hours lecture and 72 hours lab per term. This course provides experience with materials and processes involved in nontoxic approaches to relief, intaglio, screen-print and lithography, including the exploration of digital print processes. Designed to encourage graphic creativity and professional skill in the development of plates and their printing augmented by an awareness of traditional and contemporary methods and styles. (CSU) (UC) (Degree Credit)

## ART 132 F Intermediate Printmaking 3 Units

 Prerequisite: ART 131 F with a grade of " $\mathrm{C}^{\prime}$ or better. 36 hours lecture and 72 hours lab per term. This course provides students with an opportunity to build skills and expand the knowledge and experience with materials and processes of a variety of printmaking procedures that was initiated in the first semester of Printmaking. Emphasis and concentration is on creating an edition of prints. (CSU) (Degree Credit)
## ART 137 F Basic Drawing for <br> Entertainment Arts

36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing focusing on entertainment art preparation. Media used may include pencil, colored pencil, markers, watercolor, and mixed media. This course is designed for art majors who have an interest in pursuing illustration and entertainment art courses. (CSU) (Degree Credit)

## ART 139 F Fashion Sketching

## 2 Units

18 hours lecture and 54 hours lab per term. This course is designed for the student interested in a fashion career or the graphic design or illustration major wanting to develop fashion sketching skills. The course will include refinement of basic skills in drawing of the clothed figure as well as rendering of fabrics and patterns. Media used includes graphite, ink, marking pens, charcoal, colored pencils, photocopy, and mixed media. Development of a personal sketching style will be encouraged. (CSU) (Degree Credit)

## ART 140 F Introduction to Advertising and 3 Units Graphic Design

36 hours lecture and 54 hours lab per term. This course emphasizes communication through use of concepts, type and images. Topics include development of layout and computer skills, style and an introduction to logotype design. \$15 materials fee required at time of registration. (CSU) (Degree Credit)

## ART 141 F Typography

Advisory: ART 140 F.

## 3 Units

36 hours lecture and 54 hours lab per term. This course focuses on the use of type and typography in print and digital graphic design and prepares students to meet industry standards in the design and advertising industries. (CSU) (Degree Credit)

## ART 144 F Fundamentals of Cartooning 2 Units

Advisory: ART 182 F with a grade of " C " or better or ART 179 F with a grade of "C" better.
18 hours lecture and 54 hours lab per term. This course is an introduction to basic cartooning techniques and includes sketching, inking, and the development of characters. Projects include gag line cartooning, political cartooning, and the development of a weekly cartoon strip. In addition, there will be an analysis of the elements of both the humorous and the dramatic in cartoon art. This analysis will include a review of historically significant Sunday funnies and comic book characters, as well as an examination of major trends in comic art from 1895 to the present. (CSU) (Degree Credit)

## ART 145 F Publication Design 3 Units

Advisory: ART 140 F and DART 100 F.
36 hours lecture and 54 hours lab per term. This is an advanced course with emphasis on the design of publications such as brochures and magazine layouts to simulate real world assignments. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. $\$ 15$ materials fee due at registration. (CSU) (Degree Credit)

## ART 146 F Advertising Design 3 Units

Advisory: ART 140 F and DART 100 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This is an advanced level course with emphasis on design for advertising. The assignments are intended to simulate real world experience and may include advertising campaigns, posters, and billboards. Finished comprehensive projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio. $\$ 15$ materials fee is required at time of registration. (CSU) (Degree Credit)

## ART 147 F Production Techniques for Graphic Designers

## Advisory: ART 140 F.

36 hours lecture and 54 hours lab per term. This course is a study of methods and techniques necessary in preparing artwork for reproduction. Areas emphasized are: computer-generated preparation of mechanical art, electronic pre-press, typography, paper specification, and commercial printing methods. This course is oriented specifically to the needs of graphic design students. \$15 materials fee required at registration. (CSU) (Degree Credit)

## ART 148 F Packaging Design

3 Units

## Advisory: ART 140 F.

36 hours lecture and 54 hours lab per term. This is an advanced level course with emphasis on design for packaging. The assignments are intended to simulate real world experience and will include designing for a range of 3D surfaces. Finished comprehensive projects will be created on the computer to a professional quality. Students will be introduced to basic digital photography concepts for recording their work and creating images suitable for portfolio inclusion. $\$ 15$ materials fee is required at registration. (CSU) (Degree Credit)

## ART 152 F Ceramics Lab

1 Unit
Open Entry/Open Exit. Pass/No Pass only.
Corequisite: ART 153 F with a grade of " C " or better.
54 hours lab per term. This course provides students with an opportunity to work in the ceramics lab doing studio ceramics activities including handbuilding techniques, slab, coil, pinch construction, glaze preparation and application, throwing on the potter's wheel, sculptural and combined building techniques and other studio activities. (CSU) (UC) (Degree Credit)

## ART 153 F Ceramics: Beginning Handbuilding 3 Units (formerly ART 150AF)

36 hours lecture and 72 hours lab per term. This is a survey course dealing with three-dimensional design in clay as an entry into appreciation of the creative process and its physical execution using ceramic hand building techniques. Emphasis is placed on imagining, designing, creating, and evaluating vessel and sculptural form, using the coil, slab and pinch processes, and on textural and sculptural embellishment of surface. In addition, review of historical and traditional models, glazes, and firing are included. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 154 F Ceramics: Beginning Throwing 3 Units (formerly ART 150BF)

Prerequisite: ART 153 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This class is primarily about developing skill and technique in the use of the potter's wheel to create and finish controlled standard hollow forms. The class also includes an introduction to design, decoration, and glazing of wheel-thrown utilitarian forms, and basic technology of clay, glazes and firing. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 155 F Intermediate Ceramics (formerly ART 150CF)

Prerequisite: ART 153 F with a grade of " C " or better or ART 154 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course will offer the student more in-depth knowledge and refined skills in the study of hand building and/or wheel throwing techniques, design of forms, and surface decoration. Kiln operation is also emphasized. Development of further skills, knowledge, and conceptual ability is accomplished through individually determined projects. (CSU) (Degree Credit)

## ART 156 F Animal Drawing 3 Units Advisory: ART 182 F or Portfolio Review.

54 hours lecture per term. This course covers the principles and practices of classical animal drawing skills, including comparative anatomy, form construction, gesture and motion. (CSU) (Degree Credit)

## ART 157 F Sketching for Animators and Illustrators

Prerequisite: ART 182 F with a grade of " C " or better.
Advisory: ART 186 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is designed to enable the art student who wishes to develop drawing skills in the commercial fields of animation and/or illustration through focused study on quick sketch visualization, expressive anatomy, freehand perspective, character and storyboard development. (CSU) (Degree Credit)

## ART 160 F Fundamentals of Sculpture 3 Units

36 hours lecture and 72 hours lab per term. This course is a historical examination of sculpture as a vehicle for social, political and cultural expression. This course is an introduction to sculpture using basic concepts, materials, techniques and terminology. This course focuses on modeling, casting and mold-making. This course is appropriate for the beginning student and those with limited sculpture experience. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 161 F Advanced Sculpture

Advisory: ART 160 F.
36 hours lecture and analysis and 72 hours lab per term. This course is an introduction to the support processes of sculpture, to expand the development of techniques, materials and processes. Class requirements are arranged by contract to allow a wide diversity of projects. Emphasis is on development of individual style and the ability to plan and direct a semester of sculpture. (CSU) (UC) (Degree Credit)

ART 162 F Sculpture Cast Metal: Beginning 3 Units 36 hours lecture and 72 hours lab per term. This class is an introduction to the lost wax bronze casting process, investment, vacuum and sand casting. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques and materials. (CSU) (Degree Credit)

ART 163 F Sculpture Open Studio
Corequisite: Completion of, or concurrent enrollment in any of these 3-Dimensional courses: ART 121 F or ART 160 F or ART 161 F or ART 162 F or ART 164 F or ART 173 F or ART 174 F or ART 175 F or ART 176 F or ART 185 F or ART 262 F or ART 273 F or ART 274 F or ART 275 F or ART 276 F or ART 278 F or ART 285 F with a grade of "C" or better.
54 hours lab per term. This course gives access to the sculpture facility and equipment to work on new or ongoing projects. Activities include independently furthering technical development, exploring diverse sculptural media, and developing personal subject matter. (CSU) (Degree Credit)

## ART 164 F Sculpture: Metal Fabrication 3 Units

36 hours lecture and 72 hours lab per term. This course is an introduction to the support processes of sculpture and is designed to expand student development of sculptured techniques, materials and processes. This course will focus on basic techniques and processes used for fabricating metal sculpture. An historical examination of sculpture as a vehicle for social, political and cultural expression. This course is not a substitute for any welding course. (CSU) (Degree Credit)

ART 166 F Contemporary Art Studio 3 Units
Advisory: Any art lab or art history course with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is an introduction to the practices of contemporary art, including approaches to painting, sculpture, installation art, performance art, video, sound, and digital technologies. Students use traditional and digital processes to create works of art. This course is designed for Art majors. (CSU) (UC) (Degree Credit)

## ART 170 F Sketching for Animators and <br> 3 Units Illustrators-Visual Development <br> (formerly ART 157 F)

Prerequisite: ART 157 F with a grade of "C" or better and ART 182 F with a grade of "C" or better.
Advisory: ART 243 F and DART 135 F.
36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the visual development workflow of production for animated feature films. Visual development artists are responsible for establishing the look and feel of a movie before it begins production. Visual development combines the highest level of design encompassing environments, characters, props and staging. (CSU) (Degree Credit)

## ART 173 F Jewelry Casting

3 Units
36 hours lecture and 72 hours lab per term. This course is an introduction to basic concepts and techniques in designing and casting jewelry including reproduction techniques and wax models. The focus of this course is originality in fine art jewelry design relating to contemporary and historical design. (CSU) (Degree Credit)

## ART 174 F Beginning Jewelry Fabrication (formerly ART 174AF)

36 hours lecture and 72 hours lab per term. This course is an introduction to the concepts and techniques in the design and construction of jewelry and small metal objects. Fabrication techniques will require the cutting, forming, and soldering techniques of sheet metal. The focus of this course is on original design of fine art jewelry in precious metals. (CSU) (Degree Credit) AA GE, CSU GE

## ART 175 F Intermediate Jewelry Fabrication 3 Units (formerly ART 174BF)

Prerequisite: ART 174 F with a grade of " $C$ " or better. 36 hours lecture and 72 hours lab per term. This class builds on skills and information gained in ART 174 F. Further development of jewelry fabrication techniques are explored which include hollow forms, articulation, surface treatment, patina and inlay. This class focuses on advanced concepts and techniques in the design and construction of jewelry and small objects. Fabrication techniques will require the cutting, forming, and soldering techniques of sheet metals. The focus of this course is on original design fine art jewelry in precious metals. (CSU) (Degree Credit)

## ART 176 F Stained Glass <br> 3 Units

36 hours lecture and 72 hours lab per term. This course is an introduction to the stained glass process, including the basics of designing and constructing both two and three-dimensional stained glass projects using the "Tiffany Foil" technique and other cold glass processes such as mosaic and lamp building. Project emphasis will be in the design and fabrication of residential and commercial pieces. Other topics include overlay, sandblasting, fusing, and three dimensional and large scale projects. Production hours outside of class time are required. (CSU) (Degree Credit)

## ART 179 F Drawing for Non-Art Majors 2 Units

18 hours lecture and 54 hours lab per term. This is a beginning course in traditional and contemporary drawing techniques and terminology with an emphasis on representational drawing accomplished with a variety of media, including, but not limited to, graphite, charcoal, conte, ink, oil and/or chalk pastel, and colored pencil. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 180 F Rendering <br> 3 Units

Prerequisite: ART 182 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. The main objective of this class is creating the illusion of three dimensions on a twodimensional drawing surface. The lectures cover the basics of the visual perception of space, and the artistic techniques based on it. Rendering topics include explanations of the surface qualities of various materials, and the accurate depiction of the materials' interaction with light. Basics of perspective drawing will also be covered in this course. This course also meets student needs in advertising, illustration, and industrial design. (CSU) (Degree Credit)

## ART 181 F Drawing from the Masters

3 Units
Advisory: ART 182 F and ART 186 F, or Portfolio Review by Instructor.
54 hours lecture per term. This course covers working methods and media of master draftsmen from previous centuries. There is an emphasis on analyzing and copying master drawings in a variety of media. Further emphasis is placed on the traditional approach to drawing as practiced by masters such as Durer, Michelangelo, Da Vinci, Raphael, Rubens and others. (CSU) (UC) (Degree Credit)

## ART 182 F Basic Drawing

3 Units
(C-ID ARTS 110)
36 hours lecture and 72 hours lab per term. This course is an introduction to the fundamentals of representational drawing. Media used may include pencil, ink, charcoal, conte, pastels, watercolor, and mixed media. This course is designed for art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 183 F Representational Drawing 3 Units

Prerequisite: ART 182 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is a study in contemporary and traditional realism in the area of drawing. Media may include pencil, ink, charcoal, conte, pastel, watercolor, and/or mixed media. This course is recommended for Art majors. (CSU) (UC) (Degree Credit)

## ART 184 F Expressive Drawing

## 3 Units

Prerequisite: ART 182 F with a grade of " C " or better. Advisory: ART 186 F.
36 hours lecture and 72 hours lab per term. This class surveys a variety of drawing styles introduced by artists whose mark making itself communicates emotion, whether or not recognizable objects are depicted. Starting with Van Gogh and continuing through German Expressionism and Abstract Expressionism, the course leads toward the development of a personal, contemporary drawing style. Media covered include ink, pastel, watercolor, collage and mixed media. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 185 F Life Sculpture

3 Units
36 hours lecture and 72 hours lab per term. This course is an introduction to figurative sculpture with emphasis on accurate anatomical training in sculpture. This course is designed to develop an understanding of the human form, this course focuses on structure, gesture and detail. The skeleton, plaster casts, and the life model are used in this process. (CSU) (UC) (Degree Credit)

## ART 186 F Beginning Life Drawing

## 3 Units

## (C-ID ARTS 200)

## (formerly ART 186AF)

36 hours lecture and 72 hours lab per term. This course is an introductory course in drawing from the human figure. Course emphasis is on the development of a basic understanding of structure, anatomy and movement. The focus of this course is on accurate anatomical study, through continued use of the skeleton and life models. Required for all art majors. (CSU) (UC) (Degree Credit) AA GE

## ART 187 F Watercolor for Non-Art Majors <br> Letter Grade or Pass/No Pass option. <br> 18 hours lecture and 54 hours lab per term. This is an introductory course in watercolor painting with emphasis on a wide variety of traditional and contemporary techniques and skills. Creative self-expression is encouraged in still life, landscape, figurative, and abstract approaches. Media includes both transparent and opaque watercolor and related materials. (CSU) (UC) (Degree Credit) AA GE

## ART 188 F Watercolor Painting

3 Units
Advisory: ART 182 F.
36 hours lecture and 72 hours lab per term. This course is designed specifically for the Art major. This course will provide a better understanding of the structure, techniques, and vocabulary of transparent watercolor painting as well as encourage the student to develop conceptual, perceptual, and technical knowledge of all the design elements. A variety of traditional and contemporary methods are presented through demonstration, lecture, videotapes, individual instruction, critiques, class discussions, and field trips. Advanced students are encouraged to develop their own style and means of expression through a creative, experimental approach to watercolor painting. (CSU) (UC) (Degree Credit) AA GE

## ART 189 F Beginning Painting <br> (C-ID ART 210) <br> (formerly ART 189AF) <br> Advisory: ART 182 F.

36 hours lecture and 72 hours lab per term. This course is an introduction to materials and techniques of painting. The focus is on using observational skills to render basic objects including value studies, an introduction to color and simple compositions. Students are developing elementary skills of painting as a means of self-expression. This course is required by art majors. (CSU) (UC) (Degree Credit) AA GE

## ART 190 F Applied Painting: Landscape 2 Units

Prerequisite: ART 189 F with a grade of " C " or better.
Advisory: ART 182 F and ART 188 F .
18 hours lecture and 54 hours lab per term. This course is designed to provide students with the latest ideas in the study of landscape painting. Students will learn to paint landscapes, using oil or watercolor. Students will investigate landscape painting, both classic and contemporary approaches, using a variety of painting techniques. (CSU) (Degree Credit)

## ART 194 F Studio Painting Lab

2 Units
Open Entry/Open Exit.
Prerequisite: ART 189 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course provides the opportunity for the painting student to work on new or ongoing projects. Painting activities include improving skill level, furthering technical development, exploring diverse media, developing personal subject matter and style. (CSU) (Degree Credit)

## ART 195 F Anatomical Drawing

Advisory: ART 182 F.
54 hours lecture per term. The course explains and demonstrates how a specific area of the human body is constructed, how it moves and how it looks in different positions. The emphasis is on breaking the figure down into manageable components and learning to draw their three-dimensionality. There is an added emphasis on copying and analyzing a variety of anatomical studies to compile a notebook representing all of the components of the figure. This class serves the needs of the student in drawing, painting and sculpting the human figure. (CSU) (UC) (Degree Credit)

## ART 196HF Honors Creative Arts - Art 3 Units

54 hours lecture per term. This Honors-enhanced course explores the nature of creativity through exposure to the performing arts, literature, and the fine arts. Students will make independent investigations into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students who receive credit in this course may not receive credit in MUS 196HF or THEA 196HF. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ART 197 F Mural and Faux Painting

3 Units Advisory: ART 182 F and ART 189 F.
36 hours lecture and 72 hours lab per term. This is an introductory course in which the fundamentals of faux (fake) finishes and mural painting will be explored. Students will learn how to execute a variety of finishes and create murals, how to bid jobs and how to work with a variety of materials. (Degree Credit)

## ART 201 F Intermediate Painting (formerly ART 189BF)

Prerequisite: ART 189 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is a continuation of the study of painting techniques and media. Emphasis is on color theory, including use of color harmonies and creating atmospheric perspective. Recommended for art majors. (CSU) (UC) (Degree Credit)

## ART 202 F Advanced Painting I (formerly ART 189CF)

Prerequisite: ART 201 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is a continuation in the study of painting techniques and media for the advanced student. This course is a study of painting problems including: traditional and contemporary painting composition and methods with an emphasis on concept. (CSU) (UC) (Degree Credit)

## ART 203 F Advanced Painting II <br> 3 Units

Prerequisite: ART 202 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This is a course in painting for advanced level students. Students will continue to build skills, including mastering their craft and techniques. Students will also develop competent skills in conveying challenging concepts and build a personal body of work. (CSU) (Degree Credit)

## ART 208 F Intermediate Watercolor



3 Units Prerequisite: ART 188 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This course is a continuation of development of watercolor techniques and processes. Emphasis is placed on understanding color and more complicated textures. (CSU) (UC) (Degree Credit)

## ART 210 F Life Painting

3 Units
Advisory: ART 186 F and ART 189 F.
36 hours lecture and 72 hours lab per term. This course is an introduction to painting the human figure, nude and clothed. The emphasis is on realistic representation of the human form in oils and/or acrylic paint, using structure, color, value, lighting and composition. Historical and contemporary uses of the figure in art as well as various styles of painting will be explored. (CSU) (Degree Credit) AA GE

## ART 212 F Art History: The Art of Asia

3 Units

## (C-ID ARTH 130)

54 hours lecture per term. This course is a survey of the arts of India, China and Japan from prehistory through the 19th century. It examines the role of the visual arts in relation to society, religion, and history, while identifying major themes and techniques in these arts. Classroom presentations are supplemented by gallery and museum visits. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 213 F Art History: Pre-Columbian Art 3 Units

54 hours lecture per term. This course is a survey of the architecture, sculpture, painting and ceramics of Pre-Columbian Mexico, Central, North and South America from formative through post-classic times. Slide lectures, videos and museum visits will supplement the course. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 215 F Beginning Storyboarding and Narrative Composition <br> (formerly ART O90BF)

Prerequisite: ART 182 F with a grade of " C " or better.
54 hours lecture per term. This course is designed to equip the art student with a functional understanding of narrative composition, storytelling, sequence design, and production skills for feature film storyboarding through focused study on narrative design and illustration, script breakdowns and storyboard development and formatting. (CSU) (Degree Credit)

ART 216 F Advanced Storyboarding and 3 Units Pre-Visual Preparation
Prerequisite: ART 182 F with a grade of " $C$ " or better and ART 215 F with a grade of "C" or better and DART 100 F with a grade of "C" or better.
54 hours lecture per term. This advanced course is designed to equip the art student with a functional understanding of storyboarding and production skills for animatic and pre-visualization for feature films, TV, animation, and video games through focused study on storyboarding with Photoshop software. (CSU) (Degree Credit)

## ART 217 F Children's Book Illustration (formerly ART 090DF)

Advisory: ART 182 F and ART 186 F or Portfolio Review by instructor.
36 hours lecture and 72 hours lab per term. This course focuses on a specific format: the page-by-page layout of "picture books" that give the reader an image on every page. It involves an understanding of the history, methods, and markets of children's books, and the components of illustrated children's stories. Emphasis is on developing an efficient creative process to produce a unified collection of images that serve a story in children's terms. This includes research and immersion in children's books to understand their forms, moods, themes, and styles; exercises to develop compositional and storytelling skills; and producing page layouts to be developed into finished art. This course will spotlight classic masters, deriving lessons from their work, processes and careers. (CSU) (Degree Credit)

## ART 219 F Visual Storytelling: Image and Sequence

## 3 Units

Advisory: ART 182 F or Portfolio Review.
36 hours lecture and 72 hours lab per term. This course is an introduction to how professional visual storytellers create characters, craft story structure, design images, and assemble them in a sequence to entertain an audience. The class features analysis of master stories in visual media, and feedback on student assignments, which include developing story ideas and creating a finished imagetold story "pitch" for animation or film. (CSU) (Degree Credit)

## ART 220 F Genre and Style in Entertainment Art

Advisory: ART 182 F and DART 100 F or Portfolio Review by instructor.
36 hours lecture and 72 hours lab per term. This course will introduce students to the variety of genres in entertainment and visual storytelling, to offer a broad knowledge base from which to design and develop content for global markets. This course features analysis of genre elements, visual styles, and the interplay between form and content that allows genres to evolve while keeping a consistent historical continuity. Students will research a visual story genre to trace its evolution, and develop a story premise into contrasting styles. (CSU) (Degree Credit)

## ART 221 F Staging and Scene Development <br> Prerequisite: ART 182 F with a grade of " $C$ " or better. Advisory: ART 243 F.

36 hours lecture and 72 hours lab per term. This course will introduce students to the techniques of story illustrators and animators of how to create scenes that hook, compel, and satisfy an audience, using the tools that writers and actors use on stage within a pictorial frame that has unique limitations, opportunities, and dynamics. The emphasis is on individual scenes, how character objectives and emotions lead to visible action, and how to frame a scene for the camera to augment the emotional effect. Lessons will apply to a variety of styles and moods of visual stories. Assignments include analysis of master scenes, creation of original scenes, and reducing multi-panel scenes to single images. (CSU) (Degree Credit)

## ART 222 F Composition for Artists Advisory: ART 182 F and DART 100 F .



3 Units 54 hours lecture per term. This course focuses on how master artists evoke feeling, not from the subject matter, but from the design. We will learn how image makers create work in many different styles using basic compositional principles that guide all artistic forms. (CSU) (Degree Credit)

## ART 236 F Intermediate Life Drawing <br> 3 Units (formerly ART 186BF)

Prerequisite: ART 186 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This is an intermediate course in drawing the human figure. The course emphasis is on the refinement of basic skills, exercises and anatomy. Complex techniques and the continued use of the skeleton and life model to reinforce the technical skill and knowledge as it relates to gesture, structure and anatomy. Recommended for all art majors. (CSU) (UC) (Degree Credit)

## ART 243 F Applied Perspective

3 Units
Advisory: ART 182 F.
36 hours lecture and 72 hours lab per term. This course will introduce the student to the rules of perspective and demonstrate application methods applied to common projects within the field of entertainment, strengthening student draftsmanship. Instructor lectures and demonstrations will illustrate application methods governing the principles of mathematical perspective applied to drawing techniques. (CSU) (Degree Credit)

## ART 244 F Illustration

## 3 Units

Advisory: ART 182 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. The lecture portion of this class covers problems of creating finished illustrations from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as conceptual design for industrial products, and illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (CSU) (Degree Credit)

## ART 246 F Advanced Illustration

Advisory: ART 244 F.
36 hours lecture and 72 hours lab per term. This advanced level course in Illustration presents the student with the opportunity to create an elevated and accelerated level of problem solving within the creation of finished illustrations, from thumbnail sketches to final art. Emphasis in this course is on illustration for printed media such as books, newspapers, and magazines, as well as illustration for the electronic entertainment, theme park, and motion picture industries. Projects are designed to prepare the student for the professional skills necessary in creating an industry appropriate portfolio of work. (CSU) (Degree Credit)

ART 247 F Sketching for Animators


## 3 Units

and Illustrators - Traditional Media Techniques
Prerequisite: ART 182 F with a grade of " C " or better. Advisory: ART 186 F and ART 243 F.
36 hours lecture and 72 hours lab per term. This course will introduce the student to the professional application practices of using traditional media techniques for developing artwork for the fields of entertainment. Areas of focus include rapid visualization to final art production using watercolor, markers, pen, ink, and color pencil. (CSU) (Degree Credit)

## ART 254 F Advanced Ceramics

3 Units
Prerequisite: ART 155 F with a grade of " C " or better or ART 154 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is an advanced study of hand building and/or wheel throwing techniques, design of form, and surface decoration. Kiln operation is also emphasized. Development of refined skills, expanded knowledge, and a higher level of conceptual ability is accomplished through individually determined projects. (CSU) (Degree Credit)

## ART 258 F Tile I

3 Units
(formerly ART 090CF)
Advisory: ART 120 F and ART 153 F.
36 hours lecture and 72 hours lab per term. This course is an introduction to ceramic tile making techniques. Emphasis is placed on tile design and its purpose, production, and finish. Multiple methods of production and decoration will be covered as well as basic setting procedures. In addition, review of historical and traditional models and their relevance to contemporary tile design and tile making will be included. (CSU) (Degree Credit)

## ART 259 F Tile II <br> 3 Units

Prerequisite: ART 258 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is an advancement into ceramic tile design and production techniques. Emphasis is placed on development of the tile designs that are more advanced in both design and finish while having student develop a personal approach to the medium. (CSU) (Degree Credit)

## ART 261 F Sculpture - Ceramics <br> 3 Units

Prerequisite: ART 153 F with a grade of " C " or better or ART 160 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is an exploration of the methods, limitations and characteristics of various clays when used to create sculpture in the round and bas-relief. (CSU) (UC) (Degree Credit)

## ART 262 F Cast Metal: Intermediate <br> 3 Units

 Advisory: ART 162 F with a grade of "C" or better.36 hours lecture and 72 hours lab per term. This course is designed for the student to acquire improved skills in the concepts of cast metal sculpture. Student will employ and refine skills in lost wax bronze casting process, investment, vacuum sand casting. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. (CSU) (Degree Credit)

## ART 263 F Cast Metal: Advanced <br> 3 Units (formerly ART 162 F)

Prerequisite: ART 262 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This is an advanced course investigating the concepts of cast metal sculpture. Students will create work using the lost wax bronze casting process, investment, vacuum and sand casting. This class includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. The complexity of the designs requires alternative skills, techniques and materials. (CSU) (Degree Credit)

## ART 264 F Cast Metal: Studio Concepts 3 Units

Prerequisite: ART 263 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is an advanced investigation into the concepts of cast metal sculpture. Students will employ lost wax bronze casting process, investment, vacuum and sand casting. This course includes wax model production and mold making. Metal chasing and patination complete the cast bronze sculpture. In consecutive semesters, the complexity of the projects require alternative skills, techniques and materials. (CSU) (Degree Credit)

## ART 268 F Advanced Sculpture II

3 Units
Prerequisite: ART 161 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is an investigation of advanced sculptural concepts with an emphasis on the development of an individual body of work. This course advances the research, execution, and artistic intention of a body of work. Class requirements are arranged by contract to allow a wide diversity of projects. (CSU) (Degree Credit)

## ART 273 F Intermediate Jewelry Casting

3 Units
Advisory: ART 173 F or ART 174 F.
36 hours lecture and 72 hours lab per term. This intermediate course focuses on concepts and techniques acquired in previous exercises, in the designing of wax models and casting of fine art jewelry and small objects. This course involves advanced problems in casting. (CSU) (Degree Credit)

## ART 274 F Advanced Jewelry Casting Advisory: ART 173 F.

36 hours of lecture and 72 hours of studio per term. This advanced Jewelry course focuses on concepts and techniques that are essential in refined levels of jewelry design. The progression of skills is necessary for the success of the advanced student in jewelry casting. (CSU) (Degree Credit)

## ART 275 F Studio Concepts: Jewelry Casting

3 Units
Advisory: ART 173 F.
36 hours lecture and 72 hours lab per term. This course focuses on acquiring the requisite skills, concepts, and techniques that are essential in the highest levels of jewelry casting. This course also focuses on the development of a portfolio of design, drawings, wax models, molds and cast metal Fine Art Jewelry. (CSU) (Degree Credit)

## ART 276 F Advanced Jewelry Fabrication 3 Units

Prerequisite: ART 175 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course builds on skills and information gained in ART 175 F. Further development of jewelry fabrication techniques are explored which include hollow forms, articulation, and surface treatment. This course focuses on advanced concepts and techniques in design. (CSU) (Degree Credit)

ART 278 F Intermediate Stained Glass 3 Units Prerequisite: ART 176 F with a grade of "C" or better. 36 hours lecture and 72 hours lab per term. Demonstrate further progress in developing the skill of contemporary and traditional processes in cold glass within the "Tiffany Foil" techniques of overlay and sandblasting. The student will also be introduced to the hot glass processes of fusing, slumping and glass painting. The hot glass process will include both kiln and torch work. Project emphasis will be in the design and fabrication of three dimensional and large scale projects in both hot glass and cold glass. (CSU) (Degree Credit)

## ART 285 F Intermediate Life Sculpture 3 Units Prerequisite: ART 185 F with a grade of "C" or better.

 36 hours lecture and 72 hours lab per term. This is an intermediate level course in Life Sculpture. This course is focused on a review of sculpture exercises in figurative sculpture with emphasis on refinement of accurate anatomical sculpture. (CSU) (Degree Credit)
## ART 286 F Advanced Life Drawing (formerly ART 186CF)

Prerequisite: ART 236 F with a grade of " $C$ " or better. 36 hours lecture and 72 hours lab per term. This is an advanced course in drawing the human figure, the emphasis of this course is a focused review of previous drawing exercises and the refinement of techniques. Advanced studio problems will be addressed, with historical and contemporary examples. Recommended for art majors. (CSU) (UC) (Degree Credit)

## ART 287 F Advanced Life Sculpture I

3 Units
Prerequisite: ART 285 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course focuses on previous exercises and further development of advanced skills and techniques used in the sculpting of accurate human anatomy with consistent detail. (CSU) (Degree Credit)

## ART 290 F Portfolio Preparation and 3 Units Artwork Presentation

Advisory: Six units of art, design or Computer Graphics (DART) courses.
54 hours lecture per term. This course will help studio arts and design majors in the creation of a portfolio that will assist in the transfer towards a BA or BFA university art program. Major emphasis is placed on the development of a professional portfolio and the quality of the artwork in it. (CSU) (Degree Credit)

## ART 291 F Applied Painting: Expressive <br> 3 Units

 Prerequisite: ART 189 F with a grade of "C" or better. 36 hours lecture and 72 hours lab per term. This class surveys a variety of painting styles. Emphasis is on emotionally and expressive interpretation of an object or idea through use of color, composition and paint application. Fundamental painting skills, will be needed. Classic and contemporary approaches will be applied. (CSU) (Degree Credit)
## ART 294 F Independent Study:

1 to 2 Units

## Illustration

Prerequisite: A grade of "C" or better in at least one semester's previous work in Illustration at this institution.
54-108 hours independent study per term. This course is for students who wish to pursue a more thorough understanding of the field of Illustration through application of creative design, technical ability, and execution of craft. Instructor approval is required. (CSU) (UC review required) (Degree Credit)

## ART 295 F Independent Study: Painting 1 to 2 Units

Prerequisite: ART 188 F with a grade of " C " or better or ART 201 F with a grade of "C" or better.
Advisory: ART 120 F.
54-108 hours independent study per term. This course is for the advanced student who wishes to pursue painting through individual study. Instructor approval is required. (CSU) (UC review required) (Degree Credit)

## ART 296 F Independent Study: Museum Studies

Prerequisite: ART 122 F with a grade of " C " or better.
54-108 hours independent study per term. This course is for students who wish to pursue museum studies through individual study. Students will pursue a more thorough understanding of the field of museum studies through application of skills to gallery and permanent collection projects. Instructor approval is required. (CSU) (UC Credit Limitation depending upon course content; UC review required) (Degree Credit)

## ART 298 F Arts Internship

1 to 3 Units
Open Entry/Open Exit.
Advisory: 6-9 units of art courses which may include art history, design, art lab, business practices in art, portfolio preparation or computer graphics.
54-162 hours lab per term. This course is designed to enable the art student to understand and demonstrate competence in a professional artistic work environment through the combination of the application of extended classroom learning and the interaction of a professional supervisor. It is each student's responsibility to obtain his/her own internship opportunity. (CSU) (Degree Credit)

## ART 299 F Art Independent Study

1 to 2 Units
Prerequisite: A grade of " $C^{\prime}$ or better in at least one semester's previous work in the subject of the independent study, as well as a foundation in creative design, technical ability, and execution of craft.
54-108 hours independent study per term. This course is for students who wish to pursue a particular area of art through individual study. Instructor approval is required. (CSU) (UC Credit Limitation) (Degree Credit)

## Art - Digital Arts (DART)

## Fine Arts Division

Office: Bldg 1000, Room 1021-714.992.7034
Dean: John Tebay
Website: finearts.fullcoll.edu

## Art — Digital Arts Courses

## DART 100 F Introduction to Digital Art 3 Units (formerly ACG 100 F)

36 hours lecture and 54 hours lab per term. This course teaches the fundamentals of digital media to input, create, manipulate and output a variety of images. Students learn basic skills and use a varied selection of visual arts software, while gaining insights into the basic principles of digital computers and digital graphics. Extensive hands-on use of computers and other hardware allows students to build a portfolio and acquire the experience levels necessary to advance in this field. (CSU) (Degree Credit)

## DART 102 F Introduction to Web Graphics (formerly ACG 102 F)

36 hours and 54 hours lab per term. This course is a study of page development, navigation, graphics, animation, video, and sounds media for use on the Internet. During the course of the semester, the student builds an assigned website and a personal website. This course is intended as a gateway to a web certificate. Students can pursue additional in-depth study on the topic(s) that most attracted them during the semester. (CSU) (Degree Credit)

## DART 104 F Introduction to Maya 3D (formerly ACG 104 F) <br> Advisory: DART 100 F.

36 hours lecture and 54 hours lab per term. This course will introduce the Autodesk Maya 3D computer software, focusing upon polygonal modeling techniques. Students will combine modeling techniques with critical thinking assignments to design models for the entertainment industry. Students will also focus on learning design fundamentals by creating thumbnails, and silhouette sketching to aid in their design solutions. (CSU) (Degree Credit)

## DART 105 F Fundamentals of Digital Media Design <br> (formerly ACG 105 F) <br> Advisory: DART 100 F.

36 hours lecture and 54 hours lab per term. This course introduces basic digital design concepts in the development of solutions to design problems. Topics include the design theory, drawing, color theory, typography, illustration, animation, layout techniques, vocabulary, and knowledge of appropriate digital media output formats. Final output may integrate additional media such as animation, sound, text, and video. (CSU) (Degree Credit)

## DART 106 F Intermediate Maya <br> 3 Units <br> (formerly ACG 106 F)

Prerequisite: DART 104 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course gives the student an introduction to the intermediate use of Maya, a 3D digital program used within the entertainment/game industry to create 3D visual effects. Students will continue forward with basics learned in DART 104 F and expand their knowledge of modeling, texturing and lighting. Class assignments will cover more complex models, environments, and vehicle creations. Students will start building a portfolio of finished assignments that cover a wide range of the entertainment industry; for game design, animation and the film industry. (CSU) (Degree Credit)

## DART 107 F Digital Drawing <br> 3 Units

Advisory: ART 182 F with a grade of " C " or better and DART 100 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course encompasses the use of digital-based software applications combined with digital drawing tablets and touch sensitive digital monitors. This course also prepares the student to meet industry standards and requirements for working digitally inside entertainment art production companies. (CSU) (Degree Credit)

DART 108 F Digital Drawing Dynamic Sketching
Prerequisite: DART 107 F with a grade of " C " or better. Advisory: DART 100 F and ART 182 F and ART 243 F. 36 hours lecture and 54 hours lab per term. This course is an accelerated digital drawing class applying in-depth acquisition of skill and technique demonstrated in digital drawing. This course covers essentials of draftsmanship combined with digital drawing applications Sketch Book Pro and Photoshop to conceptualize ideas from script. Emphasis on problem-solving skills, and abilities associated with designing from script, to finished conceptual sketch. Focus is on the design process of translating ideation to finished projects, developed sketching for animators, illustrators and entertainment game designers. (CSU) (Degree Credit)

## DART 109 F Environmental Sketching <br> 3 Units

Prerequisite: ART 182 F with a grade of "C" or better. Advisory: DART 107 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course is an ideal foundation course for the art student wanting to learn sketching techniques used for creating and strengthening environmental sketching abilities. Foundation study will focus on designing while using perspective to create thumbnails and quick sketch visualizations. Students will be exposed to the steps required to take an idea from script, to thumbnail, to rough, to finished design. This is an ideal foundational class for the student wanting to pursue a career as a concept artist or digital painter inside entertainment. (CSU) (Degree Credit)

## DART 110 F Fundamentals of Character 3 Units Design

Prerequisite: ART 182 F with a grade of " C " or better. Advisory: DART 107 F and DART 135 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course will introduce the student to the basics of character design encompassing techniques and skills used within the creation of character development. Classroom exercises will focus on combining design principles, with perspective fundamentals to create characters for use within the fields of entertainment and commercial art. (CSU) (Degree Credit)

## DART 111 F Character Design 3 Units

Prerequisite: DART 110 F with a grade of " C " or better. Advisory: DART 107 F and DART 135 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course is designed to move the student from the basics learned inside DART 110 F and introduce them to more complex character development encompassing the fields of animation and game design. (CSU) (Degree Credit)

## DART 112 F Vector Graphics <br> (formerly ACG 112 F) <br> Advisory: DART 100 F.

36 hours lecture and 54 hours lab per term. This is a course that encompasses a basic study of digital tools to make vector-based visual art intended for publication. This course involves extensive hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)

## DART 115 F Introduction to Prop Design 3 Units (formerly ART 090AF)

Prerequisite: ART 182 F with a grade of " C " or better. Advisory: ART 243 F and DART 107 F.
36 hours lecture and 54 hours lab per term. This course will introduce the student to designing props. Props are objects that are used by a character during animation or gameplay. These objects consist of weaponry, vehicles, digital devices, military elements and portable objects. A prop designer is also responsible for incorporating the historical and mechanical significance of a show into the design process. Prop Design is an essential part of animation and game production, and is an entry-level position for students who want to start working in the entertainment industry. (CSU) (Degree Credit)

## DART 119 F Interior Sketching



3 Units
Prerequisite: ART 182 F with a grade of " C " or better.
Advisory: DART 107 F and DART 109 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course is an ideal follow-up course to DART 109 F, focusing on sketching techniques used for creating and strengthening interior environment sketching abilities. Interior sketching is used in the pre-production and production phase of development for game/animation/film production focusing on scene development, background design and level design. Students are advised to have a solid background in either perspective, pictorial illustration, or exterior sketching before taking this course. (CSU) (Degree Credit)

## DART 120 F 3D Modeling

## 3 Units

Prerequisite: DART 104 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on more advanced 3D modeling assignments encompassing vehicle design, organic modeling, set development, and staging. The Autodesk Software application, Maya, will be used to demonstrate polygonal, nurb, and sub-division surface modeling techniques. (CSU) (Degree Credit)

## DART 121 F Futuristic Vehicle Design (formerly ACG 120 F)

3 Units
Prerequisite: DART 104 F with a grade of " C " or better.
Advisory: DART 106 F and DART 135 F and ART 182 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This is an intermediate modeling course focusing on specific techniques and design theories for designing futuristic vehicles. Students will work from a traditional conceptual approach of thumbnails and rough sketches to create a final design that can then be modeled in the Maya 3D software application. (CSU) (Degree Credit)

## DART 132 F Digital Imaging I (formerly ACG 132 F)

36 hours lecture and 54 hours lab per term. This course instructs students to make and edit images using photo-editing and other raster graphics programs. Raster graphics is the technology of choice for continuous-tone artwork suitable for traditional print formats as well as newer electronic media such as web pages on the internet. Visually, raster images are often characterized by a photographic or painterly appearance. These programs are less appropriate for stylized, hard-edge material. This course covers leading photo-editing and manipulation software, with plenty of hands-on use of the computer to build a portfolio and acquire the experience levels demanded by employers and clients. (CSU) (Degree Credit)

## DART 135 F Introduction to Digital Painting 3 Units

Advisory: ART 182 F with a grade of " C " or better and DART 100 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course will introduce the student to the Photoshop software application, the most commonly used application for digital painting within the entertainment industry. This course will focus on digital painting techniques within the Photoshop software application, and how it applies towards creating digital artwork. (CSU) (Degree Credit)

DART 136 F Intermediate Digital Painting 3 Units
Prerequisite: DART 135 F with a grade of "C" or better.
Advisory: DART 107 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course continues forward painting with the Photoshop digital application focusing on expanded skill set assignments with emphasis on vehicle design, character creation and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

DART 137 F Advanced Digital Painting 3 Units
Prerequisite: DART 136 F with a grade of "C" or better.
Advisory: DART 107 and DART 108 F and ART 243 F.
36 hours lecture and 54 hours lab per term. This course is based upon increasing a mastery of digital painting technique using the Photoshop application to create vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

DART 138 F Digital Painting for Production 3 Units
Prerequisite: DART 136 F with a grade of "C" or better and DART 107 F with a grade of "C" or better.
Advisory: ART 243 F.
36 hours lecture and 54 hours lab per term. This course will introduce the student to working and delivering production level artwork, adhering to industry standard in entertainment production. Students will be painting with the Photoshop digital application, focusing on advanced level assignments prepared by industry professionals. Assignments will focus upon MAYA digital render paint-overs, vehicle design, character creation, and environmental design. Class assignments are geared around daily job requirements within the entertainment industry for gaming and animation. (CSU) (Degree Credit)

## DART 140 F Digital Publishing I <br> (formerly ACG 140 F)

36 hours lecture and 54 hours lab per term. This course focuses on the use of computers as a design aid to generate "camera ready" page layouts, integrating graphics and text. Emphasis is on design of the page, use of the computer programs, and printing skills required for a finished product. Open lab work may be required to complete assignments. (CSU) (Degree Credit).

## DART 146 F Digital Publishing II <br> 3 Units (formerly ACG 146 F)

36 hours lecture and 54 hours lab per term. This course focuses on the use of advanced options of industry standard software as a design aid to generate "camera ready" page layouts. Emphasis is on developing experience in varied types and sizes of commercial projects. Open lab work may be required for completing assignments. (CSU) (Degree Credit)

## DART 150 F 3D Computer Animation

3 Units

## (formerly ACG 150 F)

Prerequisite: DART 104 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course is an intermediate study of the animation sub-menu tab in the Maya 3D software application. This course will focus on introducing the student to basics of 3D computer animation. The Maya software is commonly used within film, game and animation industries for creating animations, and special effects. (CSU) (Degree Credit)

## DART 152 F Pre Visual Animation

3 Units (formerly ACG 150 F)
Prerequisite: DART 104 F with a grade of "C" or better and DART 150 F with a grade of "C" or better.
Advisory: ART 215 F.
36 hours lecture and 54 hours lab per term. This course is an intermediate study in animation, focusing upon pre visual camera animation. Animating cameras and setting up scenes for pre visual animation requires an education in cinematography, story boarding, and timing. Pre visual animation has become a new position within the entertainment industry providing early solutions for games, movies, special effects, and television commercial productions. (CSU) (Degree Credit)

## DART 153 F Introduction to Digital Sculpting 3 Units with Z-Brush <br> Advisory: DART 100 F and DART 104 F.

36 hours lecture and 54 hours lab per term. This is an introductory course in digital sculpting introducing the student to the Pixelogic Z-Brush 3D Digital Sculpting application. The Z-Brush application can simulate traditional sculpting in clay to create high resolution digital sculpted models, and images for film, game, and animation productions. (CSU) (Degree Credit)

DART 154 F Creature Sculpting with Z-Brush 3 Units
Prerequisite: DART 153 F with a grade of "C" or better.
Advisory: DART 100 F and DART 104 F and ART 156 F.
36 hours lecture and 54 hours lab per term. This course is an intermediate course in creature sculpting using the Pixelogic Z-Brush 3D Digital Sculpting application. This course will focus upon creating bipod, and quadruped creatures that could be used for game and movie productions. (CSU) (Degree Credit)

## DART 162 F 2D Computer Animation <br> 3 Units (formerly ACG 162 F)

36 hours lecture and 54 hours lab per term. This course is a study of digital tools to represent moving objects in 2D space. Students will learn how to create 2D computer animation. Final output may integrate additional media (sound, text, graphics, and video), and find distribution as CD-ROMs, webpages, complete websites, videos, cartoons, animated shorts, games, education, instructional training, and creative self-expression. (CSU) (Degree Credit)

## DART 164 F Interactive Multimedia Design 3 Units (formerly ACG 164 F)

36 hours lecture and 54 hours lab per term. This course focuses on designing interactive multimedia presentations by integrating a variety of programs and media (sound, text, graphics and video). Final output may take the form of DVDs, CD-ROMs, websites, videos, cartoons, animated shorts, games, educational software and creative self-expression. Open lab work may be required to complete assignments. (CSU) (Degree Credit)

## DART 170 F Digital Photo Editing I <br> 3 Units (formerly ACG 170 F)

36 hours lecture and 54 hours lab per term. This course focuses on digital photography and the appropriate level usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include camera selection, image enhancement, editing, compositing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus. (CSU) (Degree Credit)

## DART 172 F Digital Image Editing II Advisory: DART 170 F.

36 hours lecture and 54 hours lab per term. This course focuses on getting a good digital image and editing digital imagery and the usage of software for the manipulation of raster images for the development of fine art and photographic images appropriate for advertising design and digital media and art. Digital cameras, scanners, photo CDs, and video images provide the basis for image manipulation pushing to the extreme of digital photography. Course topics include equipment choices, image enhancement, editing, composing, retouching, photomontages, pre-press, color management, photo printing, color separations and service bureaus and methods of delivery. (CSU) (Degree Credit)

## DART 180 F Digital Video

## (formerly ACG 180 F)

36 hours lecture and 54 hours lab per term. This course is an examination of digital video editing techniques including the professional manipulation of sound and beginning motion graphics and compression techniques. This course includes the study and hands-on use of computers, assorted software, SDHC card-based digital video cameras, and other tools and techniques used for digitizing, editing and composition of video and audio sources. This course provides an in-depth exploration of digital video as used in the fields of multimedia, video/film, websites, DVD/Blu Ray disk creation, museum installations and video for cellular and mobile devices. (CSU) (Degree Credit)

## DART 181 F Advanced Digital Video

## 3 Units

Advisory: DART 180 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an examination of intermediate to advanced digital video editing techniques including the professional manipulation of sound. Video distribution includes multimedia video, online and offline video editing, interactive video inclusive websites, DVD/Blu Ray disk creation, video for cellular and mobile devices. (CSU) (Degree Credit)

## DART 182 F Motion Graphics and Special Effects

Advisory: DART 180 F or two years' experience with contemporary editing and compositing software or one year of professional industry experience in editing and/or motion graphics.
36 hours lecture and 54 hours lab per term. This course builds on the basic editing skills learned in DART 180 F. This course is an introduction to motion graphics, digital composition, sound design and special effects for multimedia, 2D, 3D space digital video, installations and mobile devices. (CSU) (Degree Credit)

## DART 195 F Production Design for Entertainment: Eastern Civilizations

Prerequisite: DART 109 F with a grade of "C" or better. Advisory: ART 243 F and DART 107 F and DART 135 F. 36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Eastern civilizations, and their influence upon production-design for film, games, and animation. (CSU) (Degree Credit)

## DART 196 F Production Design for Entertainment: Western Civilizations

Prerequisite: DART 109 F with a grade of "C" or better. Advisory: ART 243 F and DART 107 F and DART 135 F. 36 hours lecture and 54 hours lab per term. This course will introduce the student to environmental-production design techniques for entertainment focusing on the architectural development of Western civilizations, and their influence upon production design for film, games and animation. (CSU) (Degree Credit)

## DART 197 F Production Design for Entertainment: Early Science Fiction

Prerequisite: DART 109 F with a grade of "C" or better. Advisory: ART 243 F and DART 107 F and DART 135 F.
36 hours lecture and 54 hours lab per term. This course will introduce the student to "environment-production" design techniques for entertainment focusing inside the history of early science fiction. Students will examine the historical architecture used within the development of the early science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

## DART 198 F Production Design for Entertainment: Late Science Fiction <br> Prerequisite: DART 109 F with a grade of " C " or better. Advisory: ART 243 F and DART 107 F and DART 135 F.

36 hours lecture and 54 hours lab per term. This course will introduce the student to "environmental-production" design techniques for entertainment focusing inside the history of late science fiction. Students will examine the historical architecture used within the development of the late science fiction genre relating towards film, games, and animation. (CSU) (Degree Credit)

# Automotive Technology (AUTO) 

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Automotive Technology Courses


#### Abstract

AUTO 050 F Automotive Specialty Practice 2 Units Corequisite: Concurrent enrollment in any automotive technology course. 18 hours lecture and 72 hours lab per term. This course places emphasis on the development of skill in the specialty areas of the student's preparation. Lectures cover service department organization, job analysis and information relative to the employer, employee and customer relations. (Degree Credit)


#### Abstract

AUTO 051 F Internship in Automotive Corequisite: Any vocational automotive class. 18 hours lecture and 90-360 hours lab per term with an additional five hours per week of supervised employment is to be completed for each additional unit of credit. This course is designed to provide vocational learning opportunities through employment in an automotive servicing/repair business. No more than three units may be applied toward the degree or certificate. (Degree Credit)


## AUTO 055 F Automotive Business Management <br> Advisory: AUTO 131 F.

72 hours lecture and 54 hours lab per term. This course covers the automotive service management operations of an automotive business/dealership as related to automobile service consultant/ manager by focusing on the repair order as a legal document. It also covers the appointment system, telephone skills, warranties, communications strategies, product knowledge, selling skills, proactive customer handling, and multiple ways to reduce costs and improve profits. Topics addressed on the ASE Automobile Service Consultant Test (C1) will be emphasized. (Degree Credit)

## AUTO 060 F Automotive Powertrains Advisory: AUTO 131 F.

5 Units
90 hours lecture and 54 hours lab per term. This course covers the repair of the manual Rear Wheel Drive (RWD)/Front Wheel Drive (FWD) powertrains including the study of principles of operation, gears, bearings, drive lines, universal joints, CV joints, drive train electrica//electronic systems, and rear axles. The student will perform hands-on lab assignments. (Degree Credit)

## AUTO 065 F Auto Electrical and Electronic Systems

Advisory: AUTO 131 F.
72 hours lecture and 72 hours lab per term. This is an introductory course in the concepts of the electrical system and the electronic control of the automobile. Course instruction will include lecture, demonstration and student application in the use of test equipment on simulator board and in-car diagnosis and repair with electrical diagrams and charts. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Electrical Systems (A6) examination. (Degree Credit)

## AUTO 070 F Engine Reconditioning <br> 7 Units

Advisory: AUTO 131 F.
108 hours lecture and 54 hours lab per term. This course covers operating principles, nomenclature, design, diagnostic inspection and reconditioning procedures on contemporary high-tech automotive engines. Use of a computer database and engine improvement software is also covered. (Degree Credit)

AUTO 072 F Automotive Engine Performance 7 Units Advisory: AUTO 131 F.
108 hours lecture and 54 hours lab per term. This course covers engine tune-up, diagnosis, and repair of the electronic ignition system, emissions control system, and electronic powertrain management systems, including electronic fuel injection. Instruction will be given to prepare the student for the National Institute of Automotive Service Excellence (ASE) Engine Performance (A8) test. Modern test equipment will be utilized in the lab sessions. (Degree Credit)

## AUTO 073 F Brake Systems Repair

7 Units
Advisory: AUTO 131 F.
108 hours lab and 54 hours lab per term. This course covers the operation, nomenclature, diagnosis, adjustment and repair procedures of automotive brake components, including electronically controlled anti-lock braking systems. Course instruction will include lecture, demonstration, and student application on vehicles in the lab. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Brake Systems (A5) examination. (Degree Credit)

## AUTO 081 F Engine Rebuilding and Repair <br> 8 Units

Advisory: AUTO 131 F.
108 hours lecture and 108 hours lab per term. This course covers operating principles, nomenclature, design, and repair procedures on the modern automotive engines. Emphasis is upon procedures of rebuilding an engine while out of the chassis and repairing while in the chassis. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Engine Repair (A1) examination. (Degree Credit)

## AUTO 082 F Automotive Engine Performance 8 Units and Drivability <br> Advisory: AUTO 131 F.

108 hours lecture and 108 hours lab per term. This course covers engine tune-up, diagnosis, and repair of the ignition system (electronic, distributor-less, and electromechanical), fuel injection system, including the computer control system, and the emission control system. Diagnosis of engine performance and drivability problems is emphasized. Instruction is provided on domestic and imported vehicles. Modern test equipment will be utilized in lab sessions where live cars are repaired. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Excellence (ASE) Engine Performance (A8) examination. First semester students will concentrate on General Motors electronic control systems; those repeating the course will concentrate on Ford, Chrysler and import vehicle electronic control systems. (Degree Credit)

## AUTO 083 F Brake and Suspension Systems Repair <br> Advisory: AUTO 131 F.

108 hours lecture and 108 hours lab per term. This course covers the operation, nomenclature, adjustment and repair procedures of automotive brake, suspension, and steering systems. Instruction will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Suspension and Steering (A4) and Brakes (A5) examinations. (Degree Credit)

## AUTO 084 F Automatic Transmissions

8 Units
Advisory: AUTO 131 F.
108 hours lecture and 108 hours lab per term. This course covers the technical principles of automatic transmissions. Theory and principles of operation of planetary gear systems and hydraulic systems of automatic transmission. Operating principles, overhaul and adjustment and servicing procedures of automatic transmissions. Design and operation of fluid couplings of torque converters. Students to perform testing, diagnosis, maintenance, and overhaul on various types of automatic transmissions including electronically controlled transmissions and transaxles. Instruction for this class will closely parallel topics addressed on the national Institute for Automotive Service Excellence (ASE) Automatic Transmission/Trans-axle (A2) examination. (Degree Credit)

## AUTO 086 F Automatic Transmission <br> Fundamentals

3 Units

## Advisory: AUTO 131 F.

36 hours lecture and 54 hours lab per term. This course covers the fundamentals of automatic transmissions, theory and operation of planetary gears and related gear systems, principles of hydraulic systems, design and operation of torque converters and lock-up type converters, and operation of electronic controls. Emphasis will be on rear wheel drive transmissions. Diagnosis and maintenance fundamentals, along with service, adjustment and overhaul procedures, also will be emphasized. Instruction for this class will closely parallel topics addressed on the National Institute for Automotive Service Excellence (ASE) Automatic Transmission and Transaxle (A2) examination. First semester students will study hydraulic controlled transmission; students repeating the course will study electronically controlled transmissions. (Degree Credit)

## AUTO 089 F Automotive Air Conditioning

Advisory: AUTO 131 F.
72 hours lecture and 36 hours lab per term. This course covers the theory and principles of automotive air conditioning, including servicing, maintenance, diagnosis and repair of modern air conditioning systems. Topics addressed on the ASE Heating and Air Conditioning Test (A7) will be emphasized. (Degree Credit)

## AUTO 090 F Emission Control Systems and 6 Units Advanced Diagnosis

108 hours lecture and 36 hours lab per term. This course covers the theory and principles of automotive emission control systems. This course prepares students for the State of California Smog Check Mechanic Test and for the National Institute for Automotive Service Excellence (ASE) A8 and L1 examinations. Modern diagnostic equipment including the exhaust gas analyzer, digital meters, and engine oscilloscope will be used in lab sessions. (Degree Credit)

## AUTO 091 F Cylinder Head Repair

4 Units
54 hours lecture and 54 hours lab per term. This course covers operating principles, nomenclature, design and repair procedures on modern cylinder heads. Emphasis is on cylinder head repair procedures that are performed by small garages, including diagnosis, bench work and removal and installation. (Degree Credit)

## AUTO 096 F Performance Technology <br> 4 Units

Advisory: AUTO 131 F.
54 hours lecture and 54 hours lab per term. This course covers the practical applications of performance and durability pertaining to motorized vehicles. Topics include areas of engine, drivelines, brakes, and suspension necessary for better performance and increased safety and durability. (Degree Credit)

AUTO 131 F Automotive Fundamentals 4 Units 72 hours lecture and 36 hours lab per term. This course emphasizes basic operating principles, nomenclature, automotive care, inspection, preventive maintenance and minor repair procedures. This course is for Industrial Arts Vocational majors. (CSU) (Degree Credit)

## AUTO 088 F Fuel Systems and Advanced 4 Units

 Drivability DiagnosisAdvisory: AUTO 131 F.
54 hours lecture and 54 hours lab per term. The study of this course includes the theory and principles of engine control systems diagnosis and automotive emission control systems. This course prepares students for the National Institute of Automotive Service Excellence (ASE) A8 and L1 tests. Modern diagnostic equipment including the exhaust gas analyzer, digital meters, scan tools, and digital oscilloscope will be used in lab sessions. (Degree Credit)

# Biology (BIOL) 

Natural Sciences Division
Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Biology Courses

## BIOL 100 F Principles of Biology 4 Units

72 hours lecture per term. This course is an introductory nonmajors course that will 1) emphasize the fundamental understanding of basic biological principles, 2) illustrate the structure and function of living organisms and their relationship to the physical world, and 3) develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Topics include 1) the structure and function of life at the cellular and organismic levels, 2) metabolism, photosynthesis and energetics, 3) cell division and animal development, 4) classical and molecular genetics, 5) biotechnical development and applications, 6) evolution and adaptations of living organisms, and 7) ecological relationship and environmental conservation. (CSU) (UC Credit Limitation: BIOL 100 F and 101 F combined: maximum credit one course; no UC credit if taken after BIOL 170 F or a 200-level biology course) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 101 F General Biology 5 Units

72 hours lecture and 54 hours lab per term. This integrated lecture-lab course is an introductory non-majors course that will emphasize the fundamental understanding of basic biological principles, illustrate the structure and function of living organisms and their relationship to the physical world, and develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Lecture topics include the structure and function of life at the cellular and organismal level, metabolism, photosynthesis and energetics, cell division and animal development, classical and molecular genetics, developments and applications in biotechnology, evolution and adaptations of living organisms, and ecological relationships and environmental conservation. (CSU) (UC; no UC credit if taken after a 200-level biology course) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 101HF Honors General Biology

5 Units
72 hours lecture and 54 hours lab per term. This Honorsenhanced course will 1) emphasize the fundamental understanding of basic biological principles, 2) illustrate the structure and function of living organisms and their relationship to the physical world, and 3) develop the student's ability to make effective decisions regarding contemporary issues in natural sciences. Lecture topics include 1) the structure and function of life at the cellular and organismic levels, 2) metabolism, photosynthesis and energetics, 3) cell division and animal development, 4) classical and molecular genetics, 5) biotechnical development and applications, 6) evolution and adaptations of living organisms, and 7) ecological relationships and environmental conservation. The honors section will include extra computer simulations, reading, writing assignments and field trips. (CSU) (UC; no UC credit if taken after a 200 level Biology) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 102 F Human Biology

3 Units
54 hours lecture per term. This course is designed to study modern biological concepts presented in a human context. Concepts include biological chemistry, cellular basis of life, energetics, cell cycle, anatomy, physiology, reproduction, development, genetics, demography, ecology and evolution. Included in the course are discussions of current topics on environmental, nutritional and public health issues as they relate to the human condition. (CSU) (UC; no UC credit if taken after BIOL 170 F or a 200-level biology course) (Degree Credit) AA GE, CSU GE, IGETC

BIOL 102LF Human Biology Laboratory
1 Unit Corequisite: BIOL 102 F with a grade of "C" or better. 54 hours lab per term. This lab course supplements the BIOL 102 F lecture. This is a general education course for non-biology majors providing direct participation in experiments, demonstrations and discussions. Topics include elements of human anatomy and physiology, fitness, nutrition, disease, elements of human heredity and environmental adaptations. (CSU) (UC; no UC credit if taken after a 200-level Biology course) (Degree Credit) CSU GE, IGETC

BIOL 104 F Biology of Insects and Spiders 3 Units 54 hours lecture per term. This course familiarizes students with basic biological principles as illustrated by insects and spiders. Special emphasis is placed on their relations to plants and animals including humans. Living and preserved insects and spiders and many other visual aids will be used to help describe in detail life cycles, evolution, adaptations to local environment and the major taxonomic groups. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## BIOL 108 F Plants and People

3 Units
54 hours lecture per term. This course is the study of basic plant biology and the history and uses of plants and plant products by human societies. Plants have have played major roles in the molding of human society and civilization are studied. This course will also cover the changes made by human civilizations to plant morphology and physiology. Lectures are integrated with discussion, demonstration and hands-on learning activities. Specific topics include plant structure, function, origins of agriculture and domestication. Historical and contemporary uses of important plant products such as drugs, medicines, oils, resins, beverages, foods and industrial products are included. The nutritional values of major food plants are evaluated. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 109 F Genetics and Biotechnology in Society

54 hours lecture per term. This introductory survey course will cover the basic concepts and experiments of heredity and current advances in biotechnology, such as cloning, recombinant DNA technology, DNA profiling and gene therapy. This course will emphasize the applications, social consequences and ethical implications of biotechnology in medicine and agriculture. (CSU) (UC; no UC credit if taken after a 200 level Biology) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 109LF Biotechnology Lab Techniques 2 Units

108 hours lab per term. In this course, students will learn skills and gain experience with tools of the molecular biology lab. Students will learn safety, sterile techniques, solution preparation, record keeping, proper use of instruments, bacterial culture, recombinant DNA cloning, protein purification and applications on the computer. Class emphasizes practical hands-on experience and an understanding of the basic principles behind the technologies. (Note: BIOL 109 F is not required to take this course) (CSU) (Degree Credit)

## BIOL 141 F Marine Mammal Biology and Conservation

54 hours lecture per term. This course will provide an overview of the diversity of marine mammal species, along with their natural history, behavior, physiology, and ecology. It will introduce students to the techniques used to study marine mammals, and their applications to conservation and management issues. Required field trips are included. (CSU) (UC) (Degree Credit) AA GE, CSU GE

BIOL 170 F Organismal Biology
5 Units

## (C-ID BIOL 140)

Prerequisite: MATH 040 F with a grade of " $C$ " or better or math skills clearance.
Advisory: Completion of BIOL 101 F or equivalent college level general biology course or advanced placement high school biology with a score of 3 or better on the placement exam.
72 hours lecture and 54 hours lab per term. This course is designed to familiarize students with the diversity and biology of living organisms. Integrated lab and lecture sessions emphasize the classification of organisms with respect to the evolution of anatomical and physiological adaptations. This class is designed for Biological Science majors in transfer programs. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 190 F Introduction to Biotechnology

## 3 Units

54 hours lecture per term. This course will teach students about all aspects of the biotechnology field, with content appropriate for a wide range of students and professionals. Topics will include the biology, business and legal/ethical issues surrounding biotechnology, cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechology company structure, and the regulations affecting the field. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## BIOL 190LF Introduction to Biotechnology Lab

Corequisite: BIOL 190 F with a grade of "C" or better.
54 hours lab per term. This course prepares students for entrylevel work in the biotechnology industry by emphasizing the basic concepts needed to work effectively in a bioscience laboratory. Topics include laboratory math, basic chemistry of buffers, health and safety, metrology, quality control, biological molecules, gene expression, cell structure and molecular biology techniques. This course introduces students to basic biotechnology laboratory skills including basic separation methods, aseptic technique and documentation. Good communication and work-readiness skills are emphasized. (CSU) (Degree Credit) CSU GE

## BIOL 191 F Biotechnology A: Basic Laboratory Skills



4 Units
54 hours lecture and 54 hours lab per term. This course provides an introduction to the fundamental skills necessary for any biotechnology laboratory. Skills include maintenance of an industry standard notebook; preparation and sterilization of solutions, reagents, and media; utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, and laboratory safety regulations. Compliance with industry standards and regulations will be incorporated into course procedures. (CSU) (Degree Credit)

## BIOL 192 F Biotechnology B:

 Protein BiochemistryPrerequisite: BIOL 191 F with a grade of " C " or better. 54 hours lecture and 54 hours lab per term. This course covers fundamental skills in applied biotechnology necessary for any biotechnology laboratory but particularly focuses on downstream manufacturing processes in biomanufacturing. Skills include maintenance of an industry standard notebook, preparation and sterilization of solution, reagents and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, in vitro translation, large scale expression, purification, modification, western blot analysis, ELISA, antibody tagging, and fluorescent microscopy. (CSU) (Degree Credit)

## BIOL 193 F Biotechnology C: Molecular Biology

Prerequisite: BIOL 191 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course introduces the fundamental skills in any biotechnology laboratory focusing on the upstream research and development process. Skills include the maintenance of an industry standard notebook, preparation and sterilization of solutions, reagents, and media, utilization of good aseptic technique, proper use and maintenance of laboratory equipment, adherence to quality control protocols, lab safety regulations, DNA/RNA extraction and purification, bioinformatics, polymerase chain reaction, electrophoresis, DNA sequencing, recombinant DNA technology, DNA cloning, transformation, in vitro transcription, fluorescence in situ hybridization, and Southern blot analysis. Compliance with industry standards and regulations will be incorporated into course procedures. (CSU) (Degree Credit)

## BIOL 194 F Quality and Regulatory Compliance in the Biosciences



2 Units 36 hours lecture per term. This course will cover quality assurance and regulatory compliance for the bioscience industries. Topics will span quality control and Federal Drug Administration (FDA) regulations for the biotechnology, biopharmaceutical, biomedical device and food industries. Theories and application of quality assurance and quality control will be presented and several different quality systems will be discussed such as CGMP (Good Manufacturing Practices), ISO9000 (International Standards Organization), Six Sigma and Lean. (CSU) (Degree Credit)

## BIOL 196 F Tissue Culture Methods (C-ID BIOT 230BX)



## 2 Units

Prerequisite: BIOL 191 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course provides theoretical and practical knowledge and skills on how to culture Eukaryotic cells. Students acquire practical and theoretical knowledge of the structure, equipment, and sterile techniques of the cell culture laboratory, the growth conditions of cells, and how scientists attempt to mimic this in cultures. Among the topics covered are the composition of cell culture media, establishment of primary cultures and cell lines from normal tissue and cancer tissue, routine cultivation of cells, long-term storage, contamination, various methods for characterization of cells, transfection, and the use of cells in culture to resolve various issues in basic and applied research. (CSU) (Degree Credit)

## BIOL 222 F Marine Biology

3 Units
Prerequisite: A biological science lab course with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course presents an overview of life in the sea. Lectures, labs and fieldwork provide an introduction to the diversity of marine organisms and the physical and biological processes that influence their structure, life history, behavior, and distribution. An emphasis is placed on the interactions of these organisms and processes in a variety of marine habitats. Marine ecology and conservation are also discussed. Both lab and field exercises will be used to provide hands-on experience with marine organisms, habitats, and research techniques. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 266 F General Zoology

## 5 Units

54 hours lecture and 108 hours lab per term. This course is designed to familiarize students with the animal kingdom. Integrated lab and lecture sessions emphasize the evolution of anatomical, physiological and behavioral adaptations. This class is designed for Biological Science majors in transfer programs. (CSU) (Degree Credit) CSU GE

BIOL 268 F General Botany
5 Units
Prerequisite: A biological science lab course with a grade of "C" or better.
54 hours lecture and 108 hours lab per term. This course is a study of structure and function of roots, stems, leaves, flowers, fruits, and seeds of the flowering plants. Characteristics and life cycles of some of the algae, fungi, mosses, ferns, club mosses, and cone-bearing plants are covered. Environmental relationships, classification, genetics, propagation, and the applications of these to agriculture and forestry are included. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## BIOL 272 F Cell and Molecular Biology 4 Units

Prerequisite: BIOL 170 F and CHEM 111AF, with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course consists of integrated lectures and labs which are designed to 1) develop a strong foundation in biological facts, concepts, and theoretical models, 2) extend the student's ability to solve scientific problems through data collection and analysis, and 3) provide training in a variety of lab techniques and instrumentation experiences. These include the molecular basis of life, gene expression, cell structures, enzyme kinetics, cell cycle regulation and classic genetics. This course is designed for Biological Sciences majors in transfer programs. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 274 F General Ecology

4 Units
Prerequisite: BIOL 170 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course is designed to familiarize students with basic principles governing interactions between organisms and the environment. Integrated lectures, field trips, and lab sessions emphasize basic ecological principles and relationships. These include identification of plants and animals, community analysis, environmental survey techniques, laws of thermodynamics, behavioral and physiological adaptations of organisms, and ecological models. Field trips, including an overnight trip, are required. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 276 F Genetics and Evolutionary Biology

Prerequisite: BIOL 272 F with a grade of " $C$ " or better.
54 hours lecture and 54 hours lab per term. This course is a comprehensive survey of the processes and products of genetics. Through a review of experimental evidence, students evaluate the basic tenets of molecular, transmission and population genetics, and use the science of genetics to appraise the relationship of genetics to the processes and products of microevolution and macroevolution. Lab topics include DNA replication/repair, transcription and translation and regulation of gene expression. The philosophy and methods of science, as well as the theory of evolutionary thought are integrated throughout. Field trips may be required. (CSU) (UC) (Degree Credit)

## BIOL 299 F Biological Science Independent 1 Unit

 StudyPrerequisite: A 200-level course in the biological sciences with a grade of " $B$ " or better.
54 hours lab per term. This course involves lab and/or field investigations under the guidance of members of the life sciences faculty. Hours to be arranged. Primarily for majors in life sciences who wish to increase their knowledge of the sciences through individual study and small group conferences. Independent research problems with staff supervision may be approved. Outside reading and written report required. Elective credit in the sciences area. (CSU) (UC review required) (Degree Credit)

## Business (BUS)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Business Courses

## BUS N01 F Business/Computer Skills Lab 0 Units

NON-CREDIT COURSE: This course provides building opportunities based on individual student needs in business/computer skills including data entry, 10-key, typing/keyboarding for speed and accuracy, Windows Operating Systems, MS Office Software (Word, Excel, Access, Outlook, PowerPoint), internet research, etc.

## BUS 021 F The Securities Market

1 Unit
Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course provides an overview of the securities market. Topics to be discussed include types of markets, economic benefits, regulation, types of securities, participants in the market, brokerage houses, types of trades and orders, sources of investment information, and services offered by various types of investment professionals. (Degree Credit)

## BUS 022 F Common Stock

1 Unit
tetter Grade or Passino Pass option.
18 hours lecture per term. This course is an introduction to fundamental and technical analysis as it relates to common stock. Topics to be discussed include total return concept, return-risk characteristics, rights of stockholders, advantages and disadvantages of stock ownership, and basic valuation methods. An introduction to technical analysis with emphasis on chart patterns and technical indicators is also covered. (Degree Credit)

## BUS 023 F Fixed Income Securities

1 Unit
Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course covers the different types of fixed-income securities and their characteristic features, the rights of security holders, and basic valuation approaches. (Degree Credit)

## BUS 024 F Stock Options

1 Unit
Standard Letter or Pass/No Pass option.
18 hours lecture per term. This course provides an introduction to puts and call options. Topics to be discussed include the options market, mechanics of investing in options, basic options strategies, and return-risk characteristics. (Degree Credit)

## BUS 025 F Investment and Retirement Plans 1 Unit

 tetter Grade or Passindo Pass option.18 hours lecture per term. This course provides the fundamental concepts of mutual fund investing. The different types of investment companies, unique features, and advantages and disadvantages are covered. An overview of tax-deferred retirement plans is presented. Focus will be on managing self-directed IRAs and Keogh Plans. (Degree Credit)

## BUS 061 F Business Skills Internship

1 to 4 Units
Letter Grade or Pass/No Pass option.
$90-360$ hours lab per term. This course provides vocational learning opportunities for the student through employment in business or industry. Students must have completed 7 units or $20 \%$ of the Business and Technology Skills Certificate prior to enrolling in this course. Students must be enrolled in at least 6 units of required or restricted courses, which may include the internship course in the Business Technology Skills Certificate. (Degree Credit)

## BUS 100 F Introduction to Business

3 Units
54 hours lecture per term. This course is an introduction to the trends and opportunities in today's dynamic global business environment surveying economics, global markets, social responsibility, ownership forms, entrepreneurship, management organization, marketing, accounting and financial management. (CSU) (UC) (Degree Credit)

## BUS 101 F Personal Financial Management 3 Units

 54 hours lecture per term. This basic course covers the proper management of personal incomes and expenditures. The course includes a study of inflation and business cycles; commercial and savings accounts; budgets, charge accounts, installment buying, and borrowing money; property, income, estate, inheritance, and gift taxes; life, health, accident, property and miscellaneous insurance; pension plans and Social Security; owning a home; investing in securities; and trust funds and wills. This course is an integrative approach to personal finance focusing on practical financial decision making as well as the social, psychological, and physiological contexts in which those decisions are made. Students will examine their relationship with money, set personal goals and develop a plan to meet those goals. (CSU) (Degree Credit) CSU GE, AA GE
## BUS 110 F Business English

3 Units
54 hours lecture per term. This course is an English review course intended for the business student. Practice is provided in essentials of grammar, punctuation, English usage, capitalization, number usage, sentence structure, and spelling. Principles of letter writing are introduced. (CSU) (Degree Credit)

BUS 111 F Business Communications
3 Units
Prerequisite: ENGL 060 F with a grade of "Pass" or ENGL 099 F with a grade of "Pass" or ESL 186 F with a grade of "Pass" or a recommended score on the English Placement Test.
54 hours lecture per term. This course provides instruction and practice in writing in English usage, writing business letters, interoffice memoranda, and reports, Business English, mechanics, and appearance. Included are letters of inquiry, order and acknowledgement, sales, application, claims and adjustment and collection. One original research report is required. Meeting the needs of the readers underlies each section of study. (CSU) (Degree Credit) AA GE

## BUS 112 F Public Speaking for Business 4 Units

Advisory: Able to read and write at the college level (eligible for ENGL 100 F).
72 hours lecture per term. This is an introductory course in public speaking and presentation methods. This course covers a variety of business-related public speaking styles and formats. Emphasis will be placed on preparing logical, well-organized, accurate verbal communication. Critical evaluation, reporting and listening skills will also be a focus. Students will learn how to use technology to create audio-visual aids, as well as speaker outlines/ notes and audience handouts to assist in their presentations. Presentations topics will be related to business. (CSU) (Degree Credit) AA GE

## BUS 115 F Professional Business Etiquette 3 Units (formerly OT 070 F )

54 hours lecture per term. This course covers the business protocol and etiquette skills needed to be successful in the business workplace. This course teaches students to present with confidence and authority. Proper business protocol skills will be reviewed including proper introductions and handshakes, the proper etiquette for business dining, dressing for success, business meeting protocol, and technical etiquette skills, including business correspondence. Students will learn how to prepare for and execute an interview, starting with how to prepare a strong resume. (CSU) (Degree Credit)

## BUS 131 F Principles of International Business 3 Units

 54 hours lecture per term. This course provides an overview of the global business environment by examining the similarities and differences in comparison with the United States of doing business in various contemporary foreign cultural settings. It focuses on the differences of the economic, political, financial, and legal systems. It also discusses the ways of managing these differences through understanding the principles of marketing, exporting, financing, production, and human resource management in the context of a multicultural business environment. This course is recommended for all business managementinternational business majors. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE, MULT CULT REQ
## BUS 132 F Principles of Import/Export

3 Units
54 hours lecture per term. This course provides a thorough and practical treatment of the importing and exporting activities involved in international trade. The course is designed to acquaint the student through a comprehensive approach to import/ export as a continuous activity. It allows gaining firsthand how-to knowledge for those seeking to either get familiarized or work in the international trade industry, contemplating to start an import/ export activity, or for managers wishing to expand their company's market opportunities. Special emphasis is placed on agencies involved, terms and conditions, documentation requirements and formalities, transportation, insurance, banking and finance, marketing, and sources of information. (CSU) (Degree Credit)

## BUS 151 F Business Mathematics 3 Units

Prerequisite: MATH 020 F with a grade of " C " or better or math skills clearance
54 hours lecture per term. This course reviews the essentials of business arithmetic in fundamental computation and problem solving. Includes problems in interest and bank discount, taxation, business ownership, retailing, annuities, sinking funds, compound interest, and amortization. This course is recommended for all Business majors; however, it does not meet the GE math requirement for transfer to CSU. (CSU) (Degree Credit) AA GE

## BUS 162 F Business Economics 3 Units

54 hours lecture per term. This course covers economic principles and problems of today's business world are emphasized. An elementary and practical course intended to acquaint the student with the present-day operation of the American free enterprise system. Business terminology, price competition, labor problems, business cycles, national income, public and international finance, and government control are emphasized. This course provides an independent, business-related study of economics for the student of business management courses. (CSU) (Degree Credit) AA GE

## BUS 170 F Principles of E-Business 3 Units

54 hours lecture per term. This course will provide a comprehensive introduction to the field of e-business and integration of the Internet into existing business, taking into consideration the four critical infrastructures: technology, capital, public policy and media. This course focuses on presenting a working definition and framework for the study and practice of electronic commerce, e-business and Internet integration strategies. (CSU) (Degree Credit)

## BUS 180 F Small Business Management 3 Units

54 hours lecture per term. This course studies various small business enterprises including retail, wholesale, manufacturing, service, and home-based business. Factors in business success and advantages and disadvantages of business ownership are analyzed. This course covers the problems encountered in organizing and operating a small business, including financial sources, accounting information, marketing and other related information. (CSU) (Degree Credit)

## BUS 181 F Business Plan Development

2 Units
27 hours lecture and 27 hours lab per term. This course focuses on strategies and techniques to write an effective business plan for small businesses. Students will research, evaluate, and prepare a comprehensive business plan, utilizing business planning software. (CSU) (Degree Credit)

BUS 182 F Doing Business Online 3 Units 27 hours lecture and 27 hours lab per term. This course will prepare students to use the Internet with a business or home-based business. Emphasis will be placed on planning and organizing the Internet business. Students will learn how to connect to the Internet; create a secure Web site; organize E-mail, use FTP and telnet; create a Web-based business or integrate the Internet in an existing business; and write an Internet business plan. (CSU) (Degree Credit)

## BUS 201 F Financial Investments

## 3 Units

54 hours lecture per term. This course provides a comprehensive study of stocks, bonds, and related securities that includes a detailed study of the nature of these securities and their markets. Emphasis is placed on personal investment objectives for growth, growth with incomes, and income with preservation of capital together with taxes that affect investment policy. (CSU) (Degree Credit) AA GE

## BUS 211 F Writing for Business

3 Units
(C-ID BUS 115)
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100HF with a grade of "C" better.
54 hours lecture per term. This course refines communication skills and knowledge needed in organizations today. Emphasis will be placed on critical thinking and developing the ability to analyze, criticize and advocate ideas, to reason inductively and deductively and to reach well-supported factual or judgmental conclusions in writing. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and non-verbal communication; report writing; management presentations; team/group building skills; research methods; running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. (CSU) (Degree Credit)

## BUS 211HF Honors Writing for Business <br> 3 Units

## (C-ID BUS 115)

Prerequisite: ENGL 100 F or ENGL 100HF with a grade of "C" or better.
54 hours lecture per term. This is an intermediary course to communication skills and knowledge needed in organizations. This course will include communication fundamentals; ethical, legal and multicultural issues; correspondence applications; employment communication; oral and nonverbal communication; report writing; management presentations; team/group building skills; research methods; and running effective meetings and conferences. Computer-mediated applications will be presented throughout the course. As an Honors course, this class will use enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. (CSU) (Degree Credit)

## BUS 224 F International Marketing

3 Units
54 hours lecture per term. This course provides an analysis of worldwide marketing opportunities through a consideration of political, legal, economic, and cultural factors in the international context. Special emphasis will be placed on international market research, product development and positioning, pricing, distribution, and promotion. Recommended for students pursuing business management and international business degrees. (CSU) (Degree Credit)

## BUS 225 F International Management

3 Units
54 hours lecture per term. This course provides practical knowledge with specific applications in international business management. Topics include import/export management, international financial management, foreign joint venture, foreign licensing and franchising, and counter trade. The course combines integrated text materials with carefully selected comprehensive case studies that are designed to demonstrate the practical experience of firms of all sizes as they come to grips with an increasingly competitive global environment. Recommended for students pursuing business management and international business degrees. (CSU) (Degree Credit)

## BUS 240 F Legal Environment of Business 3 Units (C-ID BUS 120)

54 hours lecture per term. This course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. This course is required for all Business Administration majors at CSUF. (CSU) (UC Credit Limitation: BUS 240 F, BUS 240 HF , BUS 241AF and BUS 241BF combined; maximum credit, one course) (Degree Credit) AA GE

## BUS 240HF Honors Legal Environment of Business

(C-ID BUS 120)
54 hours lecture per term. This Honors-enhanced course is an introduction to the legal environment in which a business firm operates. Topics include an introduction to the American legal system, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law. As an Honors course, students will conduct independent legal research and prepare class presentations of court cases and legal arguments. This class will use the Socratic method of instruction. (CSU) (UC Credit Limitation: BUS 240 F, BUS 240HF, BUS 241AF and BUS 241BF combined; maximum credit, one course) (Degree Credit) AA GE

BUS 241AF Business Law
54 hours lecture per term. This course is an introduction to busi ness law principles and cases, including a review of the classes and sources of law, agencies for enforcement, court procedure, and civil and criminal liability. The major subject area studied is the law of contracts. A special study is made of sales of goods based upon the Uniform Commercial Code with emphasis placed on consumer protection. (CSU) (UC Credit Limitation) (Degree Credit) AA GE

## BUS 241BF Business Law

3 Units
54 hours lecture per term. This course is a continuation of BUS 241AF Business Law with emphasis on business organizations. Areas of study include commercial paper, agency employment, partnerships, corporations, antitrust, securities, and bankruptcy law. (CSU) (UC Credit Limitation) (Degree Credit)

## BUS 242 F International Business Law 3 Units

54 hours lecture per term. This course provides an introduction to the legal and cultural issues raised in formulating an international business strategy and engaging in international business transactions. Topics include international contracting, export-import, licensing and technology transfer, and sales of services. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE, MULT CULT REQ

## BUS 251 F Business Finance

3 Units
54 hours lecture per term. This is an introductory course to the field of finance, the focus is on the practical significance of the fundamental concepts of finance. The class will include the analysis of financial markets, financial statements, planning and control, working capital management, time value of money, valuation models, capital budgeting, dividend policy and mergers and acquisitions. (CSU) (Degree Credit)

BUS 262 F Principles of Management 3 Units
54 hours lecture per term. This course covers the principles, methods, and procedures essential to the successful management of human and financial resources. Planning, organizing, leading, controlling and the application of managerial skills are discussed. (CSU) (Degree Credit)

## BUS 266 F Human Relations in Business 3 Units

54 hours lecture per term. This course examines human behavior in the work place and the most important and useful practices found in the management of organizations. Typical employment situations are analyzed for the purpose of establishing sound practices in the working environment. Topics include communications, leadership development, job conflict, motivation, human relations training, workforce diversity, group dynamics, job politics, organizational change, and stress management. (CSU) (Degree Credit) AA GE

## BUS 267 F Principles of Supervision

3 Units
54 hours lecture per term. This course is designed for first-line, new, or future managers covering the skills required to effectively supervise and manage employees in organizations. This class emphasizes the supervisors' need for a working understanding of the functions of management and the practical supervisory skills relating to employees, work teams, workplace diversity, ethics, and special concerns. Topics include the role and function of supervisors, recruitment and evaluation of workers, task delegation, motivation, employee discipline, training and professional development, conflict management, labor relations and legislation, communication, employee safety, and time management. (CSU) (Degree Credit)

## BUS 269 F Managing Business Projects 2 Units

36 hours lecture per term. This is an introductory course in the study of project management. This course covers the principles and methods necessary to create an effective plan and schedule for a project; the techniques to monitor, control, and measure performance of the project once it is underway; and the relationships of timing, costs, and resources (including personnel). (CSU) (Degree Credit)

BUS 271 F Leadership and Business Ethics 3 Units 54 hours lecture per term. This course focuses on leadership and ethics in business today. It addresses leadership models perspectives and practices, and the complexities and principles of ethical business issues. Leadership topics include leading and motivating individuals and work teams, workplace diversity, followership, self-assessment and skills development. Business ethics topics include ethical leadership and decision making, organizational value systems and identifying and developing tools needed to effectively deal with ethical dilemmas. (CSU) (Degree Credit)

## BUS $\mathbf{2 9 0}$ F Managerial Communications

3 Units
54 hours lecture per term. This course covers a variety of communication challenges that typically arise in management and emphasizes the development of communication skills to successfully manage individuals and groups. Topics include leadership and management skills, developing work relationships, ethics, managing meetings, making presentations, interviewing, performance appraisals, negotiation, conflict resolution, using electronic communications technology, and group communication strategies. (CSU) (Degree Credit)

BUS 298 F Advanced Topics in Business . 5 to 3 Units $0-54$ hours lecture and $0-162$ hours lab per term. This course offers timely business-related advanced concepts designed to enhance job skills, expand the student's knowledge of the business world, and increase employment opportunities. Unit credit may range from .5 to 3 units in any given term. Consult the class schedule to verify specific topic area and credit offered for a particular term. (CSU) (Degree Credit)

## Chemistry (CHEM)

Natural Sciences Division

Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Chemistry Courses

## CHEM 100 F Chemistry for Daily Life <br> 4 Units

54 hours lecture and 54 hours lab per term. This course focuses on the practical significance of the fundamental concepts of chemistry in the context of societal, political and economic issues that impact our world. Units may include, but are not limited to the following: the chemistry of the atmosphere and water, fission and fusion, energy, chemistry, and society, pharmaceutical, new materials, the chemistry of nutrition and agriculture. Student participation is stressed individually and in groups, through written and oral assignments. The lab provides hands-on experience with chemical phenomena. This course is designed for the non-science major seeking a lab science. (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 101 F Chemistry for Allied Health <br> 5 Units Science

## (C-ID CHEM 140)

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course provides an introduction to the principles of inorganic and organic chemistry. This course includes a lab and will meet physical science transfer requirements. This is a course required of numerous allied health science majors. (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) (Degree Credit) AA GE, CSU GE, IGETC

CHEM 103 F Chemistry in a Changing World 3 Units 54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a lab. Course emphasizes basic principles of chemistry and their relationship to the modern world. This course will foster an interest in science by preparing student to make effective decisions, and by developing thinking skills that can be applied to challenges in a changing world. Topics include air and water pollution, energy resources, basic biochemistry, and current scientific developments involving chemistry. (CSU) (UC Credit Limitation: no credit if taken after CHEM 111AF) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 107 F Preparation for General Chemistry

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture, 54 hours lab and 18 hours problem solving per term. This course is strongly recommended for students who have not had high school chemistry or who earned a grade of "C" or less in the high school course. The fundamental principles of chemistry are stressed, with emphasis on the chemistry of inorganic compounds. Includes atomic structure, chemical bonding, descriptive chemistry, stoichiometry, gas laws, solutions, equilibrium and redox. This course is intended to prepare students specifically for CHEM 111AF and CHEM 111BF. Lab work supports topics of CHEM 107 F. (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 111AF General Chemistry I <br> 5 Units <br> (C-ID CHEM 110)

Prerequisite: CHEM 107 F with a grade of "C" or better or a passing score on the Chemistry Proficiency Test and MATH 040 F with a grade of " C " or better or math skills clearance.
54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of chemical reactions and stoichiometry, thermochemistry and calorimetry, atomic structure and chemical periodicity, chemical bonding, molecular structure, gases, physical properties of solids, liquids and solutions, and organic chemistry. The lab sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 111BF General Chemistry II

5 Units

## (C-ID CHEM 120S)

Prerequisite: CHEM 111AF with a grade of "C" or better.
54 hours lecture, 54 hours lab, 36 hours problem solving and 18 hours discussion per term. This course covers the topics of kinetics, equilibria, acid and bases, thermodynamics, electrochemistry, transition metals, coordination compounds and nuclear chemistry. The lab sequence will support the above topics including both qualitative and quantitative experiments, analysis of data and error propagation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 201 F Biochemistry for Allied Health <br> 5 Units Science <br> (C-ID CHEM 102) <br> Prerequisite: CHEM 101 F with a grade of " C " or better.

72 hours lecture, 36 hours lab, 18 hours problem solving and 18 hours discussion per term. This course is the second semester of a two semester sequence (CHEM 101 F and CHEM 201 F). This course is a study of organic chemistry: structures, nomenclature, reactions and functions of organic and biochemical compounds; cell structure, metabolism, bioenergetics, biochemical genetics, and mechanisms of vitamin and enzyme action. This course is designed for the health professions. (CSU) (UC Credit Limitation) (Degree Credit)

CHEM 211AF Organic Chemistry I
5 Units
Prerequisite: CHEM 111BF with a grade of "C" or better.
54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the first part of a full year organic chemistry course designated primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, prechiropractic, and biology majors. Emphasis is upon fundamental concept and application to molecular structure and chemical reactivity. Considerable stress is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and molecular spectroscopy. Lab work includes techniques such as distillation, extraction, chromatography, and synthesis and qualitative analysis. (CSU) (UC Credit Limitation) (Degree Credit)

## CHEM 211BF Organic Chemistry II <br> 5 Units

Prerequisite: CHEM 211AF with a grade of "C" or better.
54 hours lecture, 72 hours lab and 36 hours discussion per term. This course is the second part of a full year organic chemistry course designed primarily for chemistry majors but strongly recommended for pre-medical, pre-dental, pre-veterinary, pre-chiropractic, and biology majors. Aliphatic and aromatic compounds are integrated with the functional group approach maintained. Considerable emphasis is placed upon reaction mechanism, energetics, syntheses, stereochemistry, and spectroscopy. Lab work is on synthesis and qualitative analysis employing techniques learned in CHEM 211AF. (CSU) (UC) (Degree Credit)

## Child Development and Educational Studies (CDES)

Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/
Child Development and Educational Studies Courses

[^3]
## CDES 115 F Introduction to Early Childhood Education Curriculum <br> (C-ID ECE 130)

54 hours lecture per term. This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age six. Students will examine a teacher's role in supporting development and fostering the joy of learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include but not be limited to: Art, Science and Math education, language and literacy, social and emotional learning and creativity. (CAP Aligned) (CSU) (Degree Credit)

## CDES 116 F Art Education in Early Childhood 2 Units (formerly CDES 123AF)

36 hours lecture per term. This course examines the teacher's role in children's artistic growth. Emphasis is on the child as the artist, learner and creator of ideas. Students explore, analyze, and experience artistic studio processes that support children's use of art as a tool for communication, thinking, understanding and learning. (CSU) (Degree Credit)

## CDES 117 F Literacy and Language in <br> 2 Units Early Childhood

36 hours lecture per term. This course examines the teacher's role in children's literacy development. Language development topics include: receptive and expressive, writing and reading, storytelling experiences using a multi-cultural lens. Students explore, analyze, practice and present literacy experiences to children that support their use of language and literacy techniques as a tool for child communication, understanding and comprehension. (CSU) (Degree Credit)

## CDES 118 F Science and Math Education in Early Childhood (formerly CDES 123CF)

2 Units

36 hours lecture per term. This course gives students insight, knowledge and techniques for designing scientific early childhood classroom environments that promote a constructivist approach. Emphasis is on the child as researcher, explorer and investigator. Students explore processes that promote in-depth science investigation and early math understanding including nature and gardening. (CSU) (Degree Credit)

## CDES 119 F Music Education in Early Childhood <br> (formerly CDES 123DF)

36 hours lecture per term. This course prepares students to create children's musical environments as they explore the elements of music. Using a multicultural lens, both vocal and instrumental music are explored. The role of the teacher as community builder and bridge between music, relationships with the child and family is emphasized. (CSU) (Degree Credit)

## CDES 120 F Child Development

3 Units

## (C-ID CDEV 100)

54 hours lecture per term. This course is designed to study the entire scope of developmental theories addressing physical, intellectual, moral, social and emotional development. Periods of development from prenatal through adolescence are presented in a chronological sequence. Research methodologies are discussed as students are expected to think critically about theory and research. Interaction of heredity, environment and maturation is explored. Students will observe children, evaluate individual differences and analyze characteristics of development using inclusive viewpoints. (CAP Aligned) (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## CDES 121 F Introduction to Early Childhood 3 Units Education: The Assistant Teacher

Advisory: Current TB test results required; student presenting NOCROP Certificate of Completion may apply to waive this course following completing of six Fullerton College CDES units. 36 hours lecture and 54 hours lab per term. This course explores the role of the teacher assistant; developing conversations with children and key factors in learning are emphasized. Lab hours are scheduled at the CDES department Laboratory School instructional classrooms. (CSU) (Degree Credit)

## CDES 122 F Principles of Early Childhood 3 Units Education

54 hours lecture per term. This course emphasizes the development of the teacher and the construction of quality programs. Focus areas included are developmentally appropriate practice, equitable, inclusive environments, cross-cultural/non-sexist education, ethics, health, safety, curriculum, and working with parents and colleagues. The role of the adult as teacher and advocate is studied. Students gain observational skills at the Child Development and Educational Studies Department Laboratory Instructional classrooms. (CAP Aligned) (CSU) (Degree Credit)

## CDES 125 F Observation and Assessment for Early Learning and Development <br> (C-ID ECE 200)

54 hours lecture per term. 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. Students will observe young children in licensed facilities (including the CDES Lab School) as part of the assignments for the course. (CAP Aligned) (CSU) (Degree Credit)

## CDES 140 F Infant/Toddler Development <br> 3 Units and Observation

54 hours lecture per term. This course studies the child from birth to age three including prenatal development with an emphasis on physical, intellectual, social and emotional growth and development. Family interrelationships, establishment of basic trust and autonomy, and cultural variations on nurturing are included. Interwoven into this course are appropriate observation and assessment techniques. (CSU) (Degree Credit)

## CDES 141 F Principles of Infant/Toddler Care 3 Units and Education

54 hours lecture per term. This course provides the student with an overview of the organization and operation of infant-toddler programs including: goals, philosophy, infant and family needs, activities and routines, physical space and equipment. An emphasis is on developmentally appropriate, culturally sensitive care for infants in group settings. (CSU) (Degree Credit)

## CDES 151 F School Age Child: Programs, Curriculum and Guidance

54 hours lecture per term. This course is for those working within school-age extended-day programs. Emphasis is on philosophy, guidance and discipline, legal issues, program/curriculum development and developmentally appropriate activities reflecting issues of diversity. Students develop criteria for evaluating quality programs. (CSU) (Degree Credit)

## CDES 199 F Child Development Independent 1 Unit Study

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing this course will be awarded elective credit in the Child Development and Educational Studies area. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

## CDES 200 F Adolescent Development 3 Units

54 hours lecture per term. This course provides an in-depth examination of the developmental period of adolescence. Emphasis is on physical, social, intellectual, moral and identity development in a framework reflecting the growing diversity of our population. While theoretical understanding is emphasized, issues such as teen pregnancy, family relationships, and education are addressed. (CSU) (UC Credit Limitation) (Degree Credit)

## CDES 201 F Child in the Home and Community 3 Units

 (C-ID CDEV 110)54 hours lecture per term. This course provides an environmental study of the interaction of the family, school and community in the life of the developing child. Students explore the diversity of families and the support of these families throughout various social structures. Emphasis is on early childhood education, schools, community agencies and the responsibility of the professional as advocate. This course fulfills the Multicultural Education Requirement for graduation. (CAP Aligned) (CSU) (Degree Credit) AA GE, MULT CULT REQ

## CDES 204 F Introduction to Special Education 3 Units

 54 hours lecture per term. This course provides an overview of special education and the relationship to children with special needs. It includes the theoretical and educational foundations of special education, a historical background to the field of special education, legal issues, and techniques for inclusion of individuals with special needs in all settings. Various implications of full inclusion are discussed. (CSU) (Degree Credit)
## CDES 205 F Creating Environments for Young Children

54 hours lecture per term. This course is designed for adults interested in planning inclusive environments for children. It is valuable for teachers, directors, site supervisors, administrators, and interior designers. Students develop ways of examining environmental settings for children and evaluate the use of physical space and the selection of activity settings in terms of program goals. The study of contemporary issues in environmental planning to enrich children's experience is emphasized. Students observe children and settings and design both indoor and outdoor environments for group settings. (CSU) (Degree Credit)

## CDES 206 F Sensory Integration and <br> 3 Units Motor Planning for Children

54 hours lecture per term. This course provides early childhood education teachers and parents with a better understanding of the sensory and motor development of young children. Guidelines used to develop daily programs in perceptual-motor curriculum and activities are explored. Techniques for early identification of learning and emotional problems and strategies for establishing an environment to enhance sensory and physical development are addressed. (CSU) (Degree Credit)

## CDES 207 F Principles and Techniques of 3 Units Early Childhood Special Education with Field Experience

36 hours lecture and 54 hours field experience per term. This course is designed for those who are or will be working with groups of young children. Identifying the teacher's role in early diagnosis, using IEP's (Individual Education Plans), working with specialists, and working with families are discussed. Teaching techniques, appropriate teaching goals, and curriculum adaptations are emphasized in relation to all the federally recognized categories of special education. Specific behavior management techniques and the importance of environmental adaptations for effective programs are included. Full inclusion policies and natural environments are discussed. (CSU) (Degree Credit)

## CDES 208 F Working with Families of Children with Special Needs

54 hours lecture per term. This course is designed for teachers, administrators, parents, and others interested in supporting children with special needs and their families. This course focuses on supporting families of children with special needs in early childhood settings. Developing techniques and strategies to provide this support is emphasized, as well as building a knowledge base of resources available to parents and early childhood programs. There is a focus on creating inclusive environments for young children and their families. (CSU) (Degree Credit)

## CDES 209 F The Role of the Para-Professional 3 Units in Diverse Settings

54 hours lecture per term. This course is an overview of the roles and responsibilities of paraprofessional including legal, instruction, evaluation and behavioral components. It is designed to train persons to work as classroom teaching assistants in public schools. This course meets the current legislative requirements for paraprofessional. (CSU) (Degree Credit)

## CDES 210 F Anti-Bias Perspective/Diversity Seminar

## (C-ID ECE 230)

Advisory: ENGL 060 F.
54 hours lecture per term. This seminar places an emphasis on addressing issues of bias that individuals, children and families experience on a daily basis. This course requires students to examine their own world views and look at issues from a historical and cultural context. Students are challenged to take the journey on becoming an anti-bias educator in preparation for creating a culturally-relevant teaching environment where adults and/or children actively foster cognitive, emotional and behavioral skills needed to respectfully and effectively learn about differences and similarities. This course fulfills the Multicultural Education Requirement for graduation. (CAP Aligned) (CSU) (Degree Credit) MULT CULT REQ

## CDES 211 F Classroom Practices for Diverse Learners

54 hours lecture per term. This course is designed for those who are or will be assisting in the elementary through secondary educational setting. Students will be prepared to facilitate classroom and community practices for diverse learners (individuals who have disabilities, second language learners, gifted, etc.). Topics will include literacy, language, and behavior support. Introductory knowledge in the assessment, design and implementation of lifespan curriculum and methodology will be covered. (CSU) (Degree Credit)

## CDES 215 F Health, Safety, Food, and Nutrition for Children

(C-ID ECE 220)
54 hours lecture per term. This course focuses on health, safety and the use of food as an instructional medium in early childhood settings. Emphasis is placed on safety and sanitation issues for the prevention of injury and infectious diseases, the care of mildly-ill children, planning and organizing food-related activities, the application of basic nutrition principles to menu planning, the resolution of common food-related problems such as obesity and food allergies and techniques and resources for providing culturally-appropriate foods and nutrition education. This course meets, in-part, the California Department of Social Services health/ safety requirements for family child care and center-based providers. (CAP Aligned) (CSU) (Degree Credit)

## CDES 225 F Early Childhood Student Teaching Practicum

(C-ID ECE 210)
Prerequisite: CDES 115 F with a grade of " C " or better and CDES 116 F with a grade of " $C$ " or better and CDES 118 F with a grade of " C " or better and CDES 120 F with a grade of " C " or better.
Corequisite: CDES 238 F with a grade of "C" or better.
18 hours lecture and 108 hours lab per term at the CDES Lab School instructional classrooms. This course includes study, exploration and practice in the many varied roles of the early childhood teacher. Topics include constructivism, emergent curriculum, developmental education, play, nature-based curriculum, environment, the Reggio-inspired principles of learning including the image of the child, observation, reflective teaching processes, child theory building, assessment of learning and documentation of children's learning is studied. Cultural and linguistic practices are included. Students will be under the direction/supervision of faculty and/or qualified Lab Tech/mentor teacher. (CAP Aligned) (CSU) (Degree Credit)

## CDES 230 F Early Childhood Education 3 Units Administration: Business Models and Practices

Prerequisite: Completion of the Associate Teacher Program Certificate at Fullerton College or completion of the California Department of Social Services required core courses or equivalent. 54 hours lecture per term. This course is required for the Early Childhood Education Administration Certificate and meets the State Department of Social Services licensing (Title 22) regulations for administrators. This course, together with CDES 231 F, fulfills the requirement for both Site Supervisor and Program Director for the State Department of Education (Title 5). As one course in a series of administrative course offerings, this course emphasizes the following components: facility and financial management, marketing, enrollment, managing health and safety, foodservice, and legal consideration for childhood education programs. (CSU) (Degree Credit)

## CDES 231 F Early Childhood Education Administration II

Prerequisite: Completion of the Associate Teacher Program Certificate at Fullerton College or completion of the California Department of Social Services required core courses or equivalent as required by Title 22 Child Day Care General Licensing requirements.
54 hours lecture per term. This course is required for the Early Childhood Education Administration Certificate and meets the State Department of Social Services licensing regulations for administrators. This course emphasizes the following components: child development and educational theory and philosophy; effective administrative, supervisory, and leadership skills; quality child care and development programming; planning, organizing, staffing and evaluating child care centers; effective communication and advocacy. This is one course in a series of administrative course offerings. (CSU) (Degree Credit)

## CDES 238 F Reggio and Constructivism in Early Childhood

54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of teaching and learning. A seminar founded in the principles of the Reggio Emilia philosophy and the Constructivist approach to early learning. Topics include reflective teaching, children's theory building, emergent curriculum, natural learning environments, observation and documentation. Master Teacher level Child Development Permit Matrix specialization course. (CSU) (Degree Credit)

## CDES 240 F Mentoring and Leadership in Early Childhood Education

Advisory: Two years of early childhood teaching experience. 54 hours lecture per term. This course is intended for early educators interested in deepening their knowledge of mentoring, supervising and leadership. Strategies for positive growth and change in the early childhood profession are explored. Course focuses on the promotion of quality professional teaching environments, including the study of the following: communication skill development, effective working relationships and innovations in the field. Course meets requirements for adult supervision at the Master Teacher level on the Child Development Permit Matrix and application to the California Mentor Teacher Project. (CAP Aligned) (CSU) (Degree Credit)

CDES 242 F Introduction to Liberal Studies 3 Units
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
54 hours lecture per term. This course is a survey of the historical foundations and interdisciplinary nature of liberal studies, including an introduction to the values, modes of inquiry, and means of expression in the natural sciences, social sciences, and arts and humanities. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## CDES 261 F Introduction to Elementary Classroom Teaching

## (C-ID EDUC 200)

## Corequisite: CDES 261LF.

36 hours lecture per term. This course provides students interested in elementary teaching an introduction to teaching and learning; an overview of the scope and sequence of curriculum planning; understanding of content standards, California Standards of the teaching profession; experience in the development, presentation and evaluation of learning activities. This course is part of an articulation agreement with CSUF for preparation for the teaching credential program. To qualify for this articulation, students must achieve a " $B$ " or better grade for this course. (CSU) (Degree Credit)

## CDES 261LF Introduction to Elementary Classroom Teaching: Observation <br> Corequisite: CDES 261 F.

54 hours lab per term. This course provides students interested in elementary teaching weekly observation and participation experiences in elementary classrooms and opportunities to develop, present and evaluate learning activities. Students will observe three hours per week. This course is part of an articulation agreement with CSUF for preparation for teaching credential program. To qualify for this articulation, students must achieve a grade of "B" or better for this course. (CSU) (Degree Credit)

## CDES 299 F Child Development Independent 1 Unit Study

54 hours independent study per term. This course is for students who wish to increase their knowledge of Child Development and Educational Studies through individual study. Students successfully completing the course will be awarded elective credit in the Child Development and Educational Studies area. (CSU) (UC Credit Limitation depending upon course content); UC review required) (Degree Credit)

## Chinese (CHIN)

Humanities Division
Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Chinese Courses

## CHIN 101 F Elementary Chinese - Mandarin I 5 Units Letter Grade or Pass/No Pass option.

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE

CHIN 102 F Elementary Chinese - Mandarin II 5 Units Letter Grade or Pass/No Pass option.
Prerequisite: CHIN 101 F with a grade of " C " or better or one year of high school Chinese with a grade of "C" or better. 90 hours lecture per term. This course continues to focus on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to achieve these skills. Included is an introduction to customs, culture, and civilization of Chinese-speaking countries. This course is conducted primarily in Chinese and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC


#### Abstract

CHIN 203 F Intermediate Chinese -

\section*{Mandarin III}

Letter Grade or Pass/No Pass option. Prerequisite: CHIN 102 F with a grade of " C " or better or better or two years high school Chinese with grade of "C" or better. 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC


## CHIN 204 F Intermediate Chinese Mandarin IV

Letter Grade or Pass/No Pass option.
Prerequisite: CHIN 203 F with a grade of "C" or better or three years high school Chinese with a grade of "C" or better.
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Chinese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Chinese culture by introducing literary readings. This course is conducted entirely in Chinese. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Cinema, Radio and Television (CRTV)

Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

Cinema, Radio and Television Courses

[^4]
## CRTV 118 F Introduction to Radio, TV and Film

54 hours lecture per term. This course is designed to assist the beginning student in understanding radio, television, cable, film, and electronic mass media. For those who plan to pursue a career in broadcasting or film, this course will provide guidance for career decisions and background for more specialized courses. For those with a general interest in broadcasting and film, this course will provide a broad understanding of the electronic mass media industries. (CSU) (Degree Credit) AA GE

## CRTV 120 F Media Aesthetics

3 Units
54 hours lecture per term. This course provides a background in understanding aesthetics used in television, motion pictures, video games, digital media and explores the development and impact of mediated messages. The interplay and structuring of elements of sight, sound, and motion as message components, and their capacity to generate impressions, stimulate feelings, shape attitudes, and convey information are examined. (CSU) (Degree Credit) AA GE, CSU GE

## CRTV 121 F American Cinema to the 1960's 3 Units

54 hours lecture per term. This course examines the American motion picture industry as a unique economic, industrial, aesthetic, and cultural institution. Development and changes to the 1960's are examined related to technology; industrial and economic models; aesthetic styles and genres; production, marketing, and distribution processes; and audiences. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## CRTV 122 F Audio Production Techniques 3 Units

36 hours lecture and 72 hours lab per term. This course provides instruction in the operation of radio and television audio equipment, broadcast microphones, and computer software associated with media recording and internet radio. Projects will include production of radio commercials, television commercial soundtracks, digital audio editing, and special radio and television broadcast procedures with an emphasis on smooth operation of the audio control board and other audio equipment. (CSU) (Degree Credit)

## CRTV 124 F Broadcast Advertising Sales 1 Unit

18 hours lecture per term. This course covers the analysis of the sales function in commercial radio and television stations, and cable television franchises. The students examine the methodology and practical application of electronic media advertising, sales, and research. Audience demographics, market surveys, rate structure, and client relationships are included. Students will learn to write standard length commercials that focus on the targeted consumer and produce results for the advertiser. Discussion of media competitive advantages and disadvantages, as well as vocabulary and techniques of broadcast sales are also examined. (CSU) (Degree Credit)

## CRTV 126AF World Cinema to 1945

3 Units
54 hours lecture per term．This is the first course in a two－course sequence that will provide a background in cinema history with a global perspective，following the growth of cinema from primarily a U．S．and European form of entertainment and communication to an international medium with significant production centers， cultural traditions，and production styles found in a variety of locations around the world．This course will focus on world cinema from its early development through the end of World War II．This course fulfills the Multicultural Education Requirement for graduation．（CSU）（UC）（Degree Credit）AA GE，CSU GE，IGETC， MULT CULT REQ

CRTV 126BF World Cinema 1946 to Present 3 Units 54 hours lecture per term．This is the second course in a two－ course sequence that will provide a background in cinema history with a global perspective，following the growth of cinema from primarily a U．S．and European form of entertainment and com－ munication to an international medium with significant produc－ tion centers，cultural traditions，and production styles found in a variety of locations around the world．This course will focus on world cinema after World War II to the present．This course fulfills the Multicultural Education Requirement for graduation．（CSU） （UC）（Degree Credit）AA GE，CSU GE，IGETC，MULT CULT REQ

## CRTV 127 F Screenwriting

3 Units
54 hours lecture per term．This course covers the concepts and practices in the various types of dramatic writing for television and motion picture production．Students will learn about char－ acterization，conflict，structure，and commercial prospects．（CSU） （Degree Credit）

## CRTV 128 F Writing for Radio，TV and Film 3 Units

54 hours lecture per term．This course covers the concepts， practices and forms for commercials，interviews，corporate and dramatic presentations for radio，television，film and the Inter－ net．This is a course in all forms of media writing．（CSU）（Degree Credit）

## CRTV 129 F Broadcast News <br> 3 Units

36 hours lecture and 72 hours lab per term．This course provides instruction and practice in gathering and writing news for radio and television．The emphasis is on writing copy and familiar－ ization with professional practices in radio and television news operations，including the use of local news sources，international wire services and other news material．Course activities include planning，writing，and delivering news for radio and television． （CSU）（Degree Credit）

## CRTV 130 F Broadcast Audio Production 3 Units

 Prerequisite：CRTV 122 F with a grade of＂C＂or better． 36 hours lecture and 72 hours lab per term．This course is designed to increase digital audio production skills for radio and television．Projects are designed to give students the opportunity to use the audio production room for a variety of production pur－ poses for radio，television，film，internet and media production． （CSU）（Degree Credit）CRTV 131 F Contemporary American Cinema 3 Units 54 hours lecture per term．This course focuses on the American motion picture industry beginning with the film school genera－ tion and the production processes，economic factors，and social influences that have shaped the industry and been shaped by the industry．This will include changes in practices relating to pro－ duction aesthetics and techniques，marketing，distribution，and technology．（CSU）（UC）（Degree Credit）AA GE，CSU GE，IGETC

## CRTV 133 F Traffic Reporting

3 Units
36 hours lecture and 54 hours lab per term．This course provides instruction and practice in gathering and reporting traffic for radio and television．The emphasis is on gathering information and writing and announcing traffic updates and familiarization with professional practices in radio and television traffic opera－ tions，including the use of local maps，CHP sources，Cal Trans cameras，and other online material．Course activities include compiling，composing，and delivering traffic reports for radio and television．（CSU）（Degree Credit）

## CRTV 135 F Broadcast TV and Radio Announcing

36 hours lecture and 54 hours lab per term．This is a course in announcing technique focusing on the announcing and voiceover skills most needed in contemporary radio and television．This course concentrates on announcer voice technique on and off camera，talk radio hosting skills，commercial interpretation，news announcing，podcasting and ad－libbing．（CSU）（Degree Credit）

CRTV 139 F Intermediate Broadcast News 3 Units Prerequisite：CRTV 129 F with a grade of＂ C ＂or better． 36 hours lecture and 72 hours lab per term．This course is designed to increase the skill level of broadcast news students who have taken one semester of CRTV 129 F，with added tele－ vision reports，interviews，produced features，traffic reports and additional newscasts．（CSU）（Degree Credit）

## CRTV 145 F Radio／TV Sports Broadcasting 3 Units

36 hours lecture and 72 hours lab per term．In this course，class members will be involved in the broadcast of local sports on radio station KBPK，90．1 FM and the Fullerton College Cable Television Network．The sports to be broadcast include football，basketball， baseball and soccer．Students will also perform as sportscasters on news programs for KBPK．Students will interview local athletes， write，and produce feature material for broadcast．（CSU）（Degree Credit）

CRTV 146 F Intermediate Sports Broadcasting 3 Units Prerequisite：CRTV 145 F with a grade of＂C＂or better． 36 hours lecture and 72 hours lab per term．In this course，stu－ dents will take the lead on writing and preparing broadcasts and building presentation／performance skills in the broadcast of local sports on radio station KBPK， 90.1 FM ，the Fullerton College Cable Television Network，and Sportsnet web site．The sports to be broadcast include football，baseball，basketball，soccer， NASCAR and hockey．Students will also perform as sportscasters on news programs on KBPK．Students will interview local athletes， write and produce feature material for broadcast．The contribu－ tions of minorities and women in sports will be highlighted．（CSU） （Degree Credit）

## CRTV 147 F Advanced Sports Broadcasting 3 Units

Prerequisite: CRTV 146 F with a grade of "C" or better. 36 hours lecture and 72 hours lab per term. In this course, students will develop copy, produce, edit and analyze the effectiveness of broadcasts of local sports on radio station KBPK, 90.1 FM, the Fullerton College Cable Television Network, and the Internet. The sports to be broadcast include football, baseball, basketball, soccer, softball, hockey golf, tennis and volleyball. Students will also perform as sportscasters on Fullerton College Cable TV. Students will interview local athletes, and will also write and produce feature material for broadcast. (CSU) (Degree Credit)

CRTV 149 F Advanced Broadcast News 3 Units Prerequisite: CRTV 129 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This course is designed to increase the skill level of broadcast news students. This course has added field television reports, community interviews, police and fire department telephone interviews, produced features, traffic reports written from source material, and additional newscasts. (CSU) (Degree Credit)

## CRTV 150 F Television Studio Production 3 Units

36 hours lecture and 54 hours lab per term. This course is an introduction to multiple-camera studio production, theory and practice of producing programs live. Student crew positions, including writer, producer, director, assistant director, lighting director, floor manager, camera operator, technical director, audio engineer, recording engineer and graphics designer. (CSU) (Degree Credit)

## CRTV 157 F Digital Production/Non-Linear Editing for Video/Film

## (C-ID FTVE 130)

36 hours lecture and 72 hours lab per term. This course introduces single-camera video and filmmaking production techniques; including operation of digital video cameras and recorders and sound, lighting, and non-linear editing equipment. Students will use professional procedures from pre-production through postproduction to develop, produce, and execute to completion various non-fiction and fiction program formats applicable to television and motion pictures. (CSU) (Degree Credit)

## CRTV 160 F Introduction to 16 mm Film

 Production and Digital Cinematography3 Units
Prerequisite: CRTV 157 F or DART 180 F, with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course is an introduction to the fundamental techniques and aesthetics of film production including digital cinematography. Lecture/lab will emphasize camera operation, editing, lighting, cinematography and directing. Study and analysis of classic films as well as student's own work will be viewed. (CSU) (Degree Credit)

## CRTV 164 F Advanced Digital Production/ <br> 3 Units

 Non-Linear Editing for VideoPrerequisite: CRTV 157 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is designed to provide students with training and experience related to the design and execution of professional quality single-camera productions that would comprise a demo tape appropriate to pursue employment in the television/film industry. The focus will be on achieving levels of design and execution that are effective in meeting project/client and industry needs. Elements include multi-camera editing, green screen, key framing and color correction. (CSU) (Degree Credit)

CRTV 175 F Documentary Filmmaking 3 Units
Advisory: CRTV 157 F with a grade of " C " or better, or knowledge of camcorder usage and Apple computers.
54 hours lecture per term. This course gives an introduction to modern digital documentary filmmaking techniques. Practical narrative and technical approaches to documentary productions are examined and demonstrated. Students will participate in production of a documentary project(s). (CSU) (Degree Credit)

## CRTV 196 F Communications Seminars . 5 to 3 Units

$0-54$ hours lecture and $0-162$ hours lab per term. This course is designed to expose students to up-to-date equipment, methods, techniques, and materials. These courses offer the student opportunities for specialized training in greater depth than can be offered in a general course. These courses will vary from semester to semester depending on student interest, industry developments, and need for specialized training. See class schedule for current offerings. (CSU) (Degree Credit)

## CRTV 199 F Cinema-Radio-TV Independent Study

$54-162$ independent study hours per term. This course is designed for students who wish to increase their knowledge of cinema, radio or television through individual study. Project with written report or outside reading with written report is required. Independent production with staff supervision may be approved. (CSU) (UC review required) (Degree Credit)

## CRTV 227 F Intermediate Screenwriting 3 Units

Prerequisite: CRTV 127 F with a grade of " C " or better.
54 hours lecture per term. The application of concepts and practices used in the various types of dramatic writing for television and motion picture production in the completion of a feature length screenplay that meets industry standards. Students work from original student concept and first 20 pages developed in CRTV 127 F to finish a fully developed screenplay that is ready for professional submittal. (CSU) (Degree Credit)

CRTV 235 F On-Air Radio Broadcasting 3 Units
Prerequisite: CRTV 122 F with a grade of " $C$ " or better and CRTV 135 F with a grade of "C" or better.
18 hours lecture and 108 hours lab per term. This course includes daily broadcast preparation and presentation of on-the-air programs. Students gain actual on-the-air experience on College FM station, KBPK, 90.1 MHz. (CSU) (Degree Credit)

## CRTV 236 F On-Air Radio Broadcasting Intermediate

18 hours lecture and 108 hours lab per term. This course builds intermediate on-air skills, and includes the developing and writing of material for broadcast and the production, editing and presentation of materials on the air and on the internet. Students will program original long form music segments. Students gain increased proficiency in on-air broadcasting on College FM radio station KBPK, 90.1 MHz, and are heard worldwide on KBPK's Internet stream. Students will also analyze the effectiveness of on-air broadcasts. (CSU) (Degree Credit)

## CRTV 237 F Advanced On-Air Radio Broadcasting

Prerequisite: CRTV 236 F with a grade of "C" or better. 18 hours lecture and 108 hours lab per term. This course includes long-form music interview with instrumental and vocal recording artists in various genres, including jazz, country, rock and roll, electronic music, hip-hop and classical. Students gain actual on-air experience on college station (KBPK) and internet radio. (CSU) (Degree Credit)

## CRTV 245AF Digital Editing, Graphics and Effects

Prerequisite: CRTV 157 F with a grade of "C" or better
36 hours lecture and 72 hours lab per term. This course builds on the knowledge and skills received in CRTV 157 F. Students learn the aesthetics and techniques of incorporating graphics and special effects while practicing advanced non-linear video editing skills. (CSU) (Degree Credit)

## CRTV 245BF Advanced Digital Editing, 3 Units Graphics \& Effects

Prerequisite: CRTV 245AF with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is designed to provide students with more advanced training in non-linear editing, incorporating graphics, audio mixing and utilizing special effects in editing. Special emphasis will be placed on in-depth knowledge of equipment, speed, accuracy, aesthetics and special effects. (CSU) (Degree Credit)

## CRTV 280 F Television Production <br> Workshop

Prerequisite: CRTV 150 F with a grade of " C " or better.
18 hours lecture, 18 hours lab and 36-90 hours arranged lab per term. In this course, students participate as crewmembers on Media Services and Communication Department cable and campus productions utilizing four camera remote van, lab and EFP Equipment. Instruction in equipment operation, production management and production design. The course prepares students for employment in the industry through development of advanced hands-on skills and in-depth, varied production experience. (CSU) (Degree Credit)

## CRTV 290 F Internship in Communications I

18 hours lecture and 90-270 hours of supervised employment or unpaid internship per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through internships/employment in radio and television stations and television and film industryrelated companies. (CSU) (Degree Credit)

## CRTV 291 F Internship in Communications II

2 to 4 Units

Prerequisite: CRTV 290 F with a grade of "C" or better. 18 hours lecture and 90-270 hours of supervised employment or unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

## CRTV 292 F Internship in Communications III

Prerequisite: CRTV 291 F with a "C" or better.
18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit)

## CRTV 293 F Internship in

2 to 4 Units

## Communications IV

Prerequisite: CRTV 292 F with a grade of "C" or better.
18 hours lecture and $90-270$ hours of employment or unpaid internships per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU) (Degree Credit)

## CRTV 299 F Cinema-Radio-Television <br> 1 to 3 Units Independent Study

54-162 hours of independent research or lab per term. This course is designed for students who wish to explore another topic or delve deeper into a topic that they explored in CRTV 199 F . Study must include project or written report in the area of cinema, radio or television. (CSU) (Degree Credit)

## Computer Information Systems (CIS)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Computer Information Systems Courses

## CIS 050 F Web Page Design I

2 Units
Advisory: Ability to navigate the internet using web browsers. 27 hours lecture and 27 hours lab per term. This course is an introduction to automatic web page creation using state-of-theart software. Students will learn the operation of the software and how the software connects with web servers. Students will also learn to insert graphics, components, multimedia content, and other web-related components. In addition, students will learn to create and use web page templates and other design tools. (Degree Credit)

## CIS 070 F Current Computer Topics

1 to 3 Units
$18-54$ hours lecture and $0-54$ hours lab per term. This course is for students who wish to increase their knowledge and skills in various Office Technology related topics. Unit credit may range from 1 to 3 units in any given semester. Consult the class schedule to verify course topics being offered for a particular semester.

CIS 100 F Introduction to Personal Computers 4 Units 72 hours lecture per term. This course introduces students as well as the business professional to the use of the personal computer using state-of-the-art software. Course material includes computer literacy, information literacy, concepts, hardware, software, information systems, structured design techniques, overview of the computer industry, ethics and current issues including virus protection and prevention. Students will also learn how to use the Windows operating system, Microsoft Office (Word, Excel, PowerPoint, Access) and the Internet as it relates to Microsoft Office. This course will satisfy the Area E General Education Requirements for transfer to CSU or UC. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## CIS 102 F Introduction to Open Source

 Software54 hours lecture per term. This course teaches students to use various Open Source software on a Windows computer. Topics include finding Open Source Software, downloading and installing software, and using typical packages like Open Office and Open CD. Students will also learn how to participate in the Open Source community. (CSU) (Degree Credit)

## CIS 103 F Computer Keyboarding

2 Units
36 hours lecture and 18 hours lab per term. This is a beginning keyboarding course for students who wish to learn alphanumeric keyboarding and the $10-$ key pad. Individualized assignments will help students achieve increased speed and accuracy. (CSU) (Degree Credit)

## CIS 104 F Presentation Graphics

## 3 Units

54 hours lecture per term. This course is an introduction to business presentation graphics. Topics include planning presentations, creating business presentations and templates, enhancing presentations with graphics, sound, animation, transition, and video and using presentations on a Web server. State-of-the-art software will be used. (CSU) (Degree Credit)

CIS 106 F Beginning Spreadsheet (MS Excel) 3 Units 54 hours lecture and 36 hours lab per term. This course provides an introduction to spreadsheets in the solution of business problems. Students will create, format and print worksheets that include formulas, functions, charts, relative and absolute cell references, what-if analysis, and 3D worksheets. Students will learn how to create Excel Web pages, design and manipulate Excel tables, and work on group collaboration projects. State-of-the-art software will be used. (CSU) (Degree Credit)

CIS 107 F Introduction to Operating Systems 3 Units 54 hours lecture per term. This course is designed to introduce the operating system on the personal computer and personal computer security. The course will cover the fundamentals of the graphical user interface, mouse operations, how to manipulate the interface, how to use help, search, launch applications, manage files and folders and add/delete hardware and software. Additional topics include using anti-virus software, how virus programs infect computers, and how to protect computers from malicious programs. (CSU) (Degree Credit)

CIS 109 F Personal Computer Security 2 Units 27 hours lecture and 27 hours lab per term. This course introduces the student to personal security on individual computers and on the Internet. Students will learn how to protect their own computers from viruses, Trojan Horse programs, and other intrusive software. Students will also learn to protect their personal information on the Internet and how to securely send information. (CSU) (Degree Credit)

## CIS 111 F Introduction to Information Systems

(C-ID BUS 140)
72 hours lecture per term. This course is an introduction to computer information systems: computer organization, problemsolving concepts, computer operating systems, spreadsheet and database management application software. (CSU) (UC Credit Limitation) (Degree Credit) AA GE

## CIS 111HF Honors Introduction to Information Systems

72 hours lecture per term. This Honors-enhanced course is an introduction to computer information systems, computer organization and problem-solving concepts, computer operating systems, spreadsheet and database management application software, and programming in a modern high-level programming language. This course will include enrichment content and activities requiring independent problem-solving and critical thinking skills and collaborative group projects and presentations. (CSU) (UC Credit Limitation) (Degree Credit)

## CIS 120AF Project Management I

2 Units
27 hours lecture and 27 hours lab per term. This course covers project management application skills including planning a project, creating project schedules, communicating project information, adding tasks and durations, changing relationships, tracking progress, and closing the project. Also covered are customizing project management software, Web resources and project management certifications. State-of-the-art software will be used. (CSU) (Degree Credit)

## CIS 120BF Project Management II

2 Units
Advisory: CIS 120AF with a grade of "C" or better.
27 hours lecture and 27 hours lab per term. This course covers project management concepts and application skills including tracking project work, analyzing and adjusting schedules, advanced formatting and printing, project communications, managing multiple projects and exchanging project data. The course will be taught with state-of-the-art project management software. (CSU) (Degree Credit)

## CIS 123 F Word Processing (formerly CIS 123AF and CIS 123BF)

54 hours per term. This course is designed to teach the student how to use a word processing program to create, edit, and format documents. This course covers the fundamental operations of word processing: typing text, saving, editing, copying, moving, printing, formatting, margins, tabs, footers and headers, footnotes, vertical and horizontal alignment and line spacing. Students will also learn how to create an index, table of contents, and create complex documents that include images. (CSU) (Degree Credit)

## CIS 124 F Advanced Word

3 Units
Advisory: CIS 123 F or successfully completed basic Word course that covers basic formatting, tables and graphics.
54 hours lecture per term. This course teaches advanced concepts and techniques for MS Word. Topics include working with long documents, complex formatting, collaborating, and automating Word documents. (CSU) (Degree Credit)

## CIS 130 F Systems Analysis and Design

## 3 Units

54 hours lecture per term. This course is designed to introduce the student to systems analysis and design concepts as they are applied in business environments. Topics emphasize methodologies used by the analyst throughout the systems development life cycle to analyze business problems or opportunities, address user needs, perform feasibility studies, specify business requirements through process, data and logic modeling, consideration of development alternatives, and implementation and maintenance of systems. (CSU) (Degree Credit)

## CIS 142 F Database I <br> 3 Units

54 hours lecture per term. This course is designed to teach use of state-of-the-art personal database software. The course will cover introductory concepts including database structure and design, editing database records, sorting/indexing records, query techniques, custom form creation, database report design and printing, database relational techniques, and general file management techniques. (CSU) (Degree Credit)

## CIS 148 F Introduction to Personal Computer 2 Units Communications

Advisory: Students should have some email knowledge.
27 hours lecture and 27 hours lab per term. This course is an introduction to personal electronic communications and management using state-of-the-art email and scheduling software. Students learn how to connect the software with internet email servers and how to receive and manage email. Students will also learn to manage an electronic calendar, schedule appointments and manage appointment information. (CSU) (Degree Credit)

## CIS 150 F Introduction to the Internet 3 Units

54 hours lecture per term. This course is an introduction to the organizational, operational, and technical aspects of the internet. Students will learn how to use a personal computer to access internet and the World Wide Web. Topics include an overview of personal computer operations, the history and philosophy of the internet and its services, configuring a personal computer to connect to the internet, selecting an internet service provider, sending and receiving electronic mail (email), locating network resources using search engines, participating in discussion groups using Web 2.0, downloading internet. Other topics include developing, creating and posting personal and business web pages using the hypertext markup language (HTML), evaluating internet materials for accuracy and reliability and citing web and internet resources. (CSU) (Degree Credit)

## CIS 151 F Internet Research

Advisory: CIS 150 F with a grade of "C" or better.
27 hours lecture and 27 hours lab per term. This course is an introduction to the information resources available on the Internet, for the purpose of performing research. Students will learn how to use Internet search tools and methods to locate useful, accurate, and reliable information on the Internet. Topics include search engines; advanced search strings and options; comparison of search engines; Boolean operators, locating people, businesses, libraries, and multi-media; industry specific search engines, methods, and sources; electronic bulletin board services; Listserv; archives; File Transfer Protocol, and information literacy. Other topics include evaluation of Internet materials; legal issues and copyrights of Internet information; and citing Web and Internet resources. (CSU) (Degree Credit)

## CIS 152 F Web Page Design II

3 Units
54 hours lecture per term. This course presents introductory and advanced topics in Web Page Design. Students will learn how to create web pages that include style sheets, use multimedia objects, plan and manage large-scale websites, use client plugins, work with CGI, Java, and other server side technologies, design effective user interfaces, and use elements of dynamic HTML. Other topics include using JavaScript, working with different types of graphic objects, and working with the Document Object Model. Emphasis is placed on learning the Hypertext Markup Language, using and editing graphic files, and creating various types of web pages. (CSU) (Degree Credit)

## CIS 153 F Business Web Graphics 3 Units

54 hours lecture per term. This course teaches the skills necessary to create business graphics for web pages. Topics include graphic file formats used on web pages, designing and manipulating web components using a graphical editor, using graphical elements in web page design, and generating CSS layers as a result of image slicing. Students will also learn how to effectively optimize images, create hyperlinks from image comps, create navigation elements, add animation, and export HTML and images as part of the overall design of a business web page. (CSU) (Degree Credit)

## CIS 154 F JavaScript Programming I 3 Units

Prerequisite: CIS 150 F or CIS 152 F with a grade of "C" or better.
54 hours lecture per term. This course teaches the student to use the JavaScript programming language with Hyper-Text Markup Language (HTML) pages. Emphasis is placed on creating HTML pages that include JavaScript programs. The student will learn the basic syntax of the JavaScript language, how to create JavaScript programs inside HTML documents, and how to use JavaScript programs to enhance Web pages. (CSU) (Degree Credit)

## CIS 155 F Web Page Multimedia Design I

Advisory: CIS 152 F with a grade of "C" or better.
54 hours lecture per term. This course introduces students to Multimedia Web Design using Adobe Flash CS5 (or current version). Topics include how to create animations and movies for integration into websites, and how to create a full website using Flash. Various animation techniques, adding sound, and basic ActionScript for controlling the flow of the movie will be taught. (CSU) (Degree Credit)

## CIS 157 F Dreamweaver I

3 Units

## Advisory: CIS 152 F

54 hours lecture per term. This course covers using Dreamweaver to create Web pages. Topics include creating web pages with graphics, links, tables, forms, and Javascript elements. Students will also learn how to import files and graphics into Dreamweaver from other programs. Students should have a working knowledge of the Internet. (CSU) (Degree Credit)

## CIS 159 F Introduction to XML

3 Units
54 hours lecture per term. This course teaches the basic concepts of XML. Topics include the structure of an XML document, creating XML documents, using Data Definitions, and linking XML documents to other web components. Students should have a working knowledge of HTML. (CSU) (Degree Credit)

CIS 160 F Introduction to Computer Forensics 3 Units 54 hours lecture and 18 hours lab per term. Students will learn basic concepts behind computer security, evidential process, and handling electronic evidence. Topics include securing and analyzing a computer system, securing and analyzing a network system, working with law enforcement, and information warfare. (CSU) (Degree Credit)

## CIS 165 F Computer Forensics and Networking

Advisory: Basic knowledge of networking concepts.
54 hours lecture per term. This course teaches the student how to use computer forensic techniques and tools to investigate and reconstruct network-based data. Students learn the basic operation and structure of a computer network, the various network devices and their operation, and the tools used to investigate a network. Topics include trapping network data, retrieving and analyzing email, tracing network packets, and other security and forensic topics. (CSU) (Degree Credit)

## CIS 166 F Operating Systems and Computer Forensics

Advisory: Basic knowledge of computer forensics
54 hours lecture and 18 hours lab per term. This course teaches students how to perform computer forensic analysis of data on the Windows, Linux, and Macintosh operating systems. Students will learn about the internals of the operating system, the potential security problems with the operating system, and how to capture static and live data from an operating system. Students will also learn to use some typical network software and hardware forensic tools and how to protect gathered data in a legally acceptable manner. (CSU) (Degree Credit)

## CIS 168 F Tools for Computer and Network Forensics

Advisory: Basic knowledge of C++
54 hours lecture and 18 hours lab per term. This course teaches students how to use various hardware and software tools to engage in computer and network forensics. Topics include installing, configuring, and using common open source forensic tools, building custom tool kits, modifying tools, and creating new tools. Students will learn how to use C++ to write custom computer and network forensic software tools. (CSU) (Degree Credit)

## CIS 170 F Cisco Networking 1

3 Units
36 hours lecture and 54 hours lab per term. This course focuses on network terminology and protocols. Local Area Networks (LANs), Wide Area Networks (WANs), Open System Interconnection (OSI) model, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards. This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (CSU) (Degree Credit)

## CIS 171 F Network Intrusion and Detection 3 Units

Advisory: Basic knowledge of a network operating system and basic networking concepts.
54 hours lecture and 18 hours lab per term. Students learn how computer network security is compromised by use of common intrusion tools. Students also learn how to detect such network intrusions and how to monitor and trap the intruder. Topics include how to successfully penetrate Windows and Linux networks and how to install and use open source tools to detect and protect from such penetration. (CSU) (Degree Credit)

## CIS 172 F Cisco Networking 2

3 Units
Prerequisite: CIS 170 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course introduces students to router fundamentals, router setup and configuration, network management, routing and routed protocols, and network troubleshooting. Topics include: managing Cisco IOS software, Distance Vector Routing Protocols, TCP/IP suite error and control messages, basic router troubleshooting, and access control lists. This course is offered through Cisco Local Academy and upon successful course completion students receive a certificate from Cisco. (CSU) (Degree Credit)

## CIS 173 F Cisco Networking 3 <br> 3 Units

Prerequisite: CIS 172 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course focused on advanced IP addressing techniques, Variable Length Subnet Masking (VLSM), intermediate routing protocols (RIP v2, singlearea OSPF, EIGRP), command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP) and VLAN Trunking Protocol (VTP). This course is offered through Cisco Local Academy and upon successful course completion, students will receive a certificate from Cisco. (CSU) (Degree Credit)

## CIS 174 F Cisco Networking 4

3 Units
36 hours lecture and 54 hours lab per term. This course focuses on advanced IP addressing techniques; Network Address Translation (NAT), Port Address Translation (PAT), and DHCP; WAN technology and terminology; PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking. This course is offered through Cisco Local Academy and upon successful course completion students will receive a certificate from Cisco. (CSU) (Degree Credit)

## CIS 176 F Web Page Layout with CMS



3 Units Advisory: CIS 152 F
54 hours lecture per term. This course provides students with the knowledge, skills, and hands-on experience to create, enhance, and maintain a website created with a content management system (CMS). Students will design sites with articles, blogs, links, news feeds, search components, and other plugins. Knowledge of HTML is highly recommended. (CSU) (Degree Credit)

## CIS 177 F Dreamweaver II

3 Units
Advisory: Strongly recommend successful completion of CIS 157 F or solid working knowledge of the creation of standards compliant websites using the current version of Dreamweaver.
54 hours lecture and 36 hours lab per term. This project-based, hands-on course uses intermediate development techniques in Dreamweaver to enhance business web pages. Topics include the use of style sheets to create custom classes, link styling, and position elements; manage template-controlled sites, and navigation element control and accessibility. Students will also learn to manage Dreamweaver extensions. (CSU) (Degree Credit)

## CIS 180 F Introduction to Networking Concepts

54 hours lecture per term. This class introduces the student to data communications and networking concepts used in businesses. Topics include the major components of a data communications networks, local area networks, wide area networks, networking topologies, network protocols, inter-networking, and categorizing network operating systems. (CSU) (Degree Credit)

## CIS 181 F Computer Certification Preparation



3 Units

Letter Grade or Pass/No Pass option.
54 hours lecture per term. This course prepares students for industry standard certifications with both theoretical and practical lessons relating to microcomputer hardware and software. Emphasis is placed on how hardware components function together to make a microcomputer work properly, how software interacts with hardware, and practical methods to protect hardware and software. Topics include installing, configuring, and upgrading personal computer components and peripherals in a networked environment. (CSU) (Degree Credit)

## CIS 183 F Network Security Fundamentals

3 Units
Advisory: CIS 107 F and CIS 180 F.
54 hours lecture per term. This course is designed to provide students with an overview of network security, and covers terminology, technology, and software used with network security. Students will learn about communication security, infrastructure security and cryptography. Business plans for disaster recovery will be covered. (CSU) (Degree Credit)

## CIS 200 F Fundamentals of Computer Programming

Advisory: Knowledge of elementary computer concepts
18 hours lecture per term. This course will introduce basic programming terminology, concepts, and best practices related to computer programming. Students will learn the basics of writing programs using loops, statements, variables, and functions. Additional topics will include program design, flow charting, basic computer architecture and debugging techniques. (CSU) (Degree Credit)

## CIS 205 F Spreadsheet (Advanced MS Excel) <br> 3 Units <br> Advisory: Create and edit a spreadsheet.

54 hours lecture per term. This course teaches advanced concepts with Microsoft Excel. Topics include using the macro and programming features in Excel, linking spreadsheets with other programs, connecting spreadsheets with external databases, and doing advanced analysis. (CSU) (Degree Credit)

CIS 212 F Robotic Programming
3 Units
54 hours lecture per term. This class teaches basic programming concepts by creating applications for physical robotic devices. Students will learn how to connect to these robotic devices, how to design a program that controls the device, and how to download their program to the device. Programming topics include looping, making decisions, variables, and arrays. (CSU) (Degree Credit)

## CIS 217 F Visual Basic Programming I

3 Units
Advisory: Understanding of basic computer concepts
54 hours lecture per term. This course covers the implementation of objects, events, methods, properties, project windows, forms, strings, control structures, custom menus, custom procedures, sequential files, random access files, color, drawing, and error trapping. (CSU) (UC Credit Limitation) (Degree Credit)

## CIS 219 F Visual Basic Programming II <br> 3 Units Advisory: CIS 217 F

54 hours lecture per term. This course covers various specialized visual basic programming tasks including database management, component level programming, XML processing, distributed network programming, and embedded device programming. Students learn to create programs that read and write to databases, which are structured as components, process XML files, and can be distributed across a network. (CSU) (Degree Credit)

CIS 220 F Web Server Programming
3 Units
Advisory: Basic knowledge of HTML and general programming 54 hours lecture per term. This course covers topics on Web programming for the Internet and Intranets. Topics include an explanation of how programs are run across the Internet, the various types of Web programs, and how information is loaded into network databases. Programming for both clients and servers will be covered in this class. Students should have a background in Web page design with HTML and have a background in Visual Basic programming. (CSU) (Degree Credit)

CIS 221 F Introduction to C\# Programming 3 Units 54 hours lecture per term. Students will learn basic programming concepts including variables, logical constructions, and data access. Students will also learn to use the C\# programming language to create graphical user interface programs, web programs, and database programs. (CSU) (Degree Credit)

## CIS 222 F CGI/Perl Scripting 3 Units

Advisory: Complete CIS 152 F with a grade of "C" or better 54 hours lecture and 36 hours lab per term. This course teaches the Perl scripting language. Topics include using Perl in Web Pages with CGI. Topics include basic Perl syntax, data types, and functions. Topics also include using Perl with files and databases. Students must have a working knowledge of HTML. (CSU) (Degree Credit)

## CIS 223 F Programming in C++

3 Units
Advisory: CIS 226 F
54 hours lecture per term. This course is designed for students who have some experience with structured programming techniques. Students will learn the C++ programming language as it applies to business applications. Documenting, coding, entering, computing, and executing programs will take place on the personal computer. (CSU) (UC) Degree Credit)

## CIS 226 F Java Programming I <br> 3 Units

Advisory: CIS 217 F or CIS 223 F with a grade of "C" or better 54 hours lecture and 36 hours lab per term. This course is an introduction to designing, creating, and debugging Java programs. Students will learn the syntax of the Java programming language, how to design programs using Object Oriented Analysis and Design, and how to create programs that run over the Internet as well as stand-alone programs. Emphasis is placed on program design, using Java programs with HTML pages, and software re-use. (CSU) (UC) (Degree Credit)

CIS 227 F Advanced C\# Programming 3 Units
Advisory: Basic knowledge of the C\# programming language 54 hours lecture and 36 hours lab per term. Students learn how to create C\# networking programs, Web Server programs, and complex database programs. (CSU) (Degree Credit)

## CIS 228 F Java Programming II

3 Units
Advisory: CIS 226 F and CIS 107 F with a grade of "C" or better 54 hours lecture and 36 hours lab per term. This course covers advanced topics in Java programming. Topics include using the Java Swing programming environment, the COBRA programming models, event driven and messaging based structure of programs, and Java network programming. Students should be familiar with Microsoft Windows and with the Java programming language. (CSU) (Degree Credit)

## CIS 229 F XML Programming

### 3.5 Units

Advisory: CIS 159 F with a grade of " $C$ " or better
54 hours lecture and 36 hours lab per term. This course covers XML programming. Topics include using XML parsers in JavaScript and Java, using XML for file input/output, and connecting to XML databases. Students must have a working knowledge of XML. (CSU) (Degree Credit)

## CIS 230 F PHP and MySQL Programming 3 Units

## Advisory: CIS 152 F and CIS 154 F

54 hours lecture per term. This course teaches how to use the PHP Web programming language and MySQL database program to create interactive, database-driven Web sites. Students learn how to create PHP enhanced pages, how to install and configure MySQL, and how to connect Web clients to the database. (CSU) (Degree Credit)

## CIS 242 F Database II

3 Units
Advisory: CIS 142 F with a grade of " C " or better
27 hours lecture and 27 hours lab per term. This course teaches advanced topics in personal databases using state-of-the-art database software. Students will learn how to design and implement complex databases, how to create complex queries and how to use Structured Query Language, how to create personal databases with other applications, and how to write database macro programs. Other topics include the theory of database design, interfacing personal databases with external databases, and creating internet personal databases. Students in this course should have fundamental skills in using a personal database. (CSU) (Degree Credit)

## CIS 252 F Web Page Design III

## 2 Units

Advisory: CIS 152 F with a grade of " $C$ " or better
27 hours lecture and 27 hours lab per term. This course presents advanced topics in Web page design. Students will learn how to create Web pages that include style sheets, how to use multimedia objects, how to plan and manage large-scale Web sites, how to use client plug-ins, how to work with CGI, Java, and other server side technologies, how to design effective user interfaces, and how to use elements of dynamic HTML. Other topics include using JavaScript, using VBScript, working with different types of graphic objects, and working with the Document Object Model. Students should have a working knowledge of HTML and have created Web pages with HTML. (CSU) (Degree Credit)

## CIS 254 F JavaScript Programming II

Advisory: CIS 154 F with a grade of "C" or better 27 hours lecture and 27 hours lab per term. This course teaches advanced concepts in JavaScript. Students learn how to use JavaScript for client and server side design and implementation. (CSU) (Degree Credit)

CIS 255 F Web Page Multimedia Design II 3 Units
Advisory: CIS 155 F with a grade of "C" or better
54 hours lecture and 36 hours lab per term. This course teaches advanced concepts in Flash. Students learn how to write ActionScript and use advanced features in Flash to create sophisticated websites and animations. Topics include creating dynamic drop-down menus, pre-loaders, working with external movie files and sound, and connecting to a MySQL database. Students should have a working knowledge of beginning Flash concepts. (CSU) (Degree Credit)

CIS 257 F Dreamweaver III 3 Units
Advisory: Strongly recommend successful completion of CIS 157 F or solid working knowledge of the creation of standards compliant websites using the current version of Dreamweaver.
54 hours lecture and 36 hours lab per term. This course teaches students how to use Dreamweaver to create websites that use server side features. Topics include accessing data from a database, sending data from HTMLO from pages to the server, enforcing user level security and various other advanced topics. (CSU) (Degree Credit)

## CIS 270 F SQL Server Administration 3 Units

Advisory: CIS 180 F and CIS 107 F with a grade of "C" or better 54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft SQL Server. Students learn an overview of the SQL server environment, installing and administering SQL server, user and database management, and operating SQL server in a networking environment. Emphasis is placed on installing and administering SQL server, setting up user accounts and use access, and managing resources. (CSU) (Degree Credit)

## CIS 280 F Introduction to Oracle: <br> 3 Units <br> SQL and PL/SQL

Advisory: CIS 142 F with a grade of "C" or better
54 hours lecture and 18 hours lab per term. This course offers students an extensive introduction to database technology. The class covers the concepts of relational databases and the powerful SQL and PL/SQL programming languages. Students are taught to create and maintain database objects and to store, retrieve, and manipulate data. In addition, students learn to create PLSQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Demonstrations and hands-on practice reinforce the fundamental concepts. (CSU) (Degree Credit)

## CIS 281 F Introduction to Networking Hardware

54 hours lecture and 18 hours lab per term. This course builds on students' knowledge of basic networking concepts and theory through hands-on experience. The course will provide students with an in-depth understanding of network infrastructure, standards and technologies. Students will gain hands-on experience with current network design issues, protocols, and components. Hands-on experience will also include working with wired and wireless standards and network components such as servers, routers, switches, hubs and firewalls. (CSU) (Degree Credit)

## CIS 285 F Windows Server

Advisory: CIS 107 F and CIS 180 F
54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering servers, domain management and networking. Emphasis is placed on managing a Windows network, setting up user accounts and user access, and managing resources. (CSU) (Degree Credit)

## CIS 286 F Web Server Management

3 Units
Advisory: CIS 180 F and CIS 107 F
54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Information Server and enterprise networks. Students learn an overview of the Windows environment, installing and administering Internet information server, domain management and networking. Emphasis is placed on managing Internet information server, setting up user accounts and user access, and managing resources. (CSU) (Degree Credit)

## CIS 287 F Exchange Server

3 Units
Advisory: CIS 180 F and CIS 107 F
54 hours lecture and 18 hours lab per term. This course introduces students to the administration of Microsoft Exchange Server. Students learn an overview of the Exchange server environment, installing and administering Exchange server, user and database management, and operating Exchange server in a networking environment. Emphasis is placed on installing and administering Exchange server, setting up user accounts and user access, and managing resources. (CSU) (Degree Credit)

## CIS 289 F Windows Active Directory

3 Units
Advisory: CIS 180 F and CIS 107 F
54 hours lecture and 18 hours lab per term. This course introduces students to Microsoft Windows Active Directory and enterprise networks. Students learn an overview of the Windows environment, installing and administering DNS servers, Active Directory management and networking. Emphasis is placed on managing a Windows Active Directory network, setting up user accounts and user access and managing resources. (CSU) (Degree Credit)

CIS 290 F UNIX Operating System
Advisory: CIS 107 F with a grade of " $C$ " or better
54 hours lecture and 36 hours lab per term. This course is an introduction to the UNIX operating system. Topics include installing and configuring UNIX, using UNIX utilities to manage files and resources, and using UNIX on a network. Other topics include installing and configuring common UNIX graphical user interfaces, solving operating system problems, and interfacing UNIX with other operating systems. Students should be familiar with another operating system such as Microsoft Windows or Windows NT. (CSU) (Degree Credit)

CIS 298 F Advanced Computer Topics . 5 to 3 Units $0-54$ hours lecture and 0-162 hours lab per term. This course introduces advanced topics for students who wish to increase their knowledge and skills in various areas of computer information systems. Unit credit may range from 1-3 units in any given term. Consult the class schedule to verify credit for a particular term. (CSU) (Degree Credit)

# Computer Information Systems Gaming (CISG) 

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Computer Information Systems Gaming Courses

## CISG 100 F Introduction to Computer <br> 3 Units Game Design

54 hours lecture and 18 hours lab per term. This is an introductory survey class in computer game design. Students will learn the basics of how computer games are designed and created. This includes an overview of computer game graphics, computer game programming, game level design, game music development, computer game strategy and playability, and the entire computer game development process as well as the current gaming business. (CSU) (Degree Credit)

## CISG 110 F Introduction to Programming for 3 Units Computer Games

Advisory: Basic knowledge of a procedural or object-oriented programming language
54 hours lecture and 18 hours lab per term. This is an introductory survey course on computer game programming. Students will learn the basic game programming design process, the use and creation of game programming tools, basic game data structures, programming artificial intelligence, graphics programming, online and multi-user game design, 3-D engine design, and how game programmers interact with game designers. (CSU) (Degree Credit)


#### Abstract

CISG 160 F C\# for Game Programming 3 Units Advisory: Basic knowledge of C\# programming language 54 hours lecture and 18 hours lab per term. This course teaches use of the C\# programming language to create computer games. Students will review the C\# programming language, learn how C\# uses .NET resources, and learn how to use DirectX. Topics also include using 3-D, sound, and animation. (CSU) (Degree Credit)


#### Abstract

CISG 165 F C++ for Game Programming 3 Units Advisory: Knowledge of basic C++ programming 54 hours lecture and 18 hours lab per term. This course teaches students how to use C++ to write computer games. Topics include a review of basic C++, how to use various data structures in C++, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in C++. Students will learn how to create basic graphics and textbased games in C++. (CSU) (Degree Credit)


CISG 170 F Java for Game Programming 3 Units Advisory: Basic knowledge of Java programming language 54 hours lecture and 18 hours lab per term. This course teaches students how to use Java to write computer games. Topics include a review of basic Java, how to use various data structures in Java, how to access hardware devices, how to use various graphics libraries, and how to use basic networking resources in Java. Students will learn how to create basic graphics and textbased games in JAVA. (CSU) (Degree Credit)

## CISG 175 F Game Programming in Flash

3 Units
Advisory: Basic knowledge of Flash
54 hours lecture and 18 hours lab per term. This course teaches students how to use Macromedia Flash to create games. Topics include a review of basic Flash concepts, basic ActionScript programming, creating Flash 3-D effects, using physics and motion in a game, including sound in a game, and creating the overall game design structure. (CSU) (Degree Credit)

## CISG 182 F DirectX Graphics Programming

3 Units
Advisory: Basic knowledge of C++ and .NET
54 hours lecture and 18 hours lab per term. This course introduces the student to using the DirectX graphics programming tools using $C++$. Students learn the basics of DirectX, the general structure of the graphic libraries, and how to use DirectX to create 2-D and 3-D graphics, transform graphics, manage sound, and how it is used to create computer games. (CSU) (Degree Credit)

## CISG 185 F Artificial Intelligence in Game Programming

Advisory: General knowledge of the C++ or Java programming language
54 hours lecture and 18 hours lab per term. This course introduces the use of Artificial Intelligence techniques in game programming. Students learn the foundation of computer artificial intelligence (AI), basic Al techniques, and how such techniques are implemented in computer code and how they are used in different kinds of computer games. (CSU) (Degree Credit)

## CISG 190 F Programming Multiuser Online <br> 3 Units

 GamesAdvisory: Basic knowledge of a modern object-oriented programming language and general network concepts
54 hours lecture and 18 hours lab per term. This class is an introduction to programming online multi-player games. Students learn basic networking technology, network programming, and are introduced to the operation of network servers. Students also learn how to write code to link client computer games with network game servers and how to create server side game scripts. (CSU) (Degree Credit)

## Computer Science (CSCI)

Mathematics and Computer Science Division
Office: Bldg 600, Room 613-02-714.992.7041
Dean: Mark Greenhalgh
Website: compsci.fullcoll.edu
Computer Science Courses

## CSCI 123 F Introduction to Programming 4 Units Concepts in C++

Prerequisite: MATH 141 F with a grade of "C" or better or MATH 141HF with a grade of "C" or better or MATH 142 F with a grade of "C" or better.
72 hours lecture per term. This course is an introduction to the basic principles of programming using C++ as the development tool. Topics include the structure and design of algorithms, input/ output, branching structures, functions, recursion, built-in data types, arrays, structures, files, pointers and elementary operations on linked structures. The object-oriented programming paradigm will be introduced. Topics include encapsulation, polymorphism, libraries, streams, inheritance and abstract data types. Students will design algorithms, write external and internal documentation and design and write source code in C++. (CSU) (UC) (Degree Credit) AA GE

CSCI 133 F Data Structures in C++ 4 Units
Prerequisite: CSCl 123 F with a grade of " C " or better.
72 hours lecture per term. This is a course in algorithm design and data structures implemented using C++. Data structures examined are arrays, linked lists, stacks, queues, trees, tables, and graphs. Algorithm topics include hashing, sorting, heaps, searches and algorithm efficiency using Big-O notation. Students will create and modify class libraries to implement these structures. (CSU) (UC) (Degree Credit)

CSCI 223 F C Language for Math and Science 4 Units Prerequisite: CSCl 123 F with a grade of "C" or better or one prior programming language.
72 hours lecture per term. This course is an introduction to the C programming language. One of the latest C compilers will be used on a personal computer. Topics include data types, functions, pointers, bit manipulation and file I/O. Students will design, code and test program applications in the mathematics, scientific and engineering environments. (CSU) (UC) (Degree Credit)

## CSCI 241 F Computer Organization and Assembly Language Programming

Prerequisite: CSCl 133 F with a grade of " C " or better or CSCI 223 F with a grade of " C " or better.
72 hours lecture per term. This course is an introduction to assembly language programming. It includes reviews of computer organization, programming techniques and concepts, addressing techniques, input/output, hardware architecture, and data structures. (CSU) (UC) (Degree Credit)

## Construction (CSTR)

## Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Construction Courses

CSTR 005 F Construction Technology Lab . 5 to 2 Units Open Entry/Open Exit.
Corequisite: Concurrent enrollment in any of the Construction Department courses
72 hours lab per term. This course offers students the opportunity to further develop their skills at hand and power tool operations, and to devote more time to construction projects. One-half unit credit will be given for each twenty-four hours of lab participation. (Degree Credit)

## CSTR 006 F Residential Plumbing and Mechanical Systems

3 Units

54 hours lecture per term. This course covers the fundamentals of residential plumbing, heating, air conditioning, and ventilation. (Degree Credit)

## CSTR 007 F Residential Electrical Systems 2 Units

27 hours lecture and 27 hours lab per term. This course is an introduction to load center sizing, wiring circuits and grounding systems used in residential construction. Lab exercises will cover the wiring of lighting and power circuits, dedicated circuits, grounding and troubleshooting. (Degree Credit)

## CSTR 014 F Contractor's License Law

3 Units
54 hours lecture per term. This course covers the problems in the legal and practical aspects of contracting: Contractors' License Law, the Mechanic's Lien Law, labor code, Worker's Compensation, and Insurance. Business management for both the private and public sector will also be covered. This course will prepare the student to pass the Law and Business Exam required for a Contractor's License in the State of California. (Degree Credit)

## CSTR 015 F Construction Management

3 Units
54 hours lecture per term. The course covers the organization and problems associated with managing a building construction business. Topics will include sales, bidding, contracts, purchasing, scheduling, safety, and community relations. (Degree Credit)

## CSTR 016 F Business Administration for the 3 Units Construction Industry

54 hours lecture per term. This course provides the student with instruction in the practical aspects of business administration concepts and practices within the construction industry. The course surveys successful operating techniques, business structure, business plans, ownership, accounting, marketing, finance, taxation and business regulations. (Degree Credit)

## CSTR 018 F Residential Construction <br> 4 Units <br> Practice II

Prerequisite: CSTR 102 F with a grade of "C" or better.
36 hours lecture and six hours lab per term. This course provides actual practice in the finish work of the house project. Course work includes: insulating, dry walling, door installation, finish hardware, finish plumbing, finish electrical, finish trim, painting, and any finishing processes that are deemed necessary to complete the house project. (Degree Credit)

## CSTR 020 F Remodeling and Additions <br> 4 Units

## Construction I

Prerequisite: CSTR 100 F with a grade of "C" or better. 36 hours lecture and 108 hours lab per term. This course covers experiences in room additions and remodeling construction with emphasis on: starting the job, scheduling, estimating, job progress, and people relations. Tie-ins, foundations, plumbing, framing, roofing, electrical and mechanical areas will be covered. (Degree Credit)

## CSTR 022 F Remodeling and Additions <br> 4 Units

 Construction IIPrerequisite: CSTR 102 F with a grade of "C" or better.
36 hours lecture and 108 hours lab per term. This course will provide the experiences in finish work in remodeling and additions to include patching and finish carpentry, electrical, plumbing, and heating. (Degree Credit)

CSTR 028 F Introduction to Alternate Energy 2 Units 36 hours lecture per term. This course provides an overview of the world energy situation and a study into alternate energy sources. Solar water heating, solar space heating and cooling, photovoltaics, geothermal, wind generators, and others will be studied. (Degree Credit)

CSTR 030 F Construction Blueprint Reading 3 Units 54 hours lecture per term. This course provides an interpretation of architectural working drawings as they relate to residential and light commercial construction. The meaning of various lines, symbols, and conventions as well as construction documents will be covered. (Degree Credit)

## CSTR 031 F International Building Code 3 Units

54 hours lecture per term. This course covers topics of instruction will follow the content of the most recent published adoption of the International Building Code. The student will study the building codes as they pertain to commercial and industrial construction. (Degree Credit)

## CSTR 032 F Uniform Plumbing Code

3 Units
54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. (Degree Credit)

## CSTR 033 F Commercial Construction <br> 3 Units Blueprint Reading

54 hours lecture per term. This course emphasizes the interpretation of commercial architectural drawings as they relate to commercial construction industry. Contract documents, specifications, site work, structural steel construction, reinforced concrete, mechanical systems, and electrical systems will be covered. Knowledge and understanding of residential blueprints are recommended. (Degree Credit)

## CSTR 034 F National Electrical Code 3 Units

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent National Electrical Code as published by the National Fire Protection Association. (Degree Credit)

## CSTR 035 F California Accessibility and <br> 3 Units Energy Codes <br> 54 hours lecture per term. This course offers an interpretation and

 application of the California Code of Regulations (Title 24) as it pertains to various types of structures within the building industry. Special emphasis will be placed on California Energy Regulations and modifications for the disabled for accessibility requirements. (Degree Credit)
## CSTR 036 F Uniform Building Code -

## Residential

54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Building Code as published by the International Conference of Building Officials. The course will study the codes related to residential construction. (Degree Credit)

## CSTR 037 F Uniform Building Code Commercial/Industrial

3 Units
54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Building Code as published by the International Conference of Building Officials. The course will study the codes related to commercial and industrial construction. (Degree Credit)

## CSTR 038 F Uniform Mechanical Code

3 Units
54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent Uniform Mechanical Code as published by the International Conference of Building Officials. The course will study the codes related to commercial and industrial construction. (Degree Credit)

CSTR 039 F Commercial Mechanical Code 3 Units 54 hours lecture per term. This course has been designed for the individual who deals with the design of heating, cooling, ventilation and refrigeration in larger, more complex type buildings. Training received in this course will make the individual aware of the areas where the Building and Mechanical Codes overlap. (Degree Credit)

## CSTR 040 F Building Design-Hazard Materials 3 Units

 54 hours lecture per term. This course is designed to introduce the student to the provisions of the Building and Fire Codes affecting the storage, handling and use of hazardous materials. Emphasis will be placed on the requirements for the safety aspects of the codes and recognized standards for solutions. Instruction will focus on problem solving with compliance to the building standards.CSTR 041 F International Residential Code 3 Units
54 hours lecture per term. This course covers topics of instruction which will follow the content of the most recent published adoption of the International Residential Code. The student will study the residential codes as they pertain to residential construction. (Degree Credit)

## CSTR 042 F Residential Steel Frame <br> 4 Units Construction

54 hours lecture and 54 hours lab per term. This is a comprehensive course that covers the fundamentals of utilizing light frame steel for residential and light commercial. Course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation, and construction practices for foundation systems, and wall, ceiling, and roof framing. (Degree Credit)

## CSTR 050 F Computer Design Software for the Contractor

27 hours lecture and 45 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using computer architectural design software to prepare students in the preparation of designs, blueprints, and material lists for the construction industry. Students will process programs that demonstrate features and functions of the architectural design software. (Degree Credit)

## CSTR 060 F Computer Estimating in Construction

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices with using computer estimating software for estimating positions within the construction industry. Students will process programs that demonstrate features and functions of the estimating software. Knowledge and understanding of blueprint reading is beneficial. (Degree Credit)

## CSTR 065 F Construction Project Scheduling 3 Units

36 hours lecture and 54 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using project scheduling software currently used in the construction industry. Students will learn the practical application practices and demonstrate their ability to use the software and concepts associated with construction scheduling. (Degree Credit)

## CSTR 100 F Beginning Residential Const 4 Units

54 hours lecture and 54 hours lab per term. This course emphasizes the safe use of hand and power tools, construction terminology, plan interpretation and construction practices in: ground work, foundation systems, wall framing, ceiling framing, roof framing, and roofing materials. (CSU) (Degree Credit)

## CSTR 102 F Residential Finish Carpentry 4 Units

54 hours lecture and 54 hours lab per term. This course covers units of instruction to include: tool usage and safety, terminology, drywall installation and finishing, setting of door frames and hanging doors, installation of casing and base, finish hardware, paneling, railings, stairs, and trim/detail. (CSU) (Degree Credit)

## CSTR 104 F Concrete and Masonry

3 Units
45 hours lecture and 27 hours lab per term. This course includes units of instruction in basic concrete technology, concrete testing, concrete placing and finishing, masonry units -- block and brick, masonry tools and methods. (CSU) (Degree Credit)

## CSTR 108 F Surveying for Builders

2 Units
18 hours lecture and 54 hours lab per term. This is a course for builders and contractors, both general and sub. It includes surveying instruments, surveying practice for construction limited to plot layouts, simple topography as on hillside lots, establishing grade points, using bench marks and other references. Basic applied trigonometry will be reviewed. (CSU) (Degree Credit)

## CSTR 110 F Residential Estimating

3 Units
54 hours lecture per term. This course stresses residential blueprint reading, estimating, and material listing. Includes site preparation, foundations, framing, exterior finish, interior finish, roofing, hardware, and various specialty trade subcontracts. (CSU) (Degree Credit)

## CSTR 112 F Construction Materials, Specifications and Purchasing

36 hours lecture per term. The course covers the study of building materials as used in modern building construction and how they are represented in working drawings and specifications. (CSU) (Degree Credit)

## CSTR 116 F Residential Construction <br> Practice II

Prerequisite: CSTR 100 F with a grade of " C " or better.
36 hours lecture and 108 hours lab per term. This course provides actual practice in the construction of a house project. Course emphasizes the correct and safe use of tools, rough framing problems, rough electrical, rough plumbing, mechanical systems, roofing, flashing, and exterior finish. (CSU) (Degree Credit)

## Cosmetology (COSM)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu
Cosmetology Courses

## COSM 041 F Esthetician: Level 110 Units

Prerequisite: 10th grade education or equivalent.
Advisory: Must be 17 years of age when applying for State Board Examination.
135 hours lecture and 207 hours lab per term. This course includes basic skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations; temporary hair removal (tweezing and waxing); makeup techniques and applications; health, safety and sanitation precautions and procedures; bacteriology, chemistry, electricity, anatomy and physiology; professional ethics, hygiene, personality development, personal and professional management. Related subjects, as they are applicable to esthetics, are covered. This program is designed toward preparation for the Board of Barbering and Cosmetology Exam, and a successful career as an esthetician. Ten (10) units are given for 300 hours of coursework completed with a "C" or better average. This is the first of two consecutive segments. Pivot Point Member School (Degree Credit)

## COSM 042 F Esthetician: Level 2

10 Units
Prerequisite: COSM 041 F with a grade of "C" or better or equivalent.
Advisory: Must be 17 years of age when applying for State Board Examination.
135 hours lecture and 207 hours lab per term. This course includes an advanced study of skin care procedures and techniques; analysis of the skin; facial treatments (manual, electrical and chemical); facial massage manipulations (European, lymphatic and acupressure); temporary hair removal (tweezing and waxing); makeup techniques and applications; hygiene, health, safety and sanitation precautions and procedures; chemistry, electricity; professional ethics, growth and personality development; personal, professional and business management; advanced topics and procedures (aromatherapy, spa treatments, chemical exfoliation). Related subjects, as they are applicable to Esthetics, are covered. This program is designed toward preparation for the Board of Barbering and Cosmetology Examination, and a successful career as an esthetician. Ten (10) units are given for 300 hours of coursework completed with a "C" or better average. This is the second of two consecutive segments. Pivot Point Member School. (Degree Credit)

## COSM 043 F Advanced Topics in Esthetics

Prerequisite: COSM 042 F or COSM 055EF with a grade of "C" or better or a valid esthetician or cosmetology license.
Advisory: Completed 10th grade level or its equivalent.
54 hours lecture and 162 hours lab per term. This course is designed to meet the needs of the Esthetician industry that requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. The course will be offered in modules of advanced topics. Unit credit may range from .5-3 units per module. Consult the class schedule to verify specific topic areas and credit offered for each topic and fees. Pivot Point Member School. (Degree Credit)

## COSM 046 F Advanced Makeup - <br> 4 Units Microdermabrasion

Prerequisite: COSM 042 F or COSM 055EF with a grade of "C" or better.
Advisory: Completed 10th grade or its equivalent.
36 hours lecture and 108 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provide professional growth for licensed estheticians and cosmetologists. This course will be offered in two modules. One module will cover advanced makeup and the other will cover microdermabrasion. Consult the class schedule to verify specific topic areas; credit offered for each topic and fees. Pivot Point Member School.

## COSM 047 F Advanced ExfoliationMicrodermabrasion

Prerequisite: COSM 042 F or COSM 055EF with a grade of " C " or better or a valid esthetician or cosmetology license.
Advisory: Completed 10th grade or equivalent.
18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education and to provide professional growth for licensed estheticians and cosmetologists. This module will cover advanced exfoliation using microdermabrasion techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

## COSM 048 F Advanced Makeup - Air Brush 2 Units

Prerequisite: COSM 042 F or COSM 055EF with a grade of "C" or better or a valid esthetician or cosmetology license.
Advisory: Completed 10th grade or equivalent.
18 hours lecture and 54 hours lab per term. This course is designed to meet the needs of the esthetics industry which requires advanced training, continuing education, and provides professional growth for licensed estheticians and cosmetologists. This module will cover advanced makeup-air brush techniques. Consult the class schedule to verify specific class meeting dates, credit offered and fees. Pivot Point Member School.

## COSM 055AF Cosmetology: Level 1

## 11 Units

Prerequisite: 10th grade education or equivalent.
Advisory: Must be 17 years of age when applying for State Board Exam.
135 hours lecture and 207 hours lab per term. This course includes basic hair styling, manicuring, facials, day make-up, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Subjects applicable to cosmetology are also covered. The program is designed toward preparation for the Board of Barbering and Cosmetology exam and a successful career as a cosmetologist. Eleven (11) units will be given for 320 hours of class work completed with a "C" or better average. This is the first of five consecutive segments. Cosmetology fees of \$1650 are payable at the bookstore during the first week of school. Other expenses will be needed for materials during the required 1600 hours. Pivot Point Member School. (Degree Credit)

## COSM 055BF Cosmetology: Level 2 <br> 11 Units

Prerequisite: COSM 055AF with a grade of "C" or better.
Advisory: Must be 17 years of age when applying for State Board Exam.
135 hours lecture and 207 hours lab per term. This course includes basic hairstyling, manicuring, pedicuring, acrylic nails with form, nail wraps, tips, mends/repairs, facials, make-up, permanent waving, scalp treatments, hair cutting, tinting, bleaching, soft permanent wave and sodium hydroxide chemical relaxing. Related subjects, as they are applicable to cosmetology are covered. This program is designed toward preparation for the State Board of Barbering and Cosmetology Exam and a successful career as a cosmetologist. Eleven (11) units are given for 320 hours of classwork completed with a "C" or better. This is the second of five consecutive segments. Pivot Point Member School. (Degree Credit)

## COSM 055CF Cosmetology: Level 3

10 Units
Prerequisite: COSM 055BF with a grade of "C" or better.
Advisory: Must be 17 years of age when applying for State Board Exam.
99 hours lecture and 243 hours lab per term. This course includes hair design, manicuring and pedicuring, acrylic nails, facials and corrective make-up, salon permanent waving/chemical texturizing, scalp treatments, hair sculpting, color design, soft curl permanent wave chemical texturizing and chemical relaxing/ texturizing. Related subjects, as they are applicable to cosmetology, are covered. This program is designed toward preparation for the Board of Barbering and Cosmetology State Exam and a successful career as a cosmetologist. Ten (10) units are given for 320 hours of classwork completed with a " C " or better average. This is the third of five consecutive segments. Pivot Point Member School. (Degree Credit)

## COSM 055DF Cosmetology: Level $4 \quad 9$ Units

 Prerequisite: COSM 055CF with a grade of "C" or better. 72 hours lecture and 288 hours lab per term. This course includes advanced hair, artificial nails, facials, make-up, airbrush makeup, chemical texturing, hair sculpting, extensions, color design texture/chemical relaxing. Related subjects are covered. The program is designed toward preparation for the California Board of Barbering and Cosmetology Exam and a successful career as a cosmetologist. This is the fourth of five consecutive segments. Pivot Point Member School (Degree Credit)
## COSM 055EF Cosmetology: Level 5 <br> 9 Units

Prerequisite: $\operatorname{COSM}$ 055DF with a grade of " $\mathrm{C}^{\prime}$ or better.
Advisory: Must be 17 years of age when applying for State Board Exam.
72 hours lecture and 288 hours of lab per term. This course includes salon hair design, salon hair sculpting, salon manicuring and pedicuring, salon facials and makeup, salon hair removal, salon permanent design, electrical and manual scalp treatments, salon color design, salon soft curl permanent wave/chemical texturizing and salon chemical relaxing-sodium hydroxide. Related subjects, as they are applicable to cosmetology are covered. This course also includes State Board of Barbering and Cosmetology mock written and performance exams. This program is designed toward preparation for the Board Exam and a successful career as a cosmetologist. Nine (9) units are given for 320 hours of classwork completed with a "C" or better average. This is the fifth of five consecutive segments. Pivot Point Member School. (Degree Credit)

## COSM 060 F Instruction Techniques in Cosmetology/Esthetician

## Open EntrylOpen Exit.

Prerequisite: Valid California Cosmetology or Esthetician License. Advisory: Minimum of five years' experience as cosmetologist or esthetician with one year completed within the previous two years.
72 hours lecture and 216 hours lab per term plus 600 clock hours of technical instruction. This course is for cosmetologist/esthetician who teach in the post-secondary or private sector cosmetology/esthetic schools. Pivot Point Member School (Degree Credit)

COSM 061AF Pivot Point Instruction I 3 Units
Prerequisite: COSM 060 F and current Cosmetology/Esthetician License.
36 hours lecture and 54 hours lab per term. This course is specially designed for cosmetologists, estheticians, instructors and instructor trainees that need to know and teach Pivot Point techniques to obtain employment in most community college Cosmetology Departments and progressive salons or private schools. Pivot Point Member School. (Degree Credit)

## COSM 061BF Pivot Point Instruction II

3 Units
Prerequisite: COSM 061AF with a grade of "C" or better and a valid California cosmetology or esthetician license in good standing.
36 hours lecture and 54 hours lab per term. This course is designed to restate the common terminology and principles of Pivot Point and differentiate terms, concepts, and principles. This course will demonstrate the formulation and application of all advanced techniques. Pivot Point Member School. (Degree Credit)

## COSM 061CF Pivot Point Instruction III 3 Units

Prerequisite: COSM 061BF with a grade of " C " or better and a current cosmetologylesthetician license.
36 hours lecture and 54 hours lab per term. This course is specially designed for cosmetologists, estheticians, instructors and instructor trainees that need to know and teach Pivot Point techniques. This advanced course prepares the student to successfully complete the knowledge necessary in Pivot Point training and instructional techniques to advance a technical career in the private sector and community college instructors. Pivot Point Member School. (Degree Credit)

## COSM 062 F Advanced Instruction Techniques 8 Units in Cosmetology/Esthetician

Open Entry/Open Exit.
Prerequisite: COSM 060 F with a grade of " C " or better.
72 hours lecture and 216 hours lab per term. This is an advanced course designed to build teaching skills for cosmetology/ esthetician instructors. Students will put into practice effective time management and organizational skills, demonstrate selfmotivation, and learn to compose advanced lesson plans. The lecture section consists of demonstrations in teaching with the student participating in presenting advanced information and practical trade demonstrations. A lab period involves the instructor trainee supervising advanced cosmetology/esthetician students in practical salon work. Offered as a self-pacing, open-entry course with flexible hours, with a minimum of twelve hours lab hours per week. Mandatory weekly meetings. Pivot Point instructional materials and aids available upon request. (Pivot Point Member School)

## COSM 070 F Continuing Education Instruction Tech- Cosmetology

Prerequisite: Verify California esthetician instructor license. 72 hours lecture and 81 hours lab per term.
This course is designed to meet the criteria for minimum hours of continuing education required for renewal of an instructor's license. The lecture consists of demonstration in teaching with student participating in both lecture of related information and practical trade demonstration. Pivot Point Member School. (Degree Credit)

## Counseling and Guidance (COUN)

Counseling and Student Development Division
Office: Bldg 2200, Room 2022-714.992.7084
Dean: Lisa Campbell
Website: counseling.fullcoll.edu

## Counseling Courses

## COUN 050 F College Orientation <br> 1 Unit <br> 18 hours lecture per term. This course is designed to satisfy the Ealifornia Community Colleges Matriculation requirements of Assessment, Orientation, and Counseling/Advising. The course will familiarize the student with Fullerton College associate degree, certificate and transfer requirements. Students will explore the rules, policies and campus resources of Fullerton College. (Degree (redit)

## COUN 060 F Academic Success

1 Unit
Pass/No Pass only.
18 hours lecture per term. This course is designed to promote student success. Students will develop skills in time management, decision making, study techniques and learning strategies. Students will increase their awareness of community resources, current college policies and procedures and cultural diversity. (Degree Credit)

## COUN 071 F Adaptive Computer Access <br> . 5 to 2 Units

Pass/No Pass only.
Open Entry/Open Exit.
Advisory: Actively participate in the Disability Support Services (DSS) intake process with a DSS counselor.
4.5-27 hours lecture and 13.5-81 hours lab per term. This course is designed for students with learning, visual, physical, communicative disabilities or acquired brain injuries. Students will receive guided instruction/application in the introduction and use of computers and adaptive computer access technologies within the context of word processing.

COUN 072 F Learning Assessment
Pass/No Pass only.
Open Entry/Open Exit.
Advisory: Eligibility for services from Disability Support Services. 9 hours lecture per term. This course is an intensive diagnostic learning assessment for students referred to Disability Support Services. Emphasis is placed on determining the learning strengths and weaknesses of these students. Through the assessment process, students will develop learning strategies, study skills and educational goals to help them improve basic skills, educational planning, and academic performance. A student educational contract (SEC) outlining long-term goals/short-term objectives for identified eligible students with learning disabilities will be developed.

## COUN 075 F Adaptive Computer Access: . 5 to 2 Units Learning Strategies

Pass/No Pass only.
Open Entry/Open Exit.
Advisory: Actively participate in the Disability Support Services (DSS) intake process with a DSS counselor.
4.5-27 hours lecture and 13.5-81 hours lab per term. This course is designed to help all students with disabilities identify their educational weaknesses and develop strategies to overcome and/ or mitigate their limitations and weaknesses. Students will receive computer-assisted instruction to improve learning strategies, problem solving and cognitive skills and proficiency in basic skills areas.

## COUN 093 F Managing College Finances 1 Unit

36 hours lecture per term. This course is designed to assist students in analyzing and incorporating basic strategies for managing college finances. Students will identify adult related tasks such as personal budget management, maximizing their financial aid benefits and other financial resources, distinguishing between various repayment options and the consequences related to mismanagement of funds. Recognize and minimize the factors leading to financial aid probation, thereby ensuring a successful degree completion and/or transfer program.

## COUN 100 F Orientation for College Success



1 Unit
Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course is recommended for all incoming college freshman and satisfies the California Community Colleges matriculation requirements of assessment, orientation and counseling. This course is designed to familiarize students with college and contains an introduction to the principles of student development theory, student conduct, academic procedures, college policies, goal setting, educational and career planning, and college and student support services. Students will learn academic options in higher education and develop a tentative educational plan to achieve personal and academic goals. (CSU) (UC) (Degree Credit)

## COUN 101 F The College Experience

2 Units
36 hours lecture per term. This course will facilitate an understanding of the issues involved in having a successful college experience. The emphasis includes four major components of study: self-exploration; development of academic and survival skills; awareness of higher education; and transfer exploration and vocational options. Topics will include: student development theory, purpose for attending college, maintaining health, development of positive self-esteem, strategies for living a balanced life, and acquisition of academic and survival skills. Students will develop knowledge of college resources, policies and procedures. (CSU) (Degree Credit)

## COUN 110 F Teaching As A Career

3 to 4 Units Letter Grade or Pass/No Pass option.
36 hours lecture and 54-108 hours lab per term. This course is an orientation to teaching as a profession. This course surveys the nature of the work, qualifications, supply and demand for teachers. A field work experience including observation and assistance in a school and/or community agency is required. This course is designed for prospective teachers. (CSU) (Degree Credit)

## COUN 135 F Introduction to Leadership Development

## (same as STSV 135 F)

54 hours lecture per term. This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills for application in multiple roles throughout their lifetime. Students will learn the role that communication, motivation, delegation, self-assessment, planning, time management, stress management, evaluation and governance play in developing successful leaders, working relationships, and organizations. Focus will include parliamentary procedure, program development, stress reduction, and time management. (CSU) (Degree Credit) AA GE, CSU GE

## COUN 136 F Applied Leadership

1 Unit

## (same as STSV 136 F)

18 hours lecture and 36 hours lab per term. The course is designed to give students the skills and proper knowledge to participate in student government. Students critically reflect on their goals, objectives and action plans and review their own performance along with assessing the organizational environment. This course is equivalent to STSV 136 F , three units maximum can be earned for any combination. (CSU) (Degree Credit)

## COUN 140 F Educational Planning

. 5 Units

## Pass/No Pass only.

9 hours lecture per term. Students taking this course will receive an overview of graduation requirements, transfer requirements, campus policies, student services and career planning. This course is strongly recommended for first-time students with declared majors or enrollment in specific programs. Course sections may be designated for specific majors or programs. (CSU) (Degree Credit)

## COUN 141 F Career Exploration

Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course is designed to introduce students to a career decision-making process which includes both evaluation of the self and exploration of the world of work. Self-evaluation activities include identification of personality/ temperament, interests, skills, goals and values. Career research activities are utilized to examine the world at work. The focus of the course is on self-description in relation to the choice of occupation and career. (CSU) (Degree Credit)

## COUN 143 F Creative Job Search

1 Unit
Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course will cover the basic practical aspects of conducting a successful job search. The focus will be on application, cover letter, resume, and interview as well as labor market research. (CSU) (Degree Credit)

## COUN 144 F Career Motivation and Self Confidence

Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course is designed to help students identify individual differences, examine personal characteristics and behavior, and evaluate self-concept. Students will interpret information and apply knowledge of self as related to career demands and opportunities with increased motivation and self-confidence. (CSU) (Degree Credit)

## COUN 148 F Human Potential

## 1 Unit

 Letter Grade or Pass/No Pass option.18 hours lecture per term. This course will help students to understand and enhance their self-concept through an exploration of how that self-concept directs behavior patterns. This course will also enable students to examine and assess their strengths and potential, values and decision-making skills in order to develop an improved self-concept, and improve communication and listening skills. By becoming aware of their individual potential, students can plan and achieve their educational goals. (CSU) (Degree Credit)

## COUN 151 F Career/Life Planning <br> 3 Units <br> Letter Grade or Pass/No Pass option.

54 hours lecture per term. This course designed for, but not restricted to, undecided students and persons in career transition and includes self-exploration, career exploration and job search strategies. Specific topics include adult development theory and the changes that occur over the life span, extensive exploration and assessment of one's skills, values, interests and personality, analysis of career possibilities to determine individual fit, introduction to resources for educational and career planning, an intensive career investigation, decision making, goal setting and motivation, and job search and interview techniques. (CSU) (Degree Credit)

## COUN 152 F Diversity in the World of Work

54 hours lecture per term. This course explores the influence of factors such as gender, age, abilities, ethnicity, culture, and socioeconomic status on past, present and future working conditions, career development, and labor market trends in the United States. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE, MULT CULT REQ

## COUN 161 F Assertion Skills/Communication <br> 1 Unit

Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course will equip students with a basic understanding of assertive communication and present skills, techniques and strategies for implementation of assertive communication behaviors. (CSU) (Degree Credit)

## COUN 163 F Personal Growth and Life Transitions

54 hours lecture per term. This course will introduce students to life skills that can help them to achieve greater success in their educational, professional and personal lives. Topics include exploring one's life purpose, managing changes and transitions, achieving academic and career satisfaction, internal and external influences on educational and career pursuits, creating and maintaining a healthy lifestyle, and learning and employing effective communication skills and success strategies. Students will assess the impact these factors have on their lives in regards to decision making and assist them in identifying proactive skills for leading a purposeful life. (CSU) (Degree Credit) AA GE, CSU GE

## COUN 199 F Counseling/Guidance: Independent Study

Letter Grade or Pass/No Pass option.
9-36 hours lecture per term. This course is designed for students who wish to explore in depth various guidance-related topics. Unit credit may range from one-half to two units in any given semester. Consult class schedule for list of topics and to verify credit for the particular term. (CSU) (UC review required.) (Degree Credit)

## Dance (DANC)

## Physical Education Division

Office: Bldg 1200, Room 1206-714.992.7045
Dean: David Grossman

## Dance Courses

## DANC 100 F Dance Appreciation

3 Units
54 hours lecture per term. This course defines historical and contemporary dance forms and their religious, social, cultural and artistic qualities. The course will include the viewing of video documentation, discussion, research and student presentations. This course is recommended for non-majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## DANC 101 F Introduction to Dance World Cultures

54 hours lab per term. This course will introduce social, folk, and square dancing from the different cultures of the world. Dance cultures that will be studied will include the dances of: Asia, Africa, Europe, Latin America, Middle East, Mexico, Native American, Polynesia, and Spain. This class will include research and study of the backgrounds of dances and cultures, and will provide opportunities for development of acceptable performance as preparation for more advanced technique courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 102 F Conditioning for Dance 2 Units

18 hours lecture and 54 hours lab per term. This course introduces various types of stretching, strengthening, and body alignment exercises for dance. This course combines techniques and skills from various body therapy programs (e.g., yoga, Pilates, and Gyrokinesis) to enhance flexibility and strength. (CSU) (UC) (Degree Credit) CSU GE

## DANC 103 F Dance Technique I

1 Unit
54 hours lab per term. This course focuses on basic movement techniques to prepare the body for dance. This class also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## DANC 104 F Dance Technique II

1 Unit
Prerequisite: DANC 103 F with a grade of "C" or better or instructor approval.
36 hours lab per term. This course focuses on basic movement techniques to prepare the body for dance. This class also meets the needs of students who are interested in achieving fitness and contouring of the body by the use of dance technique. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## DANC 110 F Ballet Folklorico

1 Unit
36 hours lab per term. This course is designed to give a general knowledge of the regional dance styles of Mexico and their cultural aspects. Students will be expected to learn various dance steps. (CSU) (UC) (Degree Credit)

## DANC 111 F Jazz I

## 1 Unit

54 hours lab per term. This course is designed for students to learn basic skills of Jazz Dance with emphasis on body alignment, strength and coordination. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 112 F Jazz II <br> 1 Unit

Prerequisite: DANC 111 F with a grade of "C" or better.
36 hours lab per term. This course is designed for the student who wishes to perfect his jazz style. The class includes more advanced work in turns, isolations, and combinations and work with more complex rhythmic elements. (CSU) (UC) (Degree Credit)

## DANC 113 F Tap Dance I

1 Unit
54 hours lab per term. This course is designed to introduce basic tap dance techniques and beginning tap dances and provides an opportunity for the enrolled student to develop increased coordination and rhythm. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

DANC 114 F Tap Dance II 1 Unit
Prerequisite: DANC 113 F with a grade of " C " or better.
54 hours lab per term. This course provides opportunity for further development of tap dance skills at an intermediate level. Includes some provision for student composition. (CSU) (UC) (Degree Credit)

## DANC 115 F Hip Hop Dance I

1 Unit
54 hours lab per term. This course provides the opportunity for students to learn various forms of beginning Hip Hop dancing including Popping, Locking and Funk style. Students will learn the basic history of hip hop culture. (CSU) (UC) (Degree Credit) CSU GE

## DANC 116 F Social Dance

1 Unit
54 hours lab per term. This course provides the enrolled student exposure to various dance forms. This course is designed for both the non-dancer and the student with dance experience. Examples of dance forms that may be included are: Swing, Salsa, Mambo, Cha-cha, Tango, Waltz, Country Western, and Fox Trot. Also included are historical roots of each form and opportunity for student choreography. (CSU) (UC) (Degree Credit) CSU GE

## DANC 119 F Dance for Theatre

1 Unit
54 hours lab per term. This course provides opportunities to explore various dance styles: ballet, jazz, modern and tap for musical theatre productions. Exposure to choreography for musical theatre and student choreography. (CSU) (UC) (Degree Credit) CSU GE

## DANC 120 F Dance History

3 Units
54 hours lecture per term. In this course, students will study dance forms from primitive to present day with lecture, film, and class discussion. Students will also compare various dance techniques, theories, and personalities who have contributed to the art of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## DANC 121 F Classical Dance Fundamentals 1 Unit

 54 hours lab per term. This course is designed for the student who has little or no training in classical dance. This course provides instruction in application of the use of the fundamentals of applied biomechanics to achieve classical dance positions and movements. It is designed to instruct the student in the use of the fundamentals of physical movement to achieve maximum physical performance for dance and to assist in preventing injury and creating longevity for the dancer. This course provides instruction in applied biomechanics at the ballet barre, for classical ballet positions, and in use of short sequences of dance combinations and basic turns and leaps for classical dance. (CSU) (UC) (Degree Credit) CSU GEDANC 122 F Middle Eastern Dance
1 Unit
54 hours lab per term. This course is designed to explore various types of dances that are common in the Middle East (Belly dancing and dabke). Students will acquire movement unique to Middle Eastern dance. (CSU) (UC Credit Limitation) (Degree Credit)

DANC 130 F Afro-Caribbean Dance
1 Unit
54 hours lab per term. This course will teach students the dance styles and rhythms of African and Caribbean cultures. Different regions of Africa and the Caribbean will be explored. Students will learn dances from West Africa, Puerto Rico, Brazil, Trinidad, Haiti, and the Dominican Republic. Dance as an inseparable part of the culture will be discussed. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## DANC 132 F Flamenco Dance I

1 Unit
54 hours lab per term. In this course, students will study basic Flamenco Dance technique and learn movement combinations. This class provides students with the opportunity to develop coordination, rhythm, and performance skills. Some history of Flamenco will be included. (CSU) (UC Credit Limitation) (Degree Credit)

## DANC 140 F Introduction to Ballet (formerly DANC 105 F)

18 hours lecture and 54 hours lab per term. This course is designed to instruct the beginning ballet student in the fundamentals of ballet technique and terminology. Students will learn basic skills at the barre and center floor with an emphasis on proper alignment. The student will also learn the basic history of ballet as a performing art and will view examples of ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 141 F Ballet I: Beginning Ballet 2 Units (formerly DANC 105 F)

Prerequisite: DANC 140 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course students will elaborate on basic ballet skills, adding new vocabulary and movements. Emphasis will be on developing alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 142 F Ballet II: Advanced Beginning <br> 2 Units

 Ballet(formerly DANC 106 F)
Prerequisite: DANC 141 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course students will learn advanced beginning ballet technique with an emphasis on developing performance skills, self-expression and musicality. Students will practice increasingly complex connecting combinations that challenge body stability and control. Students will learn about the evolution of ballet in the twentieth century and its influence on other forms of dance. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 143 F Ballet III: Intermediate Ballet (formerly DANC 106 F) <br> Prerequisite: DANC 142 F with a grade of " $C$ " or better.

18 hours lecture and 54 hours lab per term. This course will challenge the student with intermediate level ballet steps and sequences. Emphasis will be on advancing technique for jumps and turns, performance skills, and self-expression. Students will use intermediate level steps and skills to compose short ballet sequences with attention on aesthetic choices. Students will explore different styles of contemporary ballet and significant contemporary ballet choreographers. (CSU) (UC) (Degree Credit) CSU GE

## DANC 150 F Commercial Dance

1 Unit
54 hours lab per term. This course will focus on contemporary dance styles made popular from the television, film and video industry. Students will learn and create stylized commercial dance movement combinations using a variety of popular music. (CSU) (UC Credit Limitation) (Degree Credit)

## DANC 151 F Latin Jazz

1 Unit
54 hours lab per term. In this course, students will study and learn basic skills of Latin Jazz dance and styles inherent in Jazz and Afro-Caribbean dance and Latin Popular rhythms such as Cha Cha, Mambo, Salsa, Merengue, Bolero, Cumbia, and Corridos. Students will learn Latin Jazz combinations. Cost of dance concert admission will not exceed \$40. (CSU) (UC) (Degree Credit)

## DANC 160 F Introduction to Modern Dance 2 Units (formerly DANC 107 F)

18 hours lecture and 54 hours lab per term. This course is an introduction to modern dance. Students will learn the basic vocabulary and movements of modern dance with an emphasis on body and spatial awareness, alignment, locomotor skills, and conditioning the body. Students will also learn about the history of modern dance as a performing art and will view examples of modern dance in class. (CSU) (UC) AA GE, CSU GE

## DANC 161 F Beginning Modern Dance

2 Units

## (formerly DANC 107 F)

Prerequisite: DANC 160 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course is designed to build on the basics of modern dance adding new vocabulary and movements. Emphasis will be on alignment, strength, flexibility, balance and coordination. Students will learn about the historical context of the art form and its roots in Western culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 162 F Advanced Beginning Modern 2 Units

 (formerly DANC 108 F)Prerequisite: DANC 161 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course expands upon the foundations of modern dance technique with an emphasis on performance skills, self-expression, and musicality. Students will practice increasingly complex connecting combinations challenging kinesthetic abilities. Students will learn about the evolution of modern dance in the twentieth century and its roots in United States culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 163 F Intermediate Modern Dance (formerly DANC 108 F)

Prerequisite: DANC 162 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course will present intermediate level modern dance technique, challenging skills with increasingly complex movement patterns and physicality. Emphasis will be on developing creative skills and generating interpretive dance phrases. Students will learn about contemporary modern dance choreographers. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## DANC 200 F Dance Appreciation: <br> 3 Units <br> A Classical Ballet Retrospective

54 hours lecture per term. This course is designed to expose the student to the performance of classical ballet by major dance companies from around the world and historical artists in performance. This course examines the thematic material of individual ballets, the era from which they came, the history of the choreographers, and the influences of society on ballet. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## DANC 202 F Dance Composition/ Choreography <br> 36 hours lecture and 54 hours lab per term. This course provides

 theory and practice of the basic elements of dance composition and also emphasizes problem-solving skills and the craft and creation of movement studies and full-length dances for the individual and/or group. (CSU) (UC) (Degree Credit) CSU GE
## DANC 203 F Dance Production

## 2 Units

Prerequisite: Previous dance experience.
108 hours lab per term. This course provides opportunity for creative dance expression. The emphasis of the class is on advanced dance techniques and choreography. Opportunities for public performance are available. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## DANC 204 F Dance Rehearsal and Performance <br> Prerequisite: Any previous dance class or instructor approval

 162 hours lab per term. This course provides an opportunity for a student to stage his own choreography or to participate as a dancer in original choreography by a student, faculty or guest artist. This course is a practical experience in choreography, performance and directing. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
## DANC 205 F Dance Ensemble

## 3 Units

Prerequisite: Audition.
36 hours lecture and 54 hours lab per term. This course is a selective dance performing group utilizing advanced resource and movement materials. This class is designed to give the advanced dancer an opportunity for continued performance and growth in dance technique and group repertoire. Students participate in multiple performances on campus and/or venues within the area. This course includes preparing for an audition, designing a resume, and setting goals for future performance opportunities in dance. Field trips may be required. Course may be taken three times for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 210 F Multicultural Dance in the U.S. 3 Units Today

54 hours lecture per term. This course covers the social and theatrical dances of the U.S. today and will be viewed and examined in terms of cultural influences, historical and social origins, and the functions they fulfill for individual artists, their cultures, and society in general. African American, Asian, Hispanic, European and Native American dances, choreographers, and dancers will be studied. The class work will include readings, discussions, group projects, and analysis of dance performances on video and live theater. Attendance at a selected group of performances is required. Cost of dance concert admission will not exceed $\$ 30$. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## DANC 214 F Dance Repertory

2 Units
108 hours lab per term. This course provides the opportunity to rehearse and perform works choreographed by faculty and/or artist-in-residence. It is an opportunity to experience professional working conditions and requirements. All phases of the dance concert process from audition to rehearsal to backstage preparation will be covered. (CSU) (UC) (Degree Credit)

## Earth Sciences (ESC)

## Natural Sciences Division

Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Earth Sciences Courses

## ESC 100 F Physical Geology <br> (C-ID GEOL 100)

Letter Grade or Pass/No Pass option.
54 hours lecture per term. This introductory course explores the physical composition of the earth and those processes that modify its surface. Topics include rocks and minerals, plate tectonics, earthquakes, volcanoes, landslides, flooding, groundwater, beach processes, and earth resources. Contemporary environmental changes such as global warming and resource acquisition problems will also be discussed. Concurrent enrollment in ESC 100LF is recommended. Field trips may be taken. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 100LF Physical Geology Lab

1 Unit (C-ID GEOL 100L)
Letter Grade or Pass/No Pass option.
Corequisite: ESC 100 F with a grade of " C " or better.
54 hours lab per term. This course supplements ESC 100 F. Lab includes identification of minerals and rocks, interpretation of topographic maps and geologic folios, study of landforms and rock structures and field studies. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ESC 101 F Earth Science Survey

## (C-ID GEOL 120)

54 hours lecture per term. This multidisciplinary course explores the fields of geology, oceanography, meteorology, and astronomy. Topics include earthquake and volcanic processes, global current patterns, beach formation, hurricane and tornado development, and star and planetary evolution. Special emphasis is placed on contemporary human-induced environmental changes such as global warming and resource acquisition. Class discussions will also focus on the interaction between science and society. Lab not required but recommended. Field trips may be taken. (CSU) (UC Credit Limitation: no credit for ESC 101 F if taken after college level class in astronomy, meteorology, geology or oceanography) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 101LF Earth Science Survey Lab

1 Unit
Corequisite: ESC 101 F with a grade of " C " or better.
54 hours lab per term. This lab enhances topics covered in the ESC 101 F. This course includes exercises in identifying minerals and rocks, reading topographic maps, analyzing earthquakes, interpreting coastal processes, forecasting weather, and recognizing the stars and planets. Field trips may be taken. (CSU) (UC Credit Limitation; no credit for ESC 101LF if taken after college level class in astronomy; meteorology, geology or oceanography). (Degree Credit) CSU GE, IGETC

## ESC 102 F Survey of Natural Disasters

3 Units
54 hours lecture per term. This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornados and asteroid/ meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussions will focus on aspects of regional planning, environmental laws and the interaction between science and society. Field trips are optional. (CSU) (UC) (Degree Credit) AA GE

## ESC 103 F Historical Geology

4 Units

## (C-ID GEOL 111)

Letter Grade or Pass/No Pass option.
54 hours lecture and 54 hours lab per term. This course covers the Earth's origin, geological development through time and history of its life are presented using the plate tectonic theory. The importance of environment to evolution and extinction of life forms are stressed. Study and classification of major rock and fossil groups, interpretation of geologic and topographic maps, and application of rock and fossil interpretations to geologic problems are included. Field trips are required. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 104 F Geology of National Parks and Monuments <br> Letter Grade or Pass/No Pass option.

54 hours lecture per term. This course covers the broad geologic features of North America with special emphasis on U.S. National Parks and Monuments. Photographic slides and rock samples will be used to illustrate the geologic significance of the parks and monuments. Utilizing the plate tectonic theory, a geologic history of North America will be deduced from the descriptive geology. Field trips may be taken to national parks and/or monuments. (CSU) (Degree Credit) AA GE, CSU GE

## ESC 105 F Introduction to Weather and 3 Units Climate

54 hours lecture per term. This course examines the physical properties of the atmosphere including solar heating and cooling, atmospheric circulation, weather systems, extreme weather, atmospheric optics, climate change, and weather radar, maps and forecasting. The effects of human activities on Earth's climate will be emphasized. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 105LF Introduction to Weather and Climate Laboratory



1 Unit
9 hours lecture and 27 hours lab per term. This course offers lab studies to correspond to material covered in ESC 105 F. Each lab experience will be preceded by an orientation lecture/discussion period. This course may include field trips. (CSU) (Degree Credit)

## ESC 106 F Geology of Orange County Area 2 Units

 36 hours lecture per term. This course examines the physical and historical geology of the Orange County area. The county will be analyzed for faults and folds, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips are required. (CSU) (Degree Credit)
## ESC 116 F Astronomy

3 Units
Advisory: MATH 020 F with a grade of " C " or better.
54 hours lecture per term. This course is an introduction to the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. High School Algebra and Plane Geometry or equivalents are highly desirable. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 116HF Honors Astronomy

3 Units
Advisory: MATH 020 F with a grade of "C" or better or math skills clearance.
54 hours lecture per term. This Honors-enhanced course is an introduction of the universe and the techniques used to study it. Topics include the history of astronomy, motions of the night sky, the earth moon system, the solar system, the sun, formation and death of stars, the Milky Way, cosmology, and life in the universe. As an Honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. High school algebra and plane geometry or the equivalents are highly desirable. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 116LF Astronomy Lab

2 Units
Advisory: MATH 020 F with a grade of " C " or better or math skills clearance and ESC 116 F with a grade of " C " or better.
72 hours lab per term. This course introduces the student to astronomical viewing and measurement as well as analysis of astronomical data. Students will do lab experiments to understand principles of astronomy and data analysis. They will use telescopes to make observations and gather data (or use computer images) and perform exercises relating to the moon, planets, stars, and galaxies. A field trip for dark sky observation may be arranged. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ESC 117 F Field Astronomy

1 Unit
Advisory: ESC 116 F and MATH 020 F with a grade of " C " or better or math skills clearance.
18 hours lecture per term. This course is an introduction to methods of observational astronomy including naked eye, binocular and telescopic observations. Lectures will cover celestial sphere, celestial coordinates, motions of the sky, star charts and telescope optics. Students will be trained in using star charts, planispheres, planetarium software and telescopes. Overnight camping required. (CSU) (Degree Credit)

## ESC 120 F Geology of California

3 Units
54 hours lecture per term. This course examines the physical and historical geology of California. Each of California's natural provinces will be analyzed for tectonic structures, rock and fossil occurrences, geologic hazards, and mineral deposits. Pertinent state laws and ordinances relating to geologic concerns will be reviewed. Field trips may be taken. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 130 F Introduction to Oceanography 3 Units

54 hours lecture per term. The lectures present a survey of the geological, physical, chemical, and biological principles and processes of oceanography. This course examines how these processes interact to form a variety of habitats within the marine ecosystem. An overview is provided of the physical properties of these habitats, along with the distribution and characteristics of organisms found within them. The interactions of humans with the marine environment is presented, as is an introduction to oceanographic tools and their uses. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ESC 130HF Honors Introduction to Oceanography

54 hours lecture per term. This Honors-enhanced course presents a survey of the geological, physical, chemical, and biological principles and processes of oceanography. An overview is provided of the geological, physical and chemical properties of ocean ecosystems and examples are given of characteristics of organisms found within them. The role of technology and its application to studying the world ocean is woven throughout. Students will develop an understanding of the interaction of humans with the world ocean, especially in view of the critical scientific, environmental, social and political issues that emerge from ocean conservation efforts. Students are expected to critically analyze scientific and journalistic information and engage in written and oral debate to reach a deeper understanding of these issues. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 130LF Introduction to Oceanography: Field Experience

Corequisite: ESC 130 F with a grade of "C" or better.
9 hours lecture and 27 hours lab per term. This course offers field studies to correspond to material covered in ESC 130 F. Each field experience will be preceded by an orientation lecture/discussion period. May include field work from boats. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ESC 140 F Geology of California Coastal Areas

36 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas along California's coastline. Lectures will examine the geologic importance of coastal areas and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 141 F Geology of the Anza-Borrego Desert State Park Area

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Anza-Borrego Desert State Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

ESC 142 F Geology of Mojave Desert Area 1 Unit 18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Mojave Desert area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 143 F Geology of the Owens Valley/ Mammoth Lakes Area

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Owens Valley-Mammoth Lakes area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 144 F Geology of Southern California Mountain Areas

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Transverse Ranges and Santa Ana Mountains area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 145 F Geology of the Death Valley National Park Area

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Death Valley National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 146 F Geology of the Joshua Tree National Park Area

18 hours lecture per term. This course involves lecture and field study of geologic processes and features in the Joshua Tree National Park area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ESC 147 F Geology of Colorado Plateau Areas 2 Units

 36 hours lecture per term. This course involves lecture and field study of geologic features and processes in selected areas of the Colorado Plateau area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)
## ESC 190 F Environmental Geology <br> \section*{(C-ID GEOL 130)}

54 hours lecture per term. This course explores those geologic processes that influence human activities. Topics include the geologic hazards, such as earthquakes, floods, landslides, and volcanoes; the occurrences and limitations of natural resources; and the consequences of pollution and waste disposal on the earth. Hypothetical and case histories of natural disasters will be studied. Class discussions will also focus on geologic aspects of regional planning, environmental laws, and the interaction between science and society. Field trips are optional. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ESC 196 F Regional Field Studies in Geology 1 Unit 18 hours lecture per term. This course involves lecture and field study of geologic processes and features in selected areas throughout the Southwestern United States. During a given semester, multiple sections may be offered to different study areas or for different topics. Lectures will examine the geologic importance of the area to be visited and how to recognize key geologic features in the field. Study areas include, but are not limited to, Mojave Desert, the Sierra Nevada, and coastal areas. Areas outside of California (i.e., Arizona, New Mexico) may also be selected. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## Economics (ECON)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Economics Courses

## ECON 101 F Principles of Economics-Micro 3 Units (C-ID ECON 201)

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
54 hours lecture per term. This course presents the basic structure of the economic system of the United States and emphasizes the behavior of the firm within this structure. Special attention is given to the allocation of products and resources through the price mechanism. Topics treated include comparative economic systems, supply and demand, product and resource pricing, the market models, and general equilibrium. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ECON 101HF Honors Principles of Economics- 3 Units Micro

(C-ID ECON 201)
Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
54 hours lecture per term. This Honors-enhanced course presents the basic structure of the economic system of the United States and emphasizing the behavior of the firm within this structure. Topics include comparative economic systems, supply and demand, product and resource pricing, the market modules, and general equilibrium. More attention will be given to the quantitative methods used by economists. Students will be expected to give frequent oral reports, participate in group projects, and travel off-campus for special programs. Internet access will be arranged for student groups to participate in a competitive stock market game. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ECON 102 F Principles of Economics-Macro 3 Units

 (C-ID ECON 202)Prerequisite: ECON 101 F with a grade of " C " or better.
54 hours lecture per term. This course is concerned with economic aggregates and analyzes the overall performance of the economy of the United States, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policies, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ECON 102HF Honors Principles of Economics- 3 Units Macro

## (C-ID ECON 202)

Prerequisite: ECON 101 F or ECON 101HF with a grade of "C" or better.
54 hours lecture per term. This Honors-enhanced course is concerned with the economic aggregates and analyzes the overall performance of the United States economy, with special emphasis on the role of government. Topics treated include national income, employment theory, business cycles, fiscal and monetary policy, equilibrium growth, and international economics. Some of the problems of specific sectors of the economy are examined. Students will be expected to give oral reports, participate in group projects, and perform independent research outside of class. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## Education

## (see Child Development and Educational Studies)

## Engineering (ENGR)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Engineering Courses

## ENGR 101AF Surveying I <br> 4 Units

Prerequisite: MATH 142 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course covers the principles and practices of measuring distances, elevations and angles. Topics include leveling, traversing, horizontal and vertical curves, topography, and use and care of instruments and equipment. (CSU) (Degree Credit)

## ENGR 105 F Engineering CAD (C-ID ENGR 150)

4 Units
Prerequisite: MATH 142 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This is an introductory course which utilizes the CAD system for engineering applications. The course incorporates elementary principles associated with the various menu and command structures in com-puter-assisted drafting in order to develop solutions to 2D and 3D design problems. Topics included are file management, layering, orthographic projection, dimensioning, line types and axonometric projection. (CSU) (UC) (Degree Credit)

## ENGR 110 F Introduction to Engineering 3 Units

Prerequisite: MATH 040 F with a grade of " C " or better.
Advisory: ENGL 100 F or ENGL 100HF, with a grade of "C" or better
54 hours lecture per term. This course is an introduction to engineering as a profession and its associated career responsibilities and opportunities. The course includes a selection of computational and mathematical methods and tools to be found useful in problem solving in engineering. Dimensional analysis, graphical techniques, and design theory in engineering analysis is also studied. The course includes the application of engineering and scientific problem methods to introductory electric circuit problems. This course also meets requirements for credit in Engineering. (CSU) (Degree Credit)

## ENGR 201 F Statics

3 Units
Prerequisite: MATH 150BF with a grade of " C " or better and PHYS 221 F with a grade of " C " or better.
54 hours lecture per term. This course applies equilibrium conditions of force and moments to engineering problems. Algebraic and graphical methods are used. Topics include equilibrium of particles and rigid bodies, trusses, beams, frames, machines, centroids and friction. (CSU) (UC) (Degree Credit)

## ENGR 203 F Electric Circuits

4 Units
Prerequisite: MATH 150BF with a grade of "C" or better and PHYS 222 F with a grade of "C" or better.
Concurrent Corequisite: ENGR 203LF.
72 hours lecture per term. This course is an introduction to the analysis of electric circuits. Analysis techniques include nodal analysis, loop analysis, superposition method, Thevenin's Theorem, Norton's Theorem and source transformation. RLC and op-amp networks are analyzed under DC, AC-steady state, transient and variable frequency conditions. (CSU) (UC) (Degree Credit)

## ENGR 203LF Electric Circuits Lab

1 Unit
Prerequisite: PHYS 222 F and MATH 150BF with a grade of " C " or better.
Corequisite: ENGR 203 F.
54 hours lab per term. This course covers basic electrical measurement techniques and experimental investigation of simple circuits, as well as computer simulations of transient circuits. (CSU) (UC) (Degree Credit)

## English (ENGL)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## English Courses

ENGL 059 F Developmental Writing 4 Units
Pass/No Pass only.
Advisory: READ 056 F or any reading course.
72 hours lecture per term. This course is designed for native speakers of English who need to build basic English skills in writing, reading and thinking. It provides instruction in writing effective sentences, reading short essays, thesis development, structure of paragraphs and essays, vocabulary building, basic critical thinking, and study skills.

## ENGL 060 F Preparation for College Writing 4 Units

 Pass/No Pass only.Prerequisite: ENGL 059 F with a grade of "Pass" or recommended score on the English Placement Test.
Advisory: READ 096 F.
72 hours lecture per term. This course is designed to meet the needs of students who are developing the writing and editing skills necessary for college writing. Students will review the writing process, thesis statements, essay structure, organization and general mechanics, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking.

## ENGL 099 F Accelerated Preparation for College Writing

## Pass/No Pass only.

Advisory: READ 096 F or any other reading course.
72 hours lecture and 18 hours lab per term. This course prepares students for transfer-level college writing in a highly intensive, accelerated format. Students will review English fundamentals, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking.

## ENGL 100 F College Writing

4 Units

## (C-ID ENGL 100)

Prerequisite: ENGL 060 F with a grade of "Pass" or ENGL 099 F with a grade of "Pass" or ESL 186 F with a grade of "C" or "Pass" or ESL 190 F with a grade of "C" or "Pass" or a grade of "Pass" in recommended score on the placement test.
Advisory: READ 142 F.
72 hours lecture per term. This college-level composition course is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 100HF Honors College Writing 4 Units
Prerequisite: ENGL 060 F with a grade of "Pass" or ENGL 099 F with a grade of "Pass" or ESL 186 F with a grade of "C" or "Pass" or ESL 190 F with a grade of "C" or "Pass" or a grade of "Pass" in recommended score on the placement test.
Advisory: READ 142 F.
72 hours lecture per term. This Honors-enhanced course in composition is designed to develop the reading, critical thinking, and writing strategies necessary for academic success. The emphasis is on reading and writing expository essays. The course includes research and documentation skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 102 F Introduction to Literature

3 Units

## (C-ID ENGL 120)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
54 hours lecture per term. This course will introduce a variety of literary genres such as fiction, poetry, drama and film. Students will read, analyze, and write about literature. Different critical approaches to literature will also be included. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 102HF Honors Introduction to Literature

## (C-ID ENGL 120)

Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100HF with a grade of "C" or better.
54 hours lecture per term. This Honors-enhanced course is a continuation of ENGL 100 F, uses literary works as content for reading and writing with emphasis on analytical and critical approaches to drama, poetry and prose fiction. This course will employ enhanced teaching methods such as a seminar approach, more researched based writing assignments, and assignments calling for a higher level of critical thinking. The overall content and amount of work required in ENGL 102HF will be the same as non-honors ENGL 102 F. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 103 F Critical Reasoning and Writing <br> 4 Units

## (C-ID ENGL 105)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
72 hours lecture per term. This course is designed to develop critical thinking, reading, and writing skills beyond the level achieved in ENGL 100 F . This course will focus on the development of logical reasoning and analytical and argumentative writing skills as well as information literacy. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 103HF Honors Critical Reasoning and <br> 4 Units Writing

Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.
72 hours lecture per term. This Honors-enhanced course is designed to develop critical thinking, reading, and writing skills, beyond the level achieved in ENGL 100 F or ENGL 100HF. The course will focus on the development of logical reasoning and analytical and argumentative writing skills. As an Honors section, this class will offer an enhanced approach to critical thinking, calling on students to take a more active role in the learning process. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 104 F Critical Thinking and Writing <br> 4 Units about Literature

(C-ID ENGL 110)
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.
72 hours lecture per term. This course will develop critical thinking, reading, and writing skills as they apply to the analysis of literature and literary criticism from diverse cultural sources and perspectives. There will be an emphasis on the techniques and principles of effective written argument as they apply to literature. Research strategies, information literacy and proper documentation of courses will also be emphasized. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 105 F Introduction to Creative Writing <br> 3 Units <br> (C-ID ENGL 200)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
54 hours lecture per term. This course includes writing original fiction, drama, creative nonfiction, and poetry; study and application of forms, techniques, and literary elements of creative writing, and workshop experience, which provides an opportunity for analyzing and critiquing student writing. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ENGL 201 F Intermediate College Writing 3 Units

## (C-ID ENGL 105)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
54 hours lecture per term. This course is designed to develop academic writing and critical thinking skills beyond the level achieved in ENGL 100 F . The course will stress analysis and evaluation of sources, integration of a variety of rhetorical strategies, and research and documentation methods necessary for successful academic writing in essays, reports, critiques, exams, and research papers. Assignments are designed to address cross-curricular needs of students from a variety of majors. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 203 F Introduction to Dramatic <br> Literature

3 Units
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.

## Advisory: ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course focuses on reading, critical analysis, discussion and evaluation of selected plays from classical tragedy and comedy to contemporary drama. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 204 F Introduction to Poetry

3 Units
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course covers the reading and study of poems from ancient to modern times in English and in translation. Poets represented may include Blake, Dickinson, Donne, Eliot, Frost, Keats, Neruda, Paz, Shakespeare, Whitman, Yeats and Levertov. The focus of the course is on the analysis of poetic techniques and the interpretation of universal themes. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 207 F The Short Story

3 Units
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.

## Advisory: ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course involves the reading and discussion of selected short stories emphasizing analysis, interpretation, and evaluation. The course will focus on the short story as a genre. There will be an emphasis on the cultural and historical contexts of the texts covered and on the variety of writers and styles. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 208 F Introduction to Film Studies
3 Units
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture and 18 hours lab per term. This course is an introduction to the discipline of film analysis from aesthetic, cultural, and historical perspectives. Films from a variety of countries and historical periods may be viewed and analyzed. Analysis, interpretation, and writing techniques will be emphasized. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 209 F Intermediate Creative Writing

3 Units
Letter Grade or Pass/No Pass option.
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGLHF with a grade of " C " or better
Advisory: ENGL 102 F or ENGL 102HF
54 hours lecture per term. This course continues the study of writing original fiction, drama, and poetry and the study and application of forms, techniques, and literary elements of creative writing. Workshops and peer critiquing are emphasized. (CSU) (UC) (Degree Credit)

## ENGL 210 F Introduction to Language Structure and Use

Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100HF with a grade of "C" or better.
54 hours lecture per term. This course offers students an introduction to the nature and structure of human language and use, covering fundamental elements of phonology, phonics, morphology, etymology and pragmatics. This course will explore first and second language acquisition and development. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ENGL 211 F British Literature to 1800

## 3 Units

## (C-ID ENGL 160)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. The course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 211HF Honors British Literature to 18003 Units (C-ID ENGL 160)

Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This Honors-enhanced course is a survey of British literature from the Middle Ages to 1800 and emphasizes literary trends and historical backgrounds, as well as the development of English. This course includes readings by such writers as the Pearl Poet, Chaucer, Shakespeare, Lanyer, Donne, Milton, Behn, Swift, and Pope. This course emphasizes discussion and exchanges based on students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 212 F British Literature since 1800 (C-ID ENGL 165) <br> Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better. <br> Advisory: ENGL 102 F or ENGL 102HF. <br> 54 hours lecture per term. This course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 212HF Honors British Literature since 1800

3 Units
(C-ID ENGL 165)
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This Honors-enhanced course is a survey of literature written in English from 1800 to the present and will emphasize literary trends and historical backgrounds. Students will read and discuss fiction, poetry, drama, and prose from the Romantic, Victorian, Modern, Postmodern and Postcolonial eras in Great Britain and other countries of the Empire and Commonwealth. This course emphasizes discussion and exchanged based upon students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 214 F Contemporary Literature 3 Units
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF with a grade of "C" or better.
54 hours lecture per term. The course is a study of representative poetry, drama, and fiction, concentrating on but not limited to recognized world literary figures. The focus of the course is on each text's social and historical context; consideration is also given to the artistic techniques employed in each work. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 221 F American Literature to the <br> Civil War

3 Units

## (C-ID ENGL 130)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.

## Advisory: ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a survey of representative works by American writers from the Colonial period through the Civil War, emphasizing historic backgrounds of American fiction, poetry, and prose. The course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 221HF Honors American Literature to the Civil War

(C-ID ENGL 130)
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term This Honors-enhanced course is a survey of representative works by American writers from the Colonial period through the Civil War, emphasizing historical backgrounds of American fiction, poetry, and prose. This course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. This course emphasizes discussion and exchange based upon students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 222 F American Literature from the 3 Units Civil War to the Present

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. The course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 222HF Honors American Literature from the Civil War to the Present

3 Units

## (C-ID ENGL 135)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This Honors-enhanced course is a survey of representative works by American writers since 1865, and it emphasizes literary trends in and historic backgrounds of American drama, fiction, poetry, and prose. This course includes a consideration of Realism, Regionalism, Naturalism, Modernism, and Postmodernism through the study and critical discussion of representative writers central to the development of American literature. The emphasis is on the diversity of American subjects and styles. This course emphasizes discussion and exchange based on students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 224 F World Literature through the Early Modern Period

(C-ID ENGL 140)
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late-17th century. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 224HF Honors World Literature through 3 Units the Early Modern Period

## (C-ID ENGL 140)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.

## Advisory: ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, and other areas, from antiquity to the mid- or late17th century. This course fulfills the Multicultural Education Requirement for graduation. This course emphasizes discussion and exchange based on students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 225 F World Literature since the Early Modern Period

## (C-ID ENGL 145)

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

54 hours lecture per term. This course is a comparative study of selected works, in translation and in English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 225HF Honors World Literature since the Early Modern Period



3 Units

## (C-ID ENGL 145)

Prerequisite: ENGL 100 F or ENGL 100HF, with a grade of " C " or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This Honors-enhanced course is a comparative study of selected works, in translation and English, of literature from around the world, including Europe, the Middle East, Asia, Africa, and Latin America from the late 17th century to today. This course emphasizes discussion and exchange based on students' presentations and independent research. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, MULT CULT REQ

ENGL 234 F Introduction to Shakespeare 3 Units Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course is designed to introduce students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 234HF Honors Introduction to Shakespeare

Prerequisite: ENGL 100 F or ENGL 100 HF , with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
54 hours lecture per term. This Honors-enhanced introduces students to William Shakespeare's tragedies, comedies, histories and romances, as well as poetry. Students will develop an understanding of Shakespeare's plays, their original context and their relevance for today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 239 F Survey of Children's Literature 3 Units (C-ID ENGL 180)
Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course traces the historical and cultural development of children's literature throughout the world, from its multiple origins in the oral tradition to its contemporary emphasis on written excellence and pictorial artistry. The course focuses on comparative and critical approaches to the multicultural elements in nursery rhymes, poetry, fables, folk tales, myth, sacred literature, picture books, juvenile literature, and works of non-fiction, with emphasis on contemporary literature and the emergence of ethnic writers in children's literature. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 243 F Folklore and Mythology <br> 3 Units <br> Letter Grade or Pass/No Pass option.

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
54 hours lecture per term. This course is an introductory study of the folklore and mythology of representative cultures of the world through literature including such cultures as Greek, Norse, BabyIonian, American Indian, European, Mexican, Hindu and Chinese. The course will include a comparative study of mythic elements and patterns with their modern parallels in both Eastern and Western civilizations. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

ENGL 243HF Honors Folklore and Mythology 3 Units Prerequisite: ENGL 100 F or ENGL 100HF with a grade of " C " or better.
Advisory: ENGL 102 F or ENGL 102HF with a grade of "C" or better.
54 hours lecture per term. This course is an introductory study of the folklore and mythology of representative cultures of the world through literature including such cultures as Greek, Norse, Babylonian, American Indian, European, Mexican, Hindu, and Chinese. The course will include a comparative study of mythic elements and patterns with their modern parallels in both Eastern and Western civilizations. This honors section is conducted as a seminar and relies on independent student research done outside of class. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 245 F The Bible as Literature

3 Units
Letter Grade or Pass/No Pass option.
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF
This course involves the study of the English Bible as literature, focusing on its literary forms and techniques. The course emphasizes analysis of such forms as narrative prose, poetry, letters, and wisdom literature. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 246 F The Novel

3 Units
Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
54 hours lecture per term. This course is a study of the novel as an art form, concentrating on representative novels illustrating the richness of the form. Emphasis will be placed on developing the students' analytical skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 248 F Science Fiction 3 Units

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.

## Advisory: ENGL 102 F or ENGL 102HF.

54 hours lecture per term. This course is a survey of science fiction and speculative fiction. This course emphasizes the literary, social, economic, cultural and environmental contexts of representative works and traces the development of the genre from early scientific romances and speculative works through current trends. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 249 F Survey of Chicano/a Literature 3 Units Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course offers students a survey of Chicano/a literature from its beginnings in the nineteenth century to the present day. It emphasizes the literary, historical, social, political and cultural context of Chicano/a fiction, poetry, theater and prose. Students can expect to read major literary classics as well as the works of previously less recognized writers. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 251 F Survey of Native American <br> 3 Units Literature

Prerequisite: ENGL 100 F with a grade of " C " or better or ENGL 100 HF with a grade of "C" or better.
Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course is a survey of Native American literary tradition from its beginnings as an oral tradition to contemporary works by representative authors. This course emphasizes the historical, cultural and literary context of work written by Native American authors in a variety of genres including poetry, fiction, autobiography, told-to autobiographies, oral tradition, folklore and mythology, speeches, and mixed genres. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 254 F Intermediate Creative Writing: 3 Units
Poetry
Prerequisite: ENGL 105 F with a grade of "C" or better Advisory: ENGL 102 F or ENGL 102HF
54 hours lecture per term. This course continues the development of creative writing skills with an emphasis on poetry. Students will write original poetry, study forms, techniques, and literary elements of poetry including classical poetic forms and the freeverse tradition, and study non-fiction essays related to the writing of poetry. (CSU) (UC) (Degree Credit) AA GE

ENGL 255 F Intermediate Creative Writing: 3 Units
Fiction
Prerequisite: ENGL 105 F with a grade of "C" or better. Advisory: ENGL 102 F or ENGL 102HF.
54 hours lecture per term. This course includes writing original fiction; study and application of forms, techniques and literary elements of fiction including classic short story and novel forms; study of modern, less traditional forms such as creative non-fiction; study of essays related to the writing of fiction; and workshop experience which provides an opportunity for analyzing and critiquing student writing. (CSU) (UC) (Degree Credit) AA GE

## ENGL 280 F Language Arts Tutoring Practicum <br> Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100 HF with a grade of "C" or better and recommendation from an English instructor. <br> Corequisite: ENGL 103 F or ENGL 103HF, or ENGL 104 F, or ENGL 201 F. <br> This course provides training for students to acquire specific knowledge, skills and techniques for tutoring in writing and provides strong recommendation for future employment in Fullerton College's Writing Center. Supervised, "hands-on" tutoring lab hours are part of instruction. (CSU) (Degree Credit)

## ENGL 299 F English Independent Study 1 Unit

Prerequisite: ENGL 100 F with a grade of "C" or better or ENGL 100HF with a grade of "C" or better.
54 hours independent study per term. This course will provide advanced students the opportunity for independent study that will enrich their academic experience in English. Students may choose to expand and deepen their knowledge in areas of composition, language, literature or creative writing, or special topics not covered in existing courses offered in English. Students will attend weekly arranged individual conferences or group meetings. (CSU) (UC review required) (UC Credit Limitation depending upon course content) (Degree Credit)

## English-as-a-Second-Language (ESL)

Humanities Division
Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## English-as-a-Second-Language Courses

## ESL 025 F Basic English Grammar 3 Units <br> <br> Pass/No Pass only.

 <br> <br> Pass/No Pass only.}54 hours lecture per term. This course is designed to increase students' knowledge and usage of verb tenses, sentence structure, and other basic grammatical topics. It will develop grammatical accuracy in listening, speaking, reading and writing.

## ESL 029 F Idiomatic Expressions for Students 2 Units of ESL

Pass/No Pass only.
36 hours lecture per term. This course provides instruction in common American English idioms, phrasal verbs, slang and taboo terminology, proverbs, and other fixed expressions. Additional topics include context clues, dictionary use, relaxed speech, and cultural aspects of idiomatic expressions. The course is designed for high beginning to intermediate ESL students.

ESL 035 F Intermediate English Grammar
Pass/No Pass only.
54 hours lecture per term. This course is designed to increase students' knowledge and usage of complex verb tenses and sentence structure. It will also develop grammatical competency in reading and writing.

## ESL 036 F Basic Listening and Speaking 4 Units

 Pass/No Pass only.72 hours lecture per term. This course is designed to improve beginning students' ability to speak and understand English in simple every-day and academic situations. It will provide practice in basic oral communication functions as well as beginning academic listening and speaking skills.

## ESL 038 F Fundamentals in American English 2 Units Pronunciation

Pass/No Pass only.
36 hours lecture per term. This course is designed to develop basic pronunciation, to establish better oral control of language, and to build confidence in simple oral expression.

## ESL 039 F Vocabulary Expansion Techniques: Students of ESL

Pass/No Pass only.
54 hours lecture per term. This course will provide instruction in vocabulary expansion principles and techniques for high beginning to intermediate students of English as a second language (ESL). Topics include context clues, word parts, mnemonic devices, word relationships, and dictionary use. Also emphasized are grammatical, collocational, and pragmatic restrictions on vocabulary.

## ESL 045 F Advanced English Grammar

3 Units
Pass/No Pass only.
54 hours lecture per term. This course is designed to increase students' knowledge and usage of advanced English grammar, to improve grammatical accuracy in writing and to develop strong editing skills.

## ESL 046 F Intermediate Conversation

## 2 Units

## Pass/No Pass only.

36 hours lecture per term. This course is designed to improve students' ability to comprehend and communicate in English on a variety of everyday topics. Students will develop and practice techniques for greater composure and confidence in oral expression.

## ESL 047 F Academic Preparation for American English Students

Pass/No Pass only.
Advisory: ESL skills evaluation.
36 hours lecture per term. The course is designed to orient second language students to college life. The course includes information about academic vocabulary, academic textbooks, and college instructor expectations; instruction in exam taking and study skills; and explanation of cultural differences in relation to the college setting.

## ESL 048 F Intermediate American English Pronunciation

Pass/No Pass only.
36 hours lecture per term. This course is designed to develop intermediate pronunciation skills, to structure more style in oral language, and to build confidence in basic oral expression.

## ESL 049 F Advanced Academic Vocabulary for Non-Native Speakers

## Pass/No Pass only.

54 hours lecture per term. This course provides instruction in academic vocabulary for advanced students of English as a second language (ESL). Emphasis is on the acquisition and consolidation of an expanded university-level vocabulary. Also presented are academic vocabulary learning principles and techniques including context clues, reference works, word parts, derivational forms, as well as grammatical and collocational restrictions on lexical items.

## ESL 056 F Advanced Conversation: <br> Academic Topics

2 Units
Pass/No Pass only.
36 hours lecture per term. This course is designed to improve advanced students' comprehension and oral communication in English on a broad range of academic subjects.

## ESL 058 F Advanced American English Pronunciation

Pass/No Pass only.
36 hours lecture per term. This course is designed to refine pronunciation, to reduce foreign accent, and to build confidence in complex oral expression.

## ESL 076 F Multiple Skills Preparation for Non-Native Speakers: Reading, Speaking and Vocabulary

Pass/No Pass only.
Prerequisite: ESL skills evaluation.
90 hours lecture and 18 arranged hours lab per term. This course is designed for low intermediate and intermediate non-native speakers of English. This course provides intensive instruction in reading, oral communication, and vocabulary development. Students may enroll in ESL 076 F and ESL 078 F concurrently.

## ESL 078 F Multiple Skills Preparation for Non-Native Speakers: Listening, Writing and Grammar <br> Pass/No Pass only. <br> Prerequisite: ESL skills evaluation.

90 hours lecture and 18 arranged hours lab per term. This course is designed for low-intermediate and intermediate non-native speakers of English. This course provides intensive instruction in listening comprehension, sentence and paragraph level writing, and basic grammar. Students may enroll in ESL 076 F and ESL 078 F concurrently.

## ESL 080 F Fundamental Listening, Speaking, Reading, and Writing

Pass/No Pass only.
Prerequisite: ESL skills evaluation.
72 hours lecture and one hour arranged lab per term. Designed for high-beginning students of English, this course provides practice in all four language skills - listening, speaking, reading, writing, with emphasis on listening comprehension, oral communication, basic reading skills, and basic grammar and writing skills.

## ESL 081 F Low Intermediate English for Non-Native Speakers

Pass/No Pass only.
Prerequisite: ESL 080 F with a grade of "Pass" or ESL skills evaluation.
90 hours lecture and 18 hours lab per term. This course is designed for low-intermediate students of English, and it provides instruction in listening comprehension, oral communication, reading, grammar, and simple paragraph writing.

## ESL 082 F Intermediate English for <br> 5 Units Non-Native Speakers of English

Pass/No Pass only.
Prerequisite: ESL 081 F with a grade of "Pass" or ESL skills evaluation.
90 hours lecture and 18 arranged lab hours per term. This course is designed for intermediate non-native speakers of English. This course provides instruction in listening comprehension, oral communication, grammar, reading, paragraph writing, and vocabulary development.

## ESL 083 F High Intermediate Reading and <br> 5 Units Writing for Non-Native Speakers

Letter Grade or Pass/No Pass option.
Prerequisite: ESL 076 F with a grade of "Pass" and ESL 078 F with a grade of "Pass" or ESL skills evaluation.
90 hours lecture and 18 arranged hours lab per term. This course, designed for high-intermediate students of English, provides instruction in critical reading and expository paragraph writing. Application of grammar concepts, sentence variety, and vocabulary development are also emphasized. The course offers continuing practice in listening and speaking skills.

## ESL 184 F Low Advanced Academic English for Non-Native Speakers

Letter Grade or Pass/No Pass option.
Prerequisite: ESL 083 F with a grade of " C " or "Pass" or ESL skills evaluation.
90 hours lecture and 18 arranged lab hours per term. This course is designed for low-advanced students of English and this course provides instruction in academic reading, critical thinking, and short essay writing, along with advanced grammatical concepts. This course offers continuing practice in listening and speaking skills. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 185 F Advanced Academic English for Non-Native Speakers <br> Letter Grade or Pass/No Pass option.

Prerequisite: ESL 184 F with a "C" or better or "Pass" or skills evaluation.
90 hours lecture and 18 hours arranged lab per term. This course is designed for advanced students of English and this course primarily emphasizes critical reading and expository essay writing; the course promotes continued practice in listening comprehension and oral communication. This course fulfills the reading requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 186 F College Writing Preparation for <br> 5 Units Non-Native Speakers

Letter Grade or Pass/No Pass option.
Prerequisite: ESL 185 F with a grade of "C" or "Pass" or ESL Skills Evaluation.
90 hours lecture per term. This course is designed to prepare advanced students for college level writing, and provides review of English fundamentals and practice in college-level reading, critical thinking, expository essay writing and basic research skills. The course also offers continued practice in special grammar and sentence structure problems common to second language learners. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 189 F Advanced Reading for Non-Native Speakers

Letter Grade or Pass/No Pass option.
Prerequisite: ESL 184 F with a grade of " C " or "Pass" or ESL skills evaluation.
54 hours lecture per term. This course will help prepare English language learners for academic reading at the college level. Particular emphasis will be placed on those problems faced by non-native English speakers. Students will expand their skills in critical thinking, analysis, vocabulary development, and reading comprehension. Reading material will include content area textbooks, newspaper and magazine articles, and other non-adapted pieces of writing. This course satisfies the Reading Graduation requirement for the Associate degree. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 190 F Advanced Accelerated English for Non-Native Speakers of English <br> Letter Grade or Pass/No Pass option.

Prerequisite: ESL 184 F with a grade of "C" or "Pass" or recommended score on the ESL Skills Evaluation.
Advisory: ESL 189 F.
90 hours lecture and 18 hours arranged lab per term. This course is designed for advanced students of English who are non-native speakers and are interested in accelerating their progress to col-lege-level writing. This intensive course primarily emphasizes critical reading and expository essay writing and basic research skills in preparation for college-level writing. (CSU) (UC) (Degree Credit)

# Environmental Sciences (ENVS) 

Natural Sciences Division<br>Office: Bldg 400, Room 411-714.992.7043<br>Dean: Richard Hartmann<br>Website: natsci.fullcoll.edu

## Environmental Sciences Courses

## ENVS 105 F Environmental Biology <br> 3 Units

54 hours lecture per term. This course is for non-science majors and introduces the student to the principles of organismal biology, framed in the context of Earth's natural environments. The course examines the interactive relationships between the environment and biological phenomena on all levels. In this exposé, the course explores Earth's environmental systems including: global climate system, atmospheric system, aquatic systems, and terrestrial and aquatic ecosystems. The course highlights life's influence on these systems in terms of core biological phenomena including: molecular biology, cellular biology, cellular respiration, photosynthesis, genetics, ecology, evolution, and biodiversity. The course analyzes how both robust and delicate biological systems adjust to a variety of human influences to produce complex environmental transformations. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENVS 105LF Environmental Biology Lab 1 Unit

Advisory: Concurrent enrollment or completion of ENVS 105 F with a grade of " C " or better.
9 hours lecture and 27 hours lab per term. This course reveals core biological principles framed in lab and field investigations. Exercises focus on the interactive relationships between biological and physical phenomena on all levels (molecular, cellular, organismal, and ecological). Lab investigations promote the skills of objective experimental design, systematic experimental execution, and accurate results analysis. Field investigations strengthen students' powers of observation in the natural world. Skill development includes making thorough empirical observations, situational awareness of the interactive dynamics of living and non-living components in natural settings, and becoming knowledgeable of local wild species. The course emphasizes the fundamental utility of reason and empiricism in scientific discovery and understanding. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ENVS 106 F Conservation Biology

3 Units
54 hours lecture per term. This course is for non-science majors. This course investigates the growing crisis facing the earth's biological diversity. This course draws from the sciences of genetics, reproductive biology, embryology, evolutionary biology, biogeography, ecology and anthropology. Students will learn core biological principles as they pertain to the current and swift decline in global biodiversity. This course addresses the variety of ways that biological science is being applied now to conserve biodiversity. This is a biology course for non-science majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENVS 126 F Natural History of California 3 Units

54 hours lecture per term. This course is designed to acquaint students with the diversity of California's natural geographic, biologic, and geologic regions. After introductory units on basic ecology and basic geology, each of the natural regions of the state is discussed with an emphasis on the common, conspicuous, or unique plants, animals, and geological features. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENVS 126FF Natural History of California <br> 2 Units Field Lecture

Corequisite: ENVS 126 F with a grade of "C" or better. 36 hours lecture per term. This course is designed to accompany ENVS 126 F and consists of two weekend field trips involving overnight camping. Regions are selected that illustrate California's remarkable diversity. One field trip, emphasizing mountain habitats, is taken to a selected site in the Sierra Nevada or one of the local mountain ranges. The other trip, emphasizing a desert experience, is taken to a site in the local desert such as Anza Borrego Desert State Park, Joshua Tree National Monument, or the Mojave National Preserve. (CSU) (UC) (Degree Credit)

ENVS 140 F Birds of Southern California 1 to 2 Units 18-36 hours lecture per term. This is a field-oriented course designed to introduce wildlife enthusiasts to the remarkable diversity of birds in Southern California. Students will learn how to identify birds using visual, auditory, and habitat clues in the field. Proper use of field guides, binoculars and spotting scopes, and birding ethics will be emphasized. Although the primary emphasis of this course is placed on bird identification, the ecological context for each species also will be treated, including: ecological niche, life history patterns, migratory patterns, and special adaptations. Field trips are required and may include day trips and/or overnight weekend camping trips. (CSU) (Degree Credit)

## ENVS 141 F Desert Natural History <br> 1 Unit

18 hours lecture per term. This course applies ecological principles to investigate desert environments. Activities include lecture on ecological principles and field study in selected California desert ecosystems. Lectures will provide an overview of field natural history concepts, including identification of plants and animals, adaptations to arid environments and ecological interrelationships. Students are trained in the use of various field study techniques and in the use of specific scientific equipment. Field trips are required. (CSU) (Degree Credit)

## ENVS 142 F Geology and Marine Biology of the Channel Islands

36 hours lecture per term. This course involves lecture and field study of geological and marine biological processes and features in the Channel Islands region of Southern California. Lectures will examine how to recognize key geologic landforms and marine habitats in the field. Particular attention will be focused on the relationship between geology and the marine life. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

ENVS 143 F Baja California Field Studies 2 Units
36 hours lecture per term. This course involves lecture and on-site field study of the ecology and biogeography of selected biological communities in Baja California, Mexico. Lectures will cover an introduction to the natural history and unique adaptations of native plants and animals occurring in coastal intertidal, desert riparian habitats. Impacts of humans on these communities will be observed. Lectures will prepare students for planning and executing field projects using appropriate scientific methods and instrumentation. A camping field trip to Baja, California is required. Students will arrange personal transportation. (CSU) (Degree Credit)

## ENVS 144 F Marine Biology of Baja California 2 Units

 36 hours lecture per term. This course involves lecture and field study of the marine biology of Baja, California. Lectures will examine the particular physical and biological features that structure this unique marine environment. The factors shaping the Gulf of California versus Pacific coasts will be discussed, including the roles of tidal and wind-driven upwelling in dampening El Niño effects in the Gulf. Students are trained in various field study techniques data analysis, and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)
## ENVS 145 F Marine Vertebrate Ecology of the 1 Unit Channel Islands

18 hours lecture per term. This course involves lecture and field study of the ecology of marine mammals, seabirds, and fish in the Channel Islands area. Lectures will examine the physical and biological features that structure the marine environment in the region, along with the adaptations and ecological relationships of marine vertebrates living there. Students are trained in various field study techniques, data analysis, and the use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ENVS 170 F Astrobiology <br> 3 Units

Advisory: BIOL 101 F or completion of college level general biology course with a grade of "C" or better or completion of advanced placement high school biology with a score of "3" or better on the Placement Exam.
54 hours lecture per term. This course for science majors and science enthusiasts applies principles of biology and ecology to remarkable new world environments. This course considers the prospects for life in other worlds. This science explores robust biological operations in extremely unusual environments. Based on this knowledge, students are challenged to apply a flexible living model to newly-discovered environmental circumstances on other words such as Mars, the moons of Jupiter, and extra solar planets. In the process, students are obliged to reinterpret Earth-based biological paradigms and develop a broader theoretical synthesis. As a result, the student achieves a deeper understanding of the essence of life, and greater intellectual agility for considering life elsewhere and here on Earth. (CSU) (Degree Credit)

## ENVS 196 F Regional Field Studies: Environmental Sciences

18-36 hours lecture per term. Classes are conducted in the short course format, and require participation in fieldwork in a selected biological community in southwestern United States, Mexico, or Costa Rica. Field studies are designed to develop a strong foundation in ecological facts and principles. Emphasis is placed on identifying and studying ecological issues through careful observation, data collection and analysis. Students are trained in various field study techniques and the use of science instruments. Topics include auto-ecological and synecological studies of biological communities, monitoring abiotic factors, field identification of flora and fauna, and human impact on the study area. (CSU) (Degree Credit)

## ENVS 299 F Environmental Sciences Independent Study

54 hours independent study per term. This course involves field/ laboratory investigations and/or internships with the guidance by faculty. This course is mainly for majors in environmental sciences who wish to build meaningful, self-directed experience in the discipline through individual study and small group conferences. Students may pursue independent field and/or laboratory investigations, subject to faculty approval and supervision. Outside reading and a written report will be required. Hours to be arranged. Elective credit in the sciences area. (CSU) (Degree Credit)

## Ethnic Studies (ETHS)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Ethnic Studies Courses

## ETHS 101 F American Ethnic Studies 4 Units

54 hours lecture and 54 hours lab per term. This course serves to broaden the ethnic and racial perspective of students interested in American culture and society. Utilizing an interdisciplinary approach that represents the disciplines of anthropology, sociology, psychology, political science, and history, as well as community resource people, the course offers an in-depth analysis of ethnic minorities in the United States. Emphasis is given to Indians, Black, Chicano, and Asian Americans, their relationships with each other and the rest of American society and government, past and present. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ETHS 118 F Introduction to BilingualCrossculturalism

Letter Grade or Pass/No Pass option.
54 hours lecture per term. This course will acquaint the student with a conceptual framework needed to explore and develop a cultural consciousness and a set of practical skills required to function more effectively in the increasingly complex and cross-cultural environments of our contemporary communities, classrooms, offices and other workplaces. Special emphasis will be placed on how we cross linguistic, cultural and color lines and the possible tensions, conflicts/'clashes' which abound in a multiethnic state still struggling to become multicultural. This course fulfills the Multicultural Education requirements for graduation. (CSU) (Degree Credit) AA GE, MULT CUL REQ

## ETHS 129 F Introduction to African-American <br> 3 Units Studies

54 hours lecture per term. This survey course presents the student with an examination of the African American experience, and traces the role and contributions of Black people in the development of the United States. Included are such major topics as origins in Africa and the historical development of the Black community and culture as they evolved in the United States. An emphasis will be placed on the basic terms and references that give substance to Afro-American studies, as well as contemporary Black issues. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ETHS 130 F African-American History I

3 Units
54 hours lecture per term. This course is a survey of the African-American experience in the United States from its African roots to 1865 , emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the trans-Atlantic slave trade, the process of enslavement in the Americas, slave life on the plantation, slave resistance, the socio-economic conditions of free blacks in the United States, the politico-economic dispute regarding slavery and its consequences in the outbreak of the American Civil War, and the emancipation of the enslaved black population. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ETHS 131 F African-American History II 3 Units

54 hours lecture per term. This course is a survey of the African-American experience in the United States from the Era of Reconstruction to the present, emphasizing the roles of African Americans in the political, social, and economic development of American society. Topics covered include: the various phases of the Reconstruction period; black life in the "New South"; the debates over educational and socio-economic progress; the migrations to the North and West; the struggles of the black working class; the impact of the two world wars on black life; the Civil Rights Movement; militancy during the 1960s; and the black experience in contemporary America. (CSU) (UC) AA GE, CSU GE, IGETC

## ETHS 140 F Introduction to Chicano/Chicana Studies

54 hours lecture per term. This course is designed to acquaint students with the most significant social, political, economic and historic aspects of the Chicano/Chicana experience in the United States. The course is interdisciplinary in nature and will critically analyze the societal context in which Chicanos/Chicanas have sought to maintain their culture. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ETHS 141 F Chicana/Chicano History

3 Units
54 hours lecture per term. This course provides the student with the social, political and cultural roots of the Chicana/Chicano. The class traces the origins of the Chicana/Chicano from their indigenous African and Spanish beginnings to the present. An interdisciplinary approach is used to develop the understanding of this human experience. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ETHS 142 F The Chicano-a/Latino-a in Contemporary Society

54 hours lecture per term and 20 additional hours of service learning per term. This course will introduce the student to the contemporary characteristics and significant contributions of the Chicano-a/Latino-a community utilizing the models and paradigms developed within Chicano studies, viewed as an interdisciplinary area of study. The definitions of, and interrelationships among key concepts and/or terms such as a people, nationality, culture, ethnicity, class, race, gender, acculturation, assimilation, domination and liberation will be discussed. The intent is to impart specific information about Chicanos-as, introduce theory, define key concepts, discuss significant contemporary issues, and explore future implications. There will be comparisons and contrasts with other Hispanic/Latino-a groups in the United States. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ETHS $\mathbf{1 6 0}$ F History of the Native Americans $\mathbf{3}$ Units
54 hours lecture per term. This course is a historical examination of the native peoples of the Americas from their early beginnings to the present. A socio-cultural approach is utilized to develop a better understanding of the first Americans. This course fulfills the Multicultural Education requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ETHS 170 F Introduction to Asian Pacific American Studies

54 hours lecture per term. This course focuses on the experiences of various Asian and Pacific Islander groups utilizing the lens of race, class, gender and sexuality. Students will engage in community studies, critical theory on race, sociological methods, media studies and the arts to explore the rich and diverse Asian and Pacific Islander communities. The course will start with current immigration history and end with contemporary issues and topics within API communities, i.e. garment industry, sexuality, antiAsian bias/violence, unionization, and gender stereotypes. The course will connect historical issues with contemporary phenomena. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ETHS 171 F Asian Pacific American History 3 Units

54 hours lecture per term. This course is a survey of the Asian and Pacific Islander American experience in the United States from the mid-19th century to the present day. Elements of Asian and Pacific Islander American culture (i.e., art, literature, music and photography) will be presented in a historical perspective. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ETHS 199 F Ethnic Studies Independent Study 1 Unit 54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

## ETHS 299 F Ethnic Studies Advanced Independent Study

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the Social Sciences through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

## Fashion (FASH)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Fashion Courses

## FASH 010 F Clothing Construction Studio 1 Unit

Pass/No Pass only.
Corequisite: FASH 101 F with a grade of " C " or better.
54 hours lab per term. This course provides supervised open lab time for students to develop clothing construction, patternmaking and design skills by working on individualized projects.

FASH 045 F Swim and Active Wear
1 Unit
9 hours lecture and 27 hours lab per term. In this course, students will learn the techniques needed to create commercial quality swimwear and active wear using both industrial and home equipment. (Degree Credit)

## FASH 050 F Careers in Fashion

Letter Grade or Pass/No Pass option.
18 hours lecture per term. This course is an introduction to a variety of career opportunities in designing or creating clothing. Personal qualities and skills needed for various career choices as well as the responsibilities, tools, and working environment will be covered for retailing, apparel manufacturing, couture, wardrobe consulting, theatrical, and entrepreneurial fields. (Degree Credit)

## FASH 060 F Professional Image

2 Units
Letter Grade or Pass/No Pass option.
36 hours lecture per term. This course will teach students the skills needed to get a job, develop a strong work ethic, become a valuable employee, and how to dress in a professional manner. The subject areas covered are: time management, goal setting, interview skills, wardrobe planning, personal appearance for men and women, developing skills to work well with others, problem solving, professional etiquette, and self-promotion. (Degree Credit)

## FASH 080AF Designing \& Sewing Leather 2 Units

 Prerequisite: FASH 101 F with a grade of "C" or better.18 hours lecture and 54 hours lab per term. This course offers students the skills and techniques needed to design and sew fashionable apparel and accessories of leather and suede.

FASH 085 F Bridal and Special Occasion Wear 2 Units Prerequisite: FASH 201 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course covers specialized advanced construction techniques used in the manipulation of special and veil fabrics. The construction of advanced under-support techniques for bridal and special occasion wear will be discussed. The resources for these fabrics, notions and embellishments used in the assembly of special occasion wear will also be included. (Degree Credit)

## FASH 088 F CAD for Apparel

2 Units
Prerequisite: FASH 186 F and FASH 284 F, with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course, students will use computer aided design (CAD) software as used in the fashion industry. The development of technical packages including garment construction specs, design and fashion illustrating (Degree Credit)

## FASH 090 F Creative Serging: Overlock 2 Units Machine

18 hours lecture and 54 hours lab per term. This course is designed for the student to learn the use and care of the modern serger machine. The focus is on the student learning to create an entire wardrobe quickly with the serger. The student will construct samples and garments of children's clothing, men's wear, swimwear and active wear, lingerie, and women's clothing for day and evening. (Degree Credit)

FASH 093 F Pattern Alteration \& Fitting
Letter Grade or Pass/No Pass option.
18 hours lecture and 54 hours lab per term. A class for dressmaking and design majors who need to make garment pieces fit each other and the body that wears them by altering a commercial pattern to body measurements and making a basic pattern to be used as a basic block for adjusting styles and designing clothing. Students enrolled in the second semester of FASH 093 F will have added opportunity to fit a variety of figures. (Degree Credit)

FASH 096 F Exploring a Home-Based Business 2 Units 36 hours lecture per term. This course explores the feasibility of using skills to produce income at home, and investigates the organization and management needed for a home-based business. Personal, financial, and management considerations are included. (Degree Credit)

## FASH 101 F Basic Sewing Techniques (formerly Clothing I)

Pass/No Pass only.
18 hours lecture and 54 hours lab per term. This course is designed for the beginning sewer. Basic clothing construction techniques used in the apparel industry. Appropriate methods for quality construction using a variety of fabrics. This course will include custom and speed techniques for developing skills in clothing construction, various techniques for obtaining perfect fit of a garment plus professional methods for constructing clothes. (CSU) (Degree Credit)

## FASH 107 F Apparel Analysis 3 Units

54 hours lecture per term. This course will study the psychological and sociological significance of clothing and apply the principles and elements of design in the selection of clothing to enhance the individual. (CSU) (Degree Credit)

## FASH 108 F Flat Pattern Methods and Design I

## (formerly FASH 108AF)

18 hours lecture and 54 hours lab per term. In this course, students will learn to design and make garments by apparel industry techniques by manipulating paper patterns, thereby translating a designers sketch or concept into a marketable garment. (CSU) (Degree Credit)

## FASH 109 F Flat Pattern Methods and Design II

(formerly FASH 108BF)
Prerequisite: FASH 108 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course, students will make patterns for apparel using basic techniques learned in FASH 108 F and adding more advanced concepts for creating wearable clothing. (CSU) (Degree Credit)

## FASH 110 F Flat Pattern Methods and Design III <br> (formerly FASH 108CF)

Prerequisite: FASH 109 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course will cover the development of patterns on the computer for fashion forward apparel using techniques learned in FASH 109 F, adding more advanced concepts. (CSU) (Degree Credit)

## FASH 145 F Field Studies in Fashion

1 Unit
18 hours lecture per term. This course will acquaint students with the world of fashion through field trips to manufacturers, designers, the California Mart, different types of retail stores, museums, fashion publications and fashion shows. (CSU) (Degree Credit)

## FASH 150 F Introduction to the Fashion Industry

54 hours lecture per term. This course explores four levels of the fashion industry including the development of fashion, fashion designers, apparel producers, retailers, and fiber and fabric producers. (CSU) (Degree Credit)

FASH 152 F Ready-To-Wear Evaluation 3 Units
54 hours lecture per term. This course allows students to learn to analyze and evaluate the construction, appearance, pricing, sizing and fit of ready-to-wear and of price and quality indicators for selected accessories. Terminology associated with construction, production, and apparel styles will be included. (CSU) (Degree Credit)

## FASH 183 F Fashion Marketing <br> 3 Units

Prerequisite: FASH 150 F with a grade of "C" or better.
54 hours lecture per term. This course will cover the principles behind consumer buying habits. Emphasis is placed on understanding consumer behavior of various socioeconomic and ethnic groups and how to market to them. (CSU) (Degree Credit)

## FASH 186 F Workroom Sketching

2 Units
Letter Grade or Pass/No Pass option.
18 hours lecture and 54 hours lab per term. This is a course in drawing techniques for garment workroom sketches. Emphasis is placed on developing skills in sketching garments with complete seam and embellishment details in the desired scale for use in the workroom of a manufacturer or custom shop. Drawing ability not necessary. (CSU) (Degree Credit)

## FASH 188 F Apparel Production

2 Units
Prerequisite: FASH 108 F and FASH 050 F with a grade of "C" or better.
Corequisite: FASH 297 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course provides an opportunity for students to become familiar with a major segment of the fashion industry. It will prepare students for a job as a design room assistant and includes layout and cutting techniques, power machines, professional pressing techniques, quality control, and production procedures, grading, sorting, and labeling. (CSU) (Degree Credit)

FASH 190 F Pattern Grading
2 Units
Prerequisite: FASH 108 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course teaches students to "size up" and "size down" a fashion pattern for all size ranges in misses, women's, junior, children, and men's wear using commercial industry techniques.

FASH 196 F International Fashion Studies 3 Units Letter Grade or Pass/No Pass option.
45 hours lecture and 9 hours lab per term. This course will introduce the international fashion industries of the world to the student of American fashion. Class members will tour selected fashion houses, textile mills, leading department stores, typical shops, and museums. Sixteen hours of lecture will precede departure to prepare the student for the travel experience. (CSU) (Degree Credit)

FASH 199 F Fashion Independent Study 1 to 2 Units Prerequisite: Completion of at least one semester in the area of study.
54-108 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of fashion through individual study. Projects must have instructor approval prior to enrollment. At the completion of the project, a written report is required. (CSU) (UC review required.) (Degree Credit)

## FASH 201 F Clothing II

## 2 Units

Prerequisite: FASH 101 F with a grade of " C " or better or two years high school clothing construction.
18 hours lecture and 54 hours lab per term. This course develops advanced skills in clothing construction including custom couture techniques, the use of special fabrics such as plaids, lace, sheers, leather and pile fabrics, and methods of individualizing clothing with structural and applied designs such as piping, quilting, applique and beading. (CSU) (Degree Credit)

## FASH 202 F Visual Merchandising <br> 2 Units

18 hours lecture and 54 hours lab per term. This course covers the role of display merchandising principles and design principles that are used to create retail displays. The care and handling of equipment will be discussed and demonstrated. Students will practice display techniques with windows and showcases and learn to develop a visual merchandising presentation. The students will be exposed to lectures and guest speakers on the topic of career opportunities in this field. (CSU) (Degree Credit)

## FASH 205AF Tailoring <br> 2 Units

Prerequisite: FASH 201 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course presents contemporary and traditional custom tailoring techniques applicable to women's and men's tailored garments such as suits and coats. (CSU) (Degree Credit)

## FASH 206 F Textiles

3 Units
54 hours lecture per term. This course surveys and studies fabrics used in clothing and household goods, the production of fibers through fabric manufacturing and finishing. Use, care, and suitability for various end uses will be covered. (CSU) (UC) (Degree Credit)

## FASH 209 F Draping (formerly FASH 209AF)

18 hours lecture and 54 hours lab per term. In this course, students will learn to manipulate fabrics on a dress form to create designs without the use of drafter pattern. An exploration of the many possibilities of draping will be made using a variety of fabrics. (CSU) (Degree Credit)

## FASH 211 F Draping - Advanced (formerly FASH 209BF)

Prerequisite: FASH 209 F with a grade of "C" or better. 18 hours lecture and 54 hours lab per term. In this course, students will learn advanced techniques on the manipulation of fabrics on a dress form to create designs without the use of drafted pattern. An exploration of the many possibilities of advanced draping will be made using a variety of fabrics. (CSU) (Degree Credit)

## FASH 220 F Retail and Fashion Buying

3 Units
54 hours lecture per term. This course offers a study of the principles of merchandise buying for resale in independent stores, major department stores, chain stores and centralized buying. The lectures will cover retail-buying principles for fashion merchandise, staples and soft merchandise lines. The lecture topics covered are: consumer motivation, merchandise planning and selection, sourcing, legal and trade regulation pricing, vendor relations, pricing analysis, classification systems, merchandise management and control. There will be field trips and guest lectures from major retailers to discuss career opportunities. (CSU) (Degree Credit)

## FASH 221 F Advanced Retail and Fashion <br> Buying

Prerequisite: FASH 220 F with a grade of "C" or better. 54 hours lecture per term. This course will prepare students in advanced concepts and principles of buying and merchandising fashion goods. This course expands on retail merchandising calculations and analysis for fashion apparel buying. (CSU) (Degree Credit)

## FASH 242 F History of Costume

3 Units
54 hours lecture per term. This course surveys the evolution of clothing styles through history from Egyptian to the contemporary period. Emphasis will be placed on the relation of recurring styles to contemporary fashion, the effect of social and political changes on clothing, and on clothing as a reflection of culture. (CSU) (Degree Credit)

FASH 243 F Theatrical Costume Construct
2 Units

## Corequisite: FASH 209 F or FASH 242 F.

18 hours lecture and 54 hours lab per term. This course is recommended for fashion design and Theatre Arts majors. This course covers the techniques and procedures for constructing costumes for theatrical productions including garments, masks and accessories. (Not currently being offered -- if interested, contact Division Office or see THEA 171 F.) (CSU) (UC) (Degree Credit)

## FASH 244 F Ethnic Costume

## 3 Units

Letter Grade or Pass/No Pass option.
54 hours lecture per term. This course is a survey of clothing worn as the national dress and daily wear of the indigenous peoples and the apparel of religious cultures in the developed and underdeveloped areas of the world and in the United States. Emphasis is on its influence on contemporary clothing. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) AA GE, MULT CULT REQ

## FASH 250 F Fashion Promotion <br> 3 Units

Prerequisite: FASH 150 F with a grade of "C" or better.
54 hours lecture per term. This course provides an overview of sales promotion activities of fashion retailers and manufacturers. Areas covered are advertising, publicity, coordinating fashions, and producing fashion shows. (CSU) (Degree Credit)

## FASH $\mathbf{2 6 0}$ F Fashion Forecasting



## 2 Units

18 hours lecture and 54 hours lab per term. In this course, the students will study the techniques and procedures for identifying and forecasting current fashion trends. Students will learn to understand the role of the fashion forecaster and how to detect those trends which may look to make another appearance, as well as any new trends which may be about to emerge. Included in this course will be the viewing of trend forecasting services. (CSU) (Degree Credit)

## FASH 284 F Fashion Design (formerly FASH 284AF)

18 hours lecture and 54 hours lab per term. In this course, students will learn the application of design principles and elements to contemporary fashion for ready-to-wear and couture and how to make it marketable. Class work will require garment sketching. Current fashion trends and resources for design ideas will be explored. (CSU) (Degree Credit)

## FASH 285 F Fashion Design - Advanced (formerly FASH 284BF)

18 hours lecture and 54 hours lab per term. This course explores the design principles and elements to contemporary fashion. The lectures cover design problems encountered in the ready-to-wear and couture garment industries. Classwork will require garment sketching. Current fashion trends, sourcing and resources for design ideas will be explored. (CSU) (Degree Credit)

## FASH 297 F Fashion Design Portfolio 1 Unit

 Prerequisite: FASH 109 F and FASH 209 F with a grade of "C" or better.Corequisite: FASH 188 F with a grade of " C " or better.
18 hours lecture per term. This course will prepare a student, who has completed the requirements for a Fashion Design Certificate or an AA degree, to begin seeking employment. Included are establishing a portfolio of designs, writing a resume, interview skills, finding job openings, follows up, salaries, and freelancing. (CSU) (Degree Credit)

FASH 299 F Fashion Industry Internship 1 to 4 Units Prerequisite: FASH 109 F with a grade of "C" or better and FASH 188 F with a grade of "C" or better and FASH 209 F with a grade of "C" or better or FASH 150 F with a grade of "C" or better and FASH 220 F with a grade of " C " or better and FASH 250 F with a grade of "C" or better.
18 hours lecture and 90-360 hours lab per term. This course offers supervised experience per week for each unit of credit with a garment manufacturer or retailer or one of the related businesses in the fashion industry. (CSU) (UC review required.) (Degree Credit)

FASH 975 F Patternmaking: Collections 2 Units
Prerequisite: FASH 108 F and FASH 209 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course, students will apply design principles to contemporary fashion by designing and producing a group of coordinated garments that will be included in a runway fashion show. (Degree Credit)

## FASH 976 F Advanced Patternmaking: <br> 2 Units <br> Collections

Prerequisite: FASH 975 F with a grade of "C" or better. 18 hours lecture and 54 hours lab per term. In this course, students continue to advance the skills learned in FASH 975 F using a variety of techniques not previously mastered. (Degree Credit)

# Foods and Nutrition (FOOD/NUTR) 

Natural Sciences Division<br>Office: Bldg 400, Room 411-714.992.7043<br>Dean: Richard Hartmann<br>Website: natsci.fullcoll.edu

## Foods and Nutrition Courses

## FOOD 060 F Foods for Fitness 2 Units

18 hours lecture and 54 hours lab per term. This course presents nutrition information to enhance knowledge about food choices. The principles of nutrition and food preparation are presented in a non-technical format. Students are able to apply new knowledge to their personal fitness, diet, and health goals. Labs include the planning and preparation of foods which are emphasized in the current Dietary Guidelines for Americans. (Degree Credit)

## F00D 070 F Nutrition Concepts and Food <br> 2 Units Preparation for Vegetarians

18 hours lecture with 54 hours lab per term. This course is designed to develop a basic understanding of the vegetarian diet with practical applications in food preparation. Emphasis will be on the practical preparation of health-promoting food for the lacto, lacto-ovo vegetarian and vegan.

## FOOD 102 F Introduction to Foods <br> 3 Units

## (C-ID NUTR 110)

## (formerly FOOD 101AF)

36 hours lecture and 54 hours lab per term. This course is designed to provide the student with knowledge of the fundamental scientific principles involved in food preparation, as well as practical experience in applying these principles to a wide variety of foods representative of those consumed in the U.S. Emphasis is placed on developing skills in utilizing appropriate basic scientific methodology to study the components of food and food products; and on acquiring a knowledge of, as well as applying, generally-accepted quality standards to such foods and food products. (CSU) (Degree Credit)

## FOOD 130 F Cultural Aspects of Food

2 Units
18 hours lecture and 54 hours lab per term. This course examines food as an expression of cultural unity and diversity. Students will investigate the many cultural influences on food choices and patterns. Preparation techniques and products from a variety of traditions as practiced in the United States will be explored. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) MULT CULT REQ

## NUTR 210 F Human Nutrition <br> 3 Units

(C-ID NUTR 110)
54 hours lecture per term. This course is an introduction to the science of nutrition. Major principles, functions and sources of nutrients, health and disease, as well as, chemistry and physiology as they relate to nutrition are discussed. General application as it applies to today's students is stressed. Students will analyze their food intake. (Degree Credit) (CSU) (UC) AA GE, CSU GE

## French (FREN)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## French Courses

## FREN 101 F Elementary French I <br> 5 Units <br> Letter Grade or Pass/No Pass option.

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## FREN 102 F Elementary French II Letter Grade or Pass/No Pass option.

5 Units
Prerequisite: FREN 101 F with a grade of " C " or better or one year of high school French with a grade of " C " or better.
90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of French-speaking countries. This course is conducted primarily in French and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## FREN 200 F Conversational French

2 Units
Letter Grade or Pass/No Pass option.
Prerequisite: FREN 102 F with a grade of " C " or better or two years high school French with a grade of "C" or better.
36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated reallife situations. Reading, writing and cultural components are included. This course may be taken concurrently with FREN 203 F or FREN 204 F. This course will be conducted entirely in French. (CSU) (Degree Credit)

## FREN 203 F Intermediate French III

4 Units
Letter Grade or Pass/No Pass option.
Prerequisite: FREN 102 F with a grade of " C " or better or "Pass" or two years of high school French with a grade of "C" or better. 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## FREN 204 F Intermediate French IV

Letter Grade or Pass/No Pass option.
Prerequisite: FREN 203 F with a grade of "C" or better or "Pass" or three years high school French with a grade of " $\mathrm{C}^{\prime}$ or better. 72 hours per term. This course continues the development of listening and reading comprehension, speaking and writing French based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of French culture by introducing literary readings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Geography (GEOG)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Geography Courses

## GEOG 100 F Global Geography 3 Units (C-ID GEOG 125)

54 hours lecture per term. This course is an overview of the world's geographical regions. It is an introduction to basic geographical concepts, as well as human and physical spatial patterns. The nature of global geography includes population dynamics and the social, political and economic organization of space. This course satisfies the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## GEOG 100HF Honors Global Geography 3 Units (C-ID GEOG 125)

54 hours lecture per term. This Honors-enhanced course is an overview to the world's geographical regions and an introduction to basic geographical concepts, as well as human and physical spatial patterns. The nature of global geography includes population dynamics and the social, political and economic organization of space. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## GEOG 102 F Physical Geography

## (C-ID GEOG 110)

54 hours lecture per term. This course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GEOG 102HF Honors Physical Geography 3 Units (C-ID GEOG 110)

54 hours lecture per term. This Honors-enhanced course is an overview of the interrelationships, geographic patterns and basic physical processes that create the physical landscapes of the world. The study of geosystems involves the connections between the atmosphere, lithosphere, hydrosphere and biosphere. Topics covered include weather, climate, soils, natural vegetation and the forces and processes that modify the surface of the earth. Special emphasis is given to contemporary ecological problems. This course meets a physical science requirement at most four-year institutions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GEOG 102LF Physical Geography Laboratory (C-ID GEOG 111) <br> Corequisite: GEOG 102 F

54 hours lab per term. This lab/field study supplements GEOG 102 F. This course examines the processes of weather and climate, the construction/destruction of the earth's land surface focusing on internal and external forces, and the evolution of associated flora and fauna. This course will emphasize the understanding of the spatial distributions of the earth's physical characteristics and the relative importance of natural and human-induced environmental changes such as global warning, human land use and resources acquisition, and the transformation and creation of human environments. (CSU) (UC) (Degree Credit) CSU GE, IGETC

GEOG 120 F Global Environmental Problems 3 Units 54 hours lecture per term. This course is a geographical evaluation of society-nature relationships and the analysis of global environmental problems. The focus is on the spatial dimensions of global environmental crises as they relate to social, political and economic issues. Topics examine the historical evolution of environmental issues including population growth, agriculture and pesticides, climate change, forestry and fishing, energy, endangered species and appropriate development. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GEOG 130 F California Geography (C-ID GEOG 140)

54 hours lecture per term. This course investigates and interprets the physical, cultural and economic bases and regions of the state of California. Particular emphasis is placed upon the natural foundations of the landscapes with the exploration of the unique nature and special characteristics of the people utilizing that landscape. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GEOG 160 F Cultural Geography

(C-ID GEOG 120)
54 hours lecture per term. This course provides a study of variations in the world's cultural landscapes, focusing on spatial patterns of population growth and distribution, settlement and livelihoods in the context of social, religious and political belief systems. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## GEOG 170 F Urban Geography: Introduction to the City

3 Units
54 hours lecture per term. This course provides an analysis of variations in the urbanization process of American and world cities. The focus will be on the city as a built environment. Topics will include historic evolution, patterns of distribution, internal spatial structures, urban systems and urban social issues. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) MULT CULT REQ

GEOG 199 F Geography Independent Study 1 Unit 54 hours independent study per term. This course is for students who wish to expand and deepen their knowledge and understanding of geographic concepts, topics, themes and ideas. (CSU) (UC) (Degree Credit)

## GEOG 230 F Introduction to Geographic Information Systems (formerly GEOG 281AF)

36 hours lecture and 54 hours lab per term. This course provides an introduction to concepts and use of Geographic Information Systems (GIS), and its role in geographic analysis and decision making. This course will include an introduction to basic cartographic principles, maps, scales, coordinate systems and map projections. Varied applications and examples of GIS technology used in the social sciences, governmental agencies, environmental science and business and industry will be presented. Specific topics and skills taught will include an understanding of GIS terminology, raster and vector data structures, data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases, including map features and attribute tables, and spatial analysis using map overlays, buffers, and networks. (CSU) (Degree Credit)

## GEOG 262 F Economic Geography

## 3 Units

54 hours lecture per term. This course is an investigation and interpretation of the world's economic organization, its natural resources, raw materials, crops and crop production, manufacturing and service industries, new trends in producing and the changing centers of production and consumption. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## German (GERM)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## German Courses

## GERM 101 F Elementary German I <br> 5 Units Letter Grade or Pass/No Pass option.

90 hours per lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## GERM 102 F Elementary German II

5 Units Letter Grade or Pass/No Pass option.
Prerequisite: GERM 101 F with a grade of "C" or better or "Pass" or one year of high school German with a grade of "C" or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture, and civilization of German-speaking countries. This course is conducted primarily in German and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GERM 200 F Conversational German

2 Units
Letter Grade or Pass/No Pass option.
Prerequisite: GERM 102 F with a grade of "C" or better or two years high school German with a grade of "C" or better.
36 hours lecture per term. This course will focus on improving listening comprehension and speaking skills in simulated reallife situations. Reading, writing and cultural components will be included. This course may be taken concurrently with GERM 203 F and 204 F. Instruction will be in German. (CSU) (Degree Credit)

## GERM 203 F Intermediate German III

4 Units
Letter Grade or Pass/No Pass option.
Prerequisite: GERM 102 F with a grade of "C" or better or "Pass" or two years high school German with a grade of "C" or better.
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GERM 204 F Intermediate German IV

Letter Grade or Pass/No Pass option.
Prerequisite: GERM 203 F with a grade of " $C$ " or better or "Pass" or three years high school German with a grade of "C" or better.
72 hours of lecture per term. This course continues the development of listening and reading comprehension, speaking and writing German based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding of German culture by introducing literary readings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Health Education (HED)

Natural Sciences Division

Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu
Health Education Courses

## HED 140 F Health Science

3 Units
54 hours lecture per term. Integrated lectures, discussions and videotapes are designed to study modern medical concepts. Lecture and discussion topics include personal responsibility, mental health, nutrition, weight control, exercise, sexuality, relationships, immunity, alcohol, tobacco, drugs, current health problems and health care services. Basic concepts will be presented from a holistic perspective to inform students of health issues that affect their individual lives and society. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## HED 197 F Internship in Health Education 2 Units

18 hours lecture and 18 hours lab per term. Professionals from the biological sciences and allied health fields will be invited for informative discussions and to answer questions in their field. Students will be assisted in selecting an area of career interest within the biological, allied health and related science fields, and will be directed to locations that will be willing to provide internships. Students will gain experience in their selected areas of interest by working in a "hands on" environment. (CSU) (Degree Credit)

## History (HIST)

Social Sciences Division<br>Office: Bldg 1400, Room 1415-714.992.7047<br>Dean: Kathy Bakhit<br>Website: http://socsci.fullcoll.edu/

## History Courses


#### Abstract

HIST 110 F Western Civilization I 3 Units (C-ID HIST 170) 54 hours lecture per term. This course is a study of western civilization from prehistoric times through the 16th century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ


## HIST 110HF Honors Western Civilization I <br> 3 Units

## (C-ID HIST 170)

54 hours lecture per term. This Honors-enhanced course is a study of western civilization from prehistoric times through the sixteenth century, e.g., Mesopotamian, Egyptian, Hebrew, Greek, Roman, Byzantine, Muslim, Medieval, Renaissance and Reformation societies. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 111 F Western Civilization II

3 Units
54 hours lecture per term. This course is an examination of Western Civilization from the 16th century to the present including the development of modern society, arts, industry, human rights, democracy, warfare, political and economic systems. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 111HF Honors Western Civilization II 3 Units (C-ID HIST 180)

54 hours lecture per term. This Honors-enhanced course is a continuation of HIST 110 or 110 HF Western Civilization. It is a study of the development of western civilization from the sixteenth century to the present day, emphasizing the political, economic, religious, social, and cultural forces at work in the various geographic areas. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 112 F World Civilizations I

3 Units

## (C-ID HIST 150)

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from earliest times to CE 1550. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 112HF Honors World Civilizations I

3 Units
54 hours lecture per term. This Honors-enhanced course is a survey of the development and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from the earliest times to AD 1550. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 113 F World Civilizations II

## (C-ID HIST 160)

54 hours lecture per term. This course is a survey of the development of and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from CE 1550 to the present. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit), AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 113HF Honors World Civilizations II <br> 3 Units

## (C-ID HIST 160)

54 hours lecture per term. This Honors-enhanced course is a survey of the development and interconnections among the civilizations of Europe, Africa, the Middle East, India, China, Japan and the Americas, from AD 1550 to the present. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 127 F Survey of American History 3 Units

54 hours lecture per term. This course is a survey of American history from the colonial foundations to the present time. (CSU) (UC Credit Limitation. Credit will be granted for either HIST 127 F or HIST 170 F or HIST 170 HF and HIST 171 F or HIST 171 HF as of F08). (Degree Credit) AA GE, CSU GE, IGETC

## HIST 151 F Survey of British History I

3 Units
54 hours lecture per term. This course is a survey of British history from prehistoric times to 1714 and emphasizes the contributions of Celts, Romans, Anglo-Saxons and Normans; the structure of society, the growth of monarchy, Common Law, Parliament and other governmental institutions, the development of architecture and literature, the role of the Church, and transformations brought by Reformation and Revolution during the Tudor-Stuart period. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 152 F Survey of British History II

3 Units
54 hours lecture per term. This course is a survey of British history from 1714 to the present, emphasizing the role of prime ministers as well as monarchs; the development of foreign policy and naval power; the evolution of science, religion, education, literature, painting and architecture; the changes brought about by industrialization and two World Wars; the growth of the welfare state and the rise and fall of the British empire. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 154 F Ancient Egypt

3 Units
54 hours lecture per term. This course surveys Egyptian politics, economy, society, religion, and the arts from the Pre-dynastic period through Cleopatra. It also investigates Egypt's connections with neighboring cultures of Africa, the Mediterranean, and the Middle East. An introduction to hieroglyphs is included. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 160 F Asian Civilizations I (formerly HIST 160AF)

54 hours lecture per term. This course is a study of the historical developments of Asia's three great civilizations up to the 1800's. Concentration will be on the traditional institutions shaped by the religious and philosophical concepts of these civilizations. Certain concepts in Hinduism, Buddhism, Confucianism, Taoism, and Shintoism will be studied as they affected major Asian historical developments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 161 F Asian Civilizations II (formerly HIST 160BF)

3 Units
54 hours lecture per term. This course is a study of the revolutionary changes that have taken place in basic Asian traditions and institutions. Focus will be on the efforts to replace traditional institutions with something "modern" in response to the coming of the West to Asia and to the challenge of Western ideas. Examination will be made of the impact of such concepts as Capitalism, Democracy, Imperialism, nationalism, and Communism on the traditional culture of these countries. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

HIST 165 F Introduction to the Middle East 3 Units 54 hours lecture per term. This course is a historical development of the Middle East from the prophet Mohammed to the present, emphasizing the Islamic religion, art, philosophy, and key political and social conflicts of modern times. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 165HF Honors Introduction to the 3 Units Middle East

54 hours lecture per term. This Honors-enhanced course is a historical development of the Middle East from the prophet Mohammed to the present, emphasizing Islamic religion, art, philosophy, and key political and social conflicts of modern times. As an honors section, this class will employ enhanced teaching methods such as a seminar approach, more research-based writing assignments, and assignments calling for a higher level of critical thinking. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## HIST 170 F History of the United States I <br> 3 Units

(C-ID HIST 130)
54 hours lecture per term. This course is a survey of American History from the colonial foundations to 1877, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 170HF Honors History of the United States I

(C-ID HIST 130)
54 hours lecture per term. This Honors-enhanced course is a survey of American History from the colonial foundations to 1877, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 171 F History of the United States II <br> 3 Units

 (C-ID HIST 140)54 hours lecture per term. This course is a survey of American History from 1877 to the present time, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation - Credit will be granted for either HIST 127 F or HIST 170 F or HIST 170HF and HIST 171 F or HIST 171HF) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 171HF Honors History of the United States II

3 Units

## (C-ID HIST 140)

54 hours lecture per term. This Honors-enhanced course is a survey of American history from 1877 to the present time, examining the diversity of American cultures during this period. (CSU) (UC Credit Limitation) Credit will be granted for either HIST 127 F or HIST 170 F or HIST 170HF and HIST 171 F or HIST 171HF (Degree Credit) AA GE, CSU GE, IGETC

## HIST 190 F History of the Americas I

## (formerly HIST 162AF)

54 hours lecture per term. This course is a survey of the history of the Western Hemisphere from its discovery to the wars of independence. Emphasis is placed upon the European inheritance, the interaction of this inheritance with the native and African cultures and the planting of colonial societies in the new world. Spanish America, Brazil, Canada, and the United States are compared as to their socio-cultural, economic, and political development during the colonial and independence periods. This course satisfies the state requirements in American History and Institutions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 191 F History of the Americas II (formerly HIST 162BF)

54 hours lecture per term. This course is a comparative study of the political, social and economic development of the independent nations of the Western Hemisphere from the wars of independence to the present. Emphasis is placed upon present international relations of these nations. This course satisfies the State requirements in American History and Institutions. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC

## HIST 199 F History Independent Study

1 Unit
54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)

## HIST 270 F Women in United States History 3 Units

54 hours lecture per term. This course focuses on women in American society from the Colonial era to the present with emphasis on the social sphere of women, women's health, and the roles of women in wartime and peace and in such movements as antebellum reform, suffrage and feminism as well as the gender specific problems for women in the United States. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 275 F History of California

3 Units
54 hours lecture per term. This course is a geographical, ethnic, social economic, intellectual and political history of California from the earliest times to the present. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 299 F History Independent Study Advanced

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area of history through individual research and study. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)

## Horticulture (HORT)

Natural Sciences Division

Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Horticulture Courses

## HORT 001 F Principles of Horticulture I 4 Units

54 hours lecture and 54 hours lab per term. This course covers the identification and use of ornamental plants; culture of landscape plants; morphology of leaves, flowers and fruits; survey of soil properties and fertilizers; safe and responsible use of pesticides and their alternatives; landscape design principles for basic horticulture skills in the gardening and nursery trades. (Degree Credit)

## HORT 002 F Principles of Horticulture II

4 Units
54 hours lecture and 54 hours lab per term. This course covers plant propagation techniques, weed control for ornamental plantings, disease and pest control in the landscape and turf grass management techniques. (Degree Credit)

## HORT 005 F Basic Landscape Plants I

3 Units
54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines; tropical and herbaceous plant material of landscape value. Special emphasis is placed on fall-blooming as well as broadleaf and narrow leaf plants. This course designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. Not open for transfer credit for majors in Ornamental Horticulture and Landscape Architecture as a substitute for HORT 160 F. (Degree Credit)

## HORT 006 F Basic Landscape Plants II <br> 3 Units

54 hours lecture per term. This course covers the identification and study of trees, shrubs, vines and herbaceous plant material of landscape value. Additional plants not covered in HORT 005 F, with special emphasis on spring-blooming deciduous plants. This course designed for non-majors, homeowners, and those engaged in the fields of landscaping and horticulture. Not open for transfer credit for majors in Ornamental Horticulture and Landscape Architecture as a substitute for HORT 161 F. (Degree Credit)

## HORT 008AF Landscape Pruning Techniques 1 Unit

 36 hours lecture and 54 hours lab per term. This course covers the principles and practices used in pruning ornamental shrubs, trees, vines, herbaceous perennials, groundcovers and fruit trees found in residential and commercial landscapes. Special attention is given to appropriate plant use and maintenance. (Degree Credit)
## HORT 008BF Basic Turf Care

1 Unit
36 hours lecture and 54 hours lab per term. This course covers the fundamentals of lawn care for homeowners including planting, fertilization, irrigation, weed control, and pest control. Special techniques and equipment used for lawn renovation are also covered. (Degree Credit)

## HORT 008CF Home Pest Control

1 Unit
36 hours lecture and 54 hours lab per term. This course covers the fundamentals of pest control for homeowners including identification and control of weeds, insects, vertebrates, arachnids, mollusks and diseases. Special emphasis is given to integrated Pest Management as a home pest control technique. (Degree Credit)

## HORT 010AF Landscape Lighting

1.5 Units

36 hours lecture and 54 hours lab per term. This course covers the principles and practices used in lighting outdoor trees, shrubs, planter beds and living spaces. Emphasis is given to appropriate selection of code-approved low voltage electrical components, wiring and lighting fixtures for residential use.

## HORT 010BF Landscape Water Features

1.5 Units

18 hours lecture and 27 hours lab per term. Design and installation of landscape water features including ponds, garden streams, fountains and container water gardens. Students learn current construction techniques through an on-site installation.

## HORT 045 F Pest Control Certification and Safety

54 hours lecture per term. This course is designed to assist persons desiring to be licensed as Pest Control Advisors or Pest Control Operators of pesticide dealers. Instruction involves laws and regulations, pesticide safety, control of insects, mites, nematodes and other invertebrate pests, plant disease control, and plant growth regulators used in the landscaping business. California Department of Food and Agriculture continuing education hours are available for this course. (Degree Credit)

HORT 046 F Pest Safety for Landscape Work 2 Units 36 hours lecture per term. This course is designed to teach pesticide safety to Spanish and English-speaking landscape workers. Students learn safe operations of application equipment, pesticide toxicity ratings, methods of exposure and pesticide labeling along with information about pest and disease life cycle and post host relationships. (Degree Credit)

## HORT 058 F Irrigation Controller Programming

54 hours lecture and 54 hours lab per term. This course provides hands-on experience in which students will learn the fundamentals of programming irrigation controllers and the steps involved in programming some of the most popular irrigation controllers available in the industry. Practical situations will be used to show the applications of basic and advanced controller features. The course will also provide a review of various Central control computer irrigation systems. Three field trips will be scheduled to give students the opportunity to examine central control systems as water management tools in large commercial and recreational areas. (Degree Credit)

HORT 070 F Volunteer Naturalist Training 2.5 Units 36 hours lecture and 27 hours lab per term. This is a basic ecology course dealing specifically with the ecosystems represented in the wilderness parks and nature preserves of Orange County. Special emphasis will be placed on the natural history, geology and cultural history of our undeveloped areas. Training will also be given in the skills required to lead nature tours in the parks. Assumes no science background. Weekly field trips required. (Degree Credit)

## HORT 075 F Habitat Assessment and Restoration

36 hours lecture and 27 hours lab per term. This course is designed to introduce students to the ecological theory, and practical application of a variety of habitat assessment, restoration and monitoring techniques. Scientific, social and legal aspects of restoration will be discussed. Training will emphasize habitat evaluation and restoration techniques used by industry, government agencies and environmental organizations. Weekly field trips will visit and assist in assessment and restoration projects.

## HORT 152 F Applied Botany

4 Units
54 hours lecture and 54 hours lab per term. This course is in applied botany covering the basic concepts in plant structure and functions. Includes the study of plant growth and development, horticultural practices, and an overview of horticulture as a science and art and an industry. Practical exercises and field trips are part of the lab work. (CSU) (Degree Credit) AA GE, CSU GE

## HORT 153 F Landscape Irrigation <br> 3 Units

36 hours lecture and 54 hours lab per term. This course covers the principles and practices of installing basic irrigation systems. It includes the study of fittings, piping, valves, backflow preventers, controllers, and sprinklers; basic hydraulics, friction loss calculations and beginning irrigation design are also covered. (CSU) (Degree Credit)

## HORT 154 F Irrigation Design <br> 3 Units

Prerequisite: HORT 153 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course covers the principles and practices of designing and drawing plans for residential and small commercial irrigation systems. Includes the study of component selection, sprinkler spacing and location, hydraulic calculations, graphics presentations and current practices in producing professional quality irrigation design documents. (CSU) (Degree Credit)

## HORT 155 F Soils <br> 3 Units

36 hours lecture and 54 hours lab per term. This course covers the following physical, chemical, and biological properties of soils: formation, texture, structure, compaction, stability and drainage, permeability and water-holding capacity, soil reaction, ionic exchange, organic matter, soil classification, water conservation, and soil conservation. (CSU) (UC) (Degree Credit)

## HORT 156 F Plant Nutrition

2 Units
36 hours lecture and 54 hours lab per term. This course covers the composition, value and use of fertilizers, soil correctives and soil amendments. Methods and techniques employed in detailed fertility analysis and horticultural suitability of soil media. Application equipment and fertilizer injection techniques. (CSU) (Degree Credit)

## HORT 157 F Irrigation Principles 3 Units

Prerequisite: HORT 153 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course covers the study and application of plant, soil and water relationships as they relate to irrigation. Sprinkler precipitation rates, soil infiltration rates and plant evapotranspiration rates are investigated to determine optimal irrigation, programming and efficient water usage. Lab hours will include field trips, lab investigations and on-site analysis. (CSU) (Degree Credit)

## HORT 160 F Plant ID / Ornamental Trees 3 Units

 54 hours lecture per term. This course studies broadleaf and conifer trees used in California landscapes, with special emphasis on identification. Recommended as a transfer course for majors in horticulture and landscape architecture. (CSU) (UC; HORT 160 F and HORT 161 F maximum credit one course.) (Degree Credit)
## HORT 161 F Plant ID/Ornamental Shrubs 3 Units

54 hours lecture per term. This course covers the study of ornamental shrubs, ground covers, vines, tropical and herbaceous plant material used in California landscapes with special emphasis on identification. Recommended as a transfer course in the majors of horticulture and landscape architecture. (UC Credit Limitation) (CSU) (UC; HORT 160 F and HORT 161 F maximum credit one course.) (Degree Credit)

## HORT 162 F Landscaping for Dry Climates 3 Units

 Advisory: HORT 200 F with a grade of "C" or better.36 hours lecture and 54 hours lab per term. This course covers the effects of Southern California environment on plant selection, knowledge of the growth requirements of selected native and exotic species, and their proper usage in landscapes. Emphasis is on functional values and aesthetic qualities of native and exotic drought-tolerant plants. Through development of the design process the student will create landscape plans and make site analysis evaluations using an inventory of appropriate native and drought-tolerant exotic species. Field trips are integrated as part of the laboratory projects, including one weekend trip which is required of all students. (CSU) (Degree Credit)

## HORT 164 F Identification-Annual, Perennials and Houseplants

54 hours lecture per term. This course covers the study of annuals, perennials, and houseplants used throughout California, with special emphasis on identification. It includes a comparison of the care requirements, culture and landscape usage for approximately 175 herbaceous ornamental plants. Recommended as a transfer course in the majors of horticulture and landscape architecture. (CSU) (Degree Credit)

## HORT 165 F Landscape Management

4 Units
54 hours lecture and 54 hours lab per term. This course covers new plantings and maintenance of existing plantings, including pruning, fertilization, pest control, lawn care, and landscape estimating. (CSU) (Degree Credit)

## HORT 168 F Landscape Construction 3 Units

54 hours lecture per term. This course covers the use and cost estimates of various landscape construction materials. Problems dealing with structure, grading, drainage, sprinklers, masonry, and electricity used in landscape construction. This course is designed for students qualifying for the State Landscape Contractors Examination. (CSU) (Degree Credit)

## HORT 169LF Landscape Construction Laboratory

Corequisite: HORT 168 F with a grade of "C" or better.
54 hours lab per term. This course covers lab exercises in the use of wood, concrete, brick, blocks, and other materials of construction as they relate to structures, drainage, grading, utilities, and irrigation. (CSU) (Degree Credit)

## HORT 170 F Landscaping Contracting

3 Units
54 hours lecture per term. This course covers the legal requirements and obligations of the landscape contractor, including contractor's law, lien rights, subcontractor regulations and employee labor law. It includes estimating and cost analysis for landscape trades. The course is directed toward preparing the student for passing the State Landscape Contractor's License Examination. (CSU) (Degree Credit)

## HORT 173 F Greenhouse and Nursery Production

36 hours lecture and 54 hours lab per term. This course covers the current production methods used in producing greenhouse and nursery plants. Greenhouse and nursery facilities, and equipment will be covered along with business practices, computer applications, nursery automation and current irrigation systems. Recommended for students seeking careers in nursery-related trades. (CSU) (Degree Credit)

## HORT 174 F Plant Propagation

3 Units
36 hours lecture and 54 hours lab per term. This course covers the theoretical and commercial practices of plant propagation, including seeding and transplanting, preparation of cuttings, layering, division, budding and grafting, and micro propagation techniques. The use of plant hormones, plant physiology and genetic manipulation are discussed. (CSU) (Degree Credit)

## HORT 177 F Turf Grass Management

## 3 Units

36 hours lecture and 54 hours lab per term. This course covers the production, maintenance, and management of turf grasses. Lab and field experience in identification, planting, management practices, renovation, fertilization, and pest management methods. Valuable to individuals entering fields of landscape management, nursery management, and landscape architecture; also golf course managers, stadium and athletic field managers, park managers, and managers of memorial parks. (CSU) (Degree Credit)

## HORT 185 F Arboriculture

2 Units
18 hours lecture and 54 hours lab per term. This course covers current practices in maintaining trees through correct pruning, cabling and cavity repair. In addition, tree growth characteristics, local codes and regulations and safety practices related to pruning are covered. This course prepares students for the Certified Arborists examination. (CSU) (Degree Credit)

## HORT 188 F Integrated Pest Management 2 Units

27 hours lecture and 27 hours lab per term. This course provides students with a fundamental knowledge of integrated pest management. During the class, students learn to develop and implement pest control programs using cultural, biological and chemical methods. Emphasis will be placed on pest identification, pest monitoring and analysis of plant symptoms. (CSU) (Degree Credit)

HORT 200 F Landscape Design 3 Units 36 hours lecture and 54 hours lab per term. This course covers basic drafting techniques combined with the principles of design leading to formal landscape drawings of homes. Includes the proper association of plant materials according to texture, color, mass, and cultural requirements. (CSU) (UC) (Degree Credit)

## HORT 201 F Advanced Landscape Design 3 Units

 Prerequisite: HORT 200 F with a grade of "C" or better.36 hours lecture and 54 hours lab per term. This course is a continuation of graphics, plant usage, and design theory covered in HORT 200 F with emphasis on hillside developments and commercial projects. A survey of historical development of landscape. Design of landscape structures (walls, patio overheads, steps, walkways, pools) with focus placed on the basic qualities of the construction materials. Elements of perspective drawings for project presentations. Detailed site analysis and evaluation of ecological factors. Field trips are part of laboratory, including one weekend trip required of all students. (CSU) (Degree Credit)

## HORT 205 F Applied Entomology

3 Units
36 hours lecture and 54 hours lab per term. This course covers the principles of entomology including external anatomy and internal anatomy and physiology, insect relatives, and insect classification and identification. Concepts of insect pest management techniques will be included. An insect collection with proper identification to order and family will be required of all students with lab and field examination placing emphasis on identification and control. (CSU) (Degree Credit) AA GE, CSU GE

## HORT 207 F Plant Pathology

3 Units
36 hours lecture and 54 hours lab per term. This course is an introductory study of the major plant diseases and their control. Fungi, bacteria, viruses, and nematodes causing diseases of economic crops throughout the U.S. are examined in the lab, greenhouse, and field. (CSU) (Degree Credit) AA GE, CSU GE

HORT 215 F Diseases/Pests Ornament Plants 4 Units Prerequisite: HORT 205 F or HORT 207 F with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course covers the diagnosis and control of parasitic and non-parasitic disease problems in ornamental landscapes. This course also involves determination of insects, mites, and other pest problems affecting ornamental plantings and the methods employed in control. Laboratory and field trips will be utilized to observe various problems in production areas. Transfer credit to colleges offering similar courses. (CSU) (Degree Credit)

## HORT 218 F Landscape Hydraulics 3 Units

Prerequisite: HORT 153 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course covers the principles of hydraulics related to open and closed piping systems, pipe and channel flow as applied to landscape irrigation and drainage system. It includes problems in water, storage, pumping system, surge and water hammer, fountains and ponds. (CSU) (Degree Credit)

## HORT 219 F CAD Applications in Horticulture 3 Units

36 hours lecture and 54 hours lab per term. This course includes the use of computer aided drafting in the creation of landscape and irrigation designs. The use of symbol libraries, layered drawings, macros, and different drawing programs are included. Detail drawings, landscape and irrigation plans will be developed for actual site situations. (CSU) (Degree Credit)

## HORT 250 F Permaculture Design



## 5 Units

72 hours lecture and 54 hours lab per term. This course introduces students to the application of ecological and environmental principles to designing human systems that are locally sustainable and require reduced inputs. Upon completion of this course with a passing grade, the student will receive a Permaculture Design Certificate, recognized worldwide. (CSU) (Degree Credit)

## HORT 255 F Hydroponics - Aquaponics

3 Units
36 hours lecture and 54 hours lab per term. This course covers the principles and practices used in hydroponic and aquaponic systems. Special attention is given to system design and production of appropriate crops for small scale production. (CSU) (Degree Credit)

## HORT 257 F Soil Food Web

36 hours lecture and 54 hours lab per term. This course introduces students to the Soil Food Web. The Soil Food Web is a complex living system in the soil. This course examines soil organisms and their relationship to soil fertifility. Methods will be explored to increase soil fertility using actively aerated compost teas. Quantitative and qualitative analysis of soil organisms through microscopy will be emphasized. (CSU) (Degree Credit)

## HORT 920 F Advanced CAD Applications in Horticulture

Letter Grade or Pass/No Pass option.
Prerequisite: HORT 219 F with a grade of " C " or better. 36 hours lecture and 54 hours lab per term. This course covers the use of LandCADD computer aided drafting and design program in the creation of 2-D and 3-D landscape and irrigation designs. It also includes the use of customized plant and irrigation symbols, intelligent drawing blocks, cross-referenced drawings and paper space/model space. Detail drawings, complex irrigation and grading plans will be developed for actual site situations. Presentation 2-dimensional and 3-dimensional rendered drawings and animated walk-throughs are developed using advanced tools in LandCADD. (Degree Credit)

## Humanities (HUM)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Humanities Courses

## HUM N01 F Supervised Tutoring O Units

NON CREDIT COURSE: This course provides individualized units of study based on individual student needs in writing, reading or mathematics skills.

## HUM 170 F Education: Tutoring Individual 2 Units

36 hours lecture per term. This course provides preparation and training for successful tutoring in multiple subject areas. Instruction will focus on tutoring principles, specific tutoring techniques, study skills, communication skills, tutoring the ESL student, cultural differences, learning styles, and learning disabilities. Completion of 25 hours of field experience is required. This course is strongly recommended for both students who wish to tutor in the Fullerton College Tutoring Center and students interested in careers in education. (CSU) (Degree Credit)

## HUM 299 F Humanities Independent Study

Prerequisite: ENGL 100 F or ENGL 100 HF, with a grade of "C" or better.
54 hours independent study per term. This course will provide advanced students the opportunity for independent study that will enrich their academic experience in the humanities. Students may choose to expand and deepen their knowledge in areas of language, literature, writing, communication, or special topics not covered in existing courses offered in the Humanities Division. Students will attend weekly arranged individual conferences or group meetings. (CSU) (Degree Credit)

# Industrial Drafting (DRAF) 

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Industrial Drafting Courses

## DRAF 070 F Blueprint Reading for the 2 Units Metal Trades

36 hours lecture per term. This course is designed to prepare Machine Tool, Welding and Metal Fabrication students to interpret drawings related to the metal trades. Studies of dimensioning and drawing symbols will be included. (Degree Credit)

## DRAF 140 F AutoCAD for Industry 2 Units Advisory: DRAF 171 F.

36 hours lecture per term. This is a comprehensive introduction to AutoCAD designed for practicing drafters, engineers, and other manufacturing oriented persons. Topics include hardware requirements and operation, database management, terminology, 2D AutoCAD drawing commands, plotting, symbol libraries, dimensioning, productivity, and basic 3D commands. (CSU) (Degree Credit)

DRAF 141 F Advanced CAD for Industry 2 Units Advisory: DRAF 140 F.
27 hours lecture and 27 hours lab per term. This is an advanced course in computer aided design (CAD) using AutoCAD. Students will learn advanced industrial drafting concepts while strengthening their CAD skills. Emphasis will be on drafting and design areas such as fasteners, gears, cams, surface development and intersections, and weldments. A "2D" approach to AutoCAD will be used. (CSU) (Degree Credit)

## DRAF 143 F 3D Applications Using AutoCAD 2 Units

 Advisory: DRAF 140 F.27 hours lecture and 45 hours lab per term. This course is designed for the experienced AutoCAD user who needs a working knowledge of AutoCAD's 3D environment. Topics will include an introduction to 3D applications, the 3D coordinate system, display control wire frame modeling, surface modeling, solids modeling, analysis of a solids model (mass properties), model rendering, hardcopy output, and 2D/3D transfer. The course will be taught with an emphasis on mechanical drafting applications.

DRAF 171 F Fundamentals of Drafting 2 Units 18 hours lecture and 54 hours lab per term. This is a beginning drafting course. Proper use of drafting instruments, lettering, geometric construction, pictorial drawings, orthographic projection, dimensions, single-auxiliary views and sections are introduced. Emphasis is placed on line quality and lettering. Some problems drawn from the industrial field. (CSU) (Degree Credit)

## DRAF 173 F Geometric Dimensioning and Tolerancing <br> Advisory: DRAF 070 F or DRAF 171 F. <br> 36 hours lecture per term. This is an introductory course in the application and interpretation of geometric dimensioning and tolerancing concepts per the latest revision of the American National Standards Institute (ANSI) Standard \#Y14.5M. This course is designed for persons working in the fields of drafting, machining, manufacturing and quality. (CSU) (Degree Credit)

## DRAF 944 F Solidworks

3 Units (formerly Parametric Solid Modeling)
45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concept, practice, and development of feature based solid modeling using popular solid modeling software. Students will demonstrate the features of the software by creating parametric solid models. (Degree Credit)

## Interdisciplinary Studies (INDS)

Counseling and Student Development Division
Office: Bldg 2000, Room 2022-714.992.7084
Dean: Lisa Campbell
Website: counseling.fullcoll.edu

## Interdisciplinary Studies Courses

INDS 298AF Interdisciplinary Studies Seminar<br>1 Unit for Study Abroad<br>Pass/No Pass only.<br>18 hours lecture per term. This course will develop critical thinking, research, writing and presentation skills as they apply to issues such as trip planning, managing money, safety, coping with stressful situations, and adapting to new cultures as part of a Study Abroad Program. (CSU) (Degree Credit)

## Interior Design (IDES)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Interior Design Courses

[^5]IDES 100 F Fundamentals of Interior Design 3 Units 54 hours lecture per term. This course covers the application of design principles and elements in planning of total interior environments that meet individual, functional, legal and environmental needs. The selection of all materials and products used in interior environments will be emphasized for the functional and aesthetic quality. (CSU) (Degree Credit)

## IDES 105 F Interior Design Studio I

2 Units
18 hours lecture and 54 hours lab per term. This lab course is designed to apply concepts and theories presented in the lecture course, IDES 100 F . It is recommended that this course be taken concurrently with the lecture class. Emphasis is placed on design process in developing solutions for design projects. (CSU) (Degree Credit)

## IDES 110 F Beginning Drafting for Interior Design

36 hours lecture and 54 hours lab per term. This course covers applications of methods and theory used for architectural drawings, including basic graphics and projections for design and working drawings. (CSU) (Degree Credit)

IDES 120 F Interior Design Careers 2 Units
36 hours lecture per term. This course is a survey of the Interior Design profession, industry, related occupations and work sites. The course will emphasize personal, educational and professional qualifications required for entry into the Interior Design profession. (CSU) (Degree Credit).

IDES 130 F Applied Color and Design Theory 4 Units 54 hours lecture and 54 hours lab per term. This course covers Basic Design theory and application. Utilization of tools, materials, and equipment to develop technical skills applicable to interior, architectural and other related fields of design. Exploration of cultural heritage and psychological implication of design. (CSU) (Degree Credit)

## IDES 147 F Office Planning

3 Units
Prerequisite: IDES 110 F or ARCH 100 F with a grade of "C" or better.
36 hours lecture, 54 hours lab per term. This course will cover large and small office planning including client improvement practices and the use of modular systems. Also covered are code requirements and the use of electrical, plumbing and mechanical systems. (CSU) (Degree Credit)

## IDES 150 F Interior Materials and Products 4 Units

 72 hours lecture per term. This course will cover methods of analysis, application and evaluation of products and materials used in Interior Design. Topics include interior textiles, furnishings and finish materials and products. (CSU) (Degree Credit)
## IDES 170 F Space Planning

3 Units
Advisory: IDES 110 F.
36 hours lecture and 54 hours lab per term. This course covers the application of programming, theory and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized in the lab. (CSU) (Degree Credit)

IDES 180 F History of Interior Architecture I 3 Units 54 hours lecture per term. This course covers the historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage from antiquity through the 19th century in France. Emphasis is placed on style development as it relates to social, economic and political influences. (CSU) (Degree Credit)

IDES 190 F History of Interior Architecture II 3 Units 54 hours lecture per term. This course covers the historical relationship between the decorative arts, period furniture and interior architecture is illustrated in this overview of design heritage. This course begins with the sixteenth century England and America and analyzes the influences and changes in design to the present. Emphasis is placed on style development as it relates to social, economic and political forces. (CSU) (Degree Credit)

## IDES $\mathbf{2 0 0}$ F Interior Illustration

2 Units
Advisory: IDES 100 F and IDES 130 F
18 hours lecture and 54 hours lab per term. This course covers the application of the methods, techniques and tools used for illustrating interior spaces and products. (CSU) (Degree Credit)

## IDES 210 F Fundamentals of Lighting

3 Units
54 hours lecture per term. This course covers the fundamentals of lighting, design, theory and application including the history and vocabulary of lighting; how light affects color and vision, incandescent and fluorescent lamps, lighting techniques for interior designers, codes and energy efficient lighting practices. (CSU) (Degree Credit)

## IDES 215 F Interior Design Studio II

## 2 Units

 Advisory: IDES 100 F, IDES 130 F and IDES 170 F.18 hours lecture and 54 hours lab per term. This course develops, analyzes and applies design concepts to interior environments. Topics include universal design, "green design", space planning, lighting systems, interior components, architectural elements and specification writing will be integrated into research projects emphasizing a problem solving approach. (CSU) (Degree Credit)

## IDES 230 F Business and Professional Practice

3 Units

54 hours lecture per term. This course covers the business and professional management of an interior design practice including legal issues, project management and business practices. (CSU) (Degree Credit)

IDES 240 F Interior Design Internship
2 to 3 Units 18 hours lecture and 90-180 hours lab per term with an additional 75 hours of paid or 60 hours of unpaid work experience is required for a third unit. Credit is earned through supervised employment related to classroom instruction in Interior Design. (CSU) (Degree Credit)

IDES 248AF Restaurant/Hotel Design 2 Units
Prerequisite: IDES 215 F, IDES 110 F or ARCH 100 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course covers the principles of space planning applied to the unique problems of the hospitality industry including design, systems and specifications. (CSU) (Degree Credit)

## IDES 248BF Medical/Health Design <br> 2 Units

Prerequisite: IDES 215 F or IDES 110 F or ARCH 100 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course covers the principles of space planning applied to the unique problems of the medical field including design, systems and specifications. (CSU) (Degree Credit)

## IDES 249AF Study/International Architecture 1 Unit \& Design

18 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis on architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

## IDES 249BF Study/International Architecture 2 Units \& Design

36 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis of architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

## IDES 249CF Study/International Architecture 3 Units \& Design

54 hours lecture per term. This course includes pre-trip lectures and guided trips during travel tour. The course content will vary according to area studied, but will include emphasis on architecture and interior design of specific European countries or areas on the American continent. (CSU) (Degree Credit)

IDES 265 F Interior Design Studio III 2 Units
Prerequisite: IDES 110 F and IDES 215 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course covers total space planning with advanced problems in interior environments. The analysis of problems allows for the application of the design process, of planning, materials, codes and specialized equipment. (CSU) (Degree Credit)

## Italian (ITAL)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Italian Courses

## ITAL 101 F Elementary Italian I Letter Grade or Pass/No Pass option.

5 Units
90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ITAL 102 F Elementary Italian II 5 Units

 Letter Grade or Pass/No Pass option.Prerequisite: ITAL 101 F with a grade of " C " or better or one year of high school Italian with a grade of "C" or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture, and civilization of Italy. This course is conducted primarily in Italian and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ITAL 203 F Intermediate Italian III

4 Units Letter Grade or Pass/No Pass option.
Prerequisite: ITAL 102 F with a grade of " C " or better or "Pass" or two years of high school Italian with a grade of "C" or better. 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ITAL 204 F Intermediate Italian IV

4 Units

## Letter Grade or Pass/No Pass option.

Prerequisite: ITAL 203 F with a grade of "Pass" or " C " or better or three years of high school Italian with a grade of "C" or better. 72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Italian based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Italian culture by introducing literary readings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Japanese (JAPN)

Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Japanese Courses

## JAPN 101 F Elementary Japanese I <br> 5 Units Letter Grade or Pass/No Pass option.

90 hours lecture per term. This course focuses on the four major skills of language learning - listening comprehension, speaking, reading and writing - and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## JAPN 102 F Elementary Japanese II <br> 5 Units <br> Letter Grade or Pass/No Pass option.

Prerequisite: JAPN 101 F with a grade of " C " or better or "Pass" or one year of high school Japanese with a grade of "C" or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture, and civilization of Japanese-speaking countries. This course is conducted primarily in Japanese and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## JAPN 203 F Intermediate Japanese III 4 Units

Letter Grade or Pass/No Pass option.
Prerequisite: JAPN 102 F with a grade of "C" or better or "Pass" or two years of high school Japanese with a grade of "C" or better.
72 hours lecture per term. This course includes development of listening and reading comprehension, speaking, writing Japanese based on culture and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## JAPN 204 F Intermediate Japanese IV 4 Units

Prerequisite: JAPN 203 F with a grade of "C" or better or "Pass" or three years of high school Japanese with a grade of "C" or better.
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Japanese based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Japanese culture by introducing literary readings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Journalism (JOUR)

Technology and Engineering Division<br>Office: Bldg 700, Room 700-714.992.7115<br>Dean: Ken Starkman<br>Website: techneng.fullcoll.edu

## Journalism Courses

## JOUR 101 F Reporting and Writing 3 Units (C-ID JOUR 110)

Prerequisite: ENGL 060 F or ESL 186 F, with a grade of "C" or better or recommended score on English placement test.
54 hours lecture per term. This course provides an introduction to the skills and practices of news reporting as applied to the various communications media with emphasis on the newspaper. Stress is placed on various story types--news, feature, editorial, online, column sports, and press release. (CSU) (UC) (Degree Credit) AA GE

## JOUR 102 F Advanced Reporting and Writing 3 Units (C-ID JOUR 210)

Prerequisite: JOUR 101 F with a grade of " C " or better.
54 hours lecture and 18 hours lab per term. This course covers the study and practice of advanced reporting and newsgathering techniques are the main focus stressing interviewing and research skills, investigative, special assignment and online reporting. (CSU) (Degree Credit)

## JOUR 108 F Feature Writing

3 Units
54 hours lecture per term. This course covers the principles of freelance writing for magazines, newspapers, and other specialized periodicals. Students receive instruction on query writing, marketing and manuscript preparation and submission. Copyright and libel laws will be included. Both peer and professional evaluations will be utilized. (CSU) (Degree Credit)

## JOUR 110 F Mass Media Survey

3 Units
(C-ID JOUR 100)
54 hours lecture per term. This class provides an introduction to the mass communications media and a critical consideration of their roles in our society. Mass media under consideration in this course will include: books, newspapers, magazines, movies, radio, television, film and the Internet. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## JOUR 132 F Introduction to Magazine Production

## (C-ID JOUR 130)

54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication -fctorch.net. (CSU) (Degree Credit)

## JOUR 133 F Beginning Magazine Production 3 Units

 (C-ID JOUR 131)Prerequisite: JOUR 132 F with a grade of "C" or better.
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Greater emphasis is placed on writing longer, in-depth magazine articles, editing techniques, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for the online publication. (CSU) (Degree Credit)

## JOUR 134 F Intermediate Magazine Production

Prerequisite: JOUR 133 F with a grade of "C" or better.
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine and online publications is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs, multimedia storytelling and packaging all elements together. (CSU) (Degree Credit)

## JOUR 135 F Advanced Magazine Production 3 Units

Prerequisite: JOUR 134 F with a grade of "C" or better.
54 hours lecture and 36 hours lab per term. This course covers all aspects of the magazine publishing industry. A soft cover magazine is created by the class. Emphasis is placed on writing longer, in-depth magazine articles, capturing feature photographs and packaging all elements together. Students will also publish stories and photos for online publication. (CSU) (Degree Credit)

## JOUR 140 F Public Relations/Publicity <br> 3 Units

## (C-ID JOUR 150)

54 hours lecture per term. This course covers the study and practice of the techniques and responsibilities of corporate, agency, and non-profit public relations with special attention to publicity writing and public relations campaign development (CSU) (Degree Credit)

## JOUR 196 F Communications Seminar . 5 to 4 Units

9-72 hours lecture and 9-72 hours lab per term. These courses vary according to the nature of the seminar. Communications seminars are courses designed to expose the students to up-todate equipment, methods, techniques, and materials. These courses offer the student opportunity for specialized training in greater depth than can be offered in a general course. These courses will vary from semester to semester depending on student interest, new developments in industry, and need for specialized training. Communications seminars will be offered in photography, journalism, and radio/television. See class schedule for current offerings. (CSU) (Degree Credit)

## JOUR 199 F Journalism Independent Study

1 to 3 Units
Prerequisite: JOUR 101 F with a grade of "C" or better.
54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of journalism and communications through individual study. Independent lab research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC review required) (Degree Credit)

## JOUR 210 F Multimedia Reporting 3 Units

 (C-ID JOUR 120)36 hours lecture and 54 hours lab per term. This course focuses on media article writing and digital storytelling. Students will develop multimedia news reporting and writing techniques with an emphasis on the Web. Students research, write, and edit articles as they practice the skills of gathering information from a variety of sources. Students synthesize, edit and prepare stories for dissemination online. Students will learn the basics of visual journalism storytelling, including basic elements of shooting videotape, recording audio, editing video and audio tape, and creating news websites. A culminating project will demonstrate knowledge of reporting and writing for print and broadcast on the web. (CSU) (Degree Credit)

## JOUR 219 F Photojournalism

3 Units

## (C-ID JOUR 160)

36 hours lecture and 54 hours lab per term. This course covers the basics of digital photography for publication both print and online such as news, advertising, feature, sports, lifestyle, photo essay, and documentary applications. Students will work with the student publications on campus. (CSU) (Degree Credit)

## JOUR 220 F Community Reporting

3 Units
Advisory: ENGL 100 F with a grade of "C" or better.
54 hours lecture and 18 hours lab per term. This course focuses on the role of the newspaper in the community. The handling of news categories especially those applicable to smaller newspapers. Students will analyze issues affecting community journalism. Students will create local community newspapers and other media. (CSU) (Degree Credit)

## JOUR 222 F Introduction to News Media

## Production

## (C-ID JOUR 130)

36 hours lecture and 54 hours lab per term. This course is an introduction to news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit)

## JOUR 223 F Beginning News Media Production

3 Units

## (C-ID JOUR 131)

Prerequisite: JOUR 222 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course expands news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit)

## JOUR 224 F Intermediate News Media Production

Prerequisite: JOUR 223 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course is expanded training in news media production. Students will learn skills in multimedia reporting, page design, photojournalism, editing and proofreading. Students will participate in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).

## JOUR 225 F Advanced News Media 3 Units Production

Prerequisite: JOUR 224 F with a grade of "C" or better. 36 hours lecture and 54 hours lab per term. This course includes the following areas of study: reporting, editing, design, photojournalism, multimedia reporting and publishing techniques are also studied and practiced in the production of The Hornet newspaper and Hornet Online. (CSU) (Degree Credit).

## JOUR 271 F Introduction to SpanishLanguage Reporting

(C-ID JOUR 130)
Advisory: Understanding of conversational Spanish.
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (CSU) (Degree Credit)

## JOUR 272 F Beginning Spanish-Language <br> Reporting <br> (C-ID JOUR 131)

Prerequisite: JOUR 271 F with a grade of " C " or better.
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (CSU) (Degree Credit)

## JOUR 273 F Intermediate Spanish-Language 3 Units Reporting

Prerequisite: JOUR 272 F with a grade of " C " or better.
54 hours lecture and 18 hours lab per term. This course will continue to allow students to develop the methods and styles of reporting and writing in Spanish in multimedia format. It will prepare students to edit and publish multiple stories and photos on the campus' Spanish-language publication. (CSU) (Degree Credit)

## JOUR 274 F Advanced Spanish-Language <br> 3 Units

## Reporting

Prerequisite: JOUR 273 F with a grade of "C" or better.
54 hours lecture and 18 hours lab per term. This course will guide students in the methods and styles of reporting and writing in Spanish for print and online. It will prepare students to publish stories and photos on the campus' Spanish-language publication. The course also provides students with a general understanding of contemporary Spanish-speaking and Latino communities. (CSU) (Degree Credit)

## JOUR 290 F Internship in Journalism/ Public Relations

18 hours lecture per lecture and 90-270 hours lab per term. This course offers career development opportunities for students and industry professional who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through employment/internships at newspapers, magazines, public relations firms, companies requiring journalism and public relations experts, radio, television, and cable stations. (CSU) (Degree Credit)

## JOUR 291 F Internship in Journalism/ Public Relations II

Prerequisite: JOUR 290 F with a grade of "C" or better. 18 hours lecture and 90-270 hours lab per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

## JOUR 292 F Internship in Journalism/ Public Relations III

Prerequisite: JOUR 291 F with a grade of " C " or better.
18 hours lecture and 90-270 hours of employment or unpaid internship per term. This course is designed to give the student the skills needed to market themselves as professionals in the entertainment and communication industries. (CSU) (Degree Credit).

## JOUR 293 F Internship in Journalism/ Public Relations IV

Prerequisite: JOUR 292 F with a grade of "C" or better.
18 hours lecture and 90-270 hours of employment or unpaid internships per term. This course is designed to help the students who are interning to transition into working as independent contractors in the communication and entertainment related industries. (CSU) (Degree Credit)

## Library Technology (LIB)

Library Technology Division<br>Office: Bldg 800, Room 823 (LLRC) - 714.992.7039<br>Dean: Dani Wilson<br>Website: library.fullcoll.edu

## Library Technology Courses

## LIB 100 F Introduction to Research 1 Unit

Advisory: Basic computer literacy and ENGL 060 F or ENGL 099 F or ESL 186 F or eligibility for ENGL 100 F.
18 hours lecture per term. This course is designed to introduce students to research methods using print library materials, online information databases and the Web. Students will develop critical thinking skills to identify research needs and locate, retrieve, analyze, evaluate and cite appropriate resources on topics. This course is of special value to those students intending to transfer to a four-year institution. (CSU) (UC) (Degree Credit)

LIB 100HF Honors Introduction to Research 1 Unit Advisory: Basic computer literacy and ENGL 060 F or ENGL 099 F or ESL 186 F or eligibility for ENGL 100 F.
18 hours lecture per term. This Honors-enhanced course is designed to introduce students to library materials, online information databases and the Web. Students will develop critical thinking skills to identify research needs and locate, retrieve, analyze, evaluate, and cite appropriate resources on topics. This course is of special value to those students intending to transfer to a four-year institution. (CSU) (UC) (Degree Credit)

## Machine Technology (MACH)

## Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Machine Technology Courses

## MACH 010 F Machining Skills Lab

. 5 to 2 Units
Open Entry/Open Exit.
27-108 hours lab per term. This course provides students the opportunity to further develop their skills in machining set up, operation, and programming tasks. One-half unit of credit will be given for each 24 hours of lab participation.

## MACH 040 F CNC Wire EDM: Programming 3 Units and Operation

45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with the set up, operation, and programming of CNC Wire EDMs (Electrical Discharge Machines). Emphasis will be placed on using a wire EDM to cut in a two axis environment. Students will prepare and cut parts on the machine during lab time. (Degree Credit)

## MACH 043 F Advanced Topics in Machine . 5 to 3 Units Technology

$0-54$ hours lecture and $0-162$ hours lab per term. This course is designed to meet the needs of the Machine Tool industry that requires advanced training, continuing education and provide professional growth for persons employed in the Machine Tool industry. This course will be offered in modules of advanced topics. Unit credit may range from .5 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic.

## MACH 050 F CNC Programming Using 3 Units Mastercam

Advisory: MACH 086 F or MACH 091 F or MACH 116 F.
45 hours lecture and 27 hours lab. This course provides the student with instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. (Degree Credit)

MACH 052 F Adv CNC Programming w/Mastercam
Advisory: MACH 050 F or industry experience using Mastercam in a $2 D$ environment.
45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using Mastercam software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience with Mastercam to develop 3D wire frame models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. (Degree Credit)

## MACH 060 F CNC Programming Using 3 Units SURFCAM

Advisory: MACH 086 F or MACH 091 F or MACH 116 F. 45 hours lecture and 27 hours lab per term. This course provides the student with instruction in the concepts and practices associated with using SURFCAM software to prepare CNC machine programs for both mills and lathes. Students will process programs that demonstrate the features and functions of the software. (Degree Credit)

## MACH 062 F Advanced CNC Programming 3 Units Using SURFCAM

45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction in the concepts and practices associated with using SURFCAM software to prepare CNC machine programs for both mills and lathes. Students will build upon prior experience using SURFCAM to develop 3D wire frame models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. (Degree Credit)

## MACH 086 F CNC Machine Set-up \& 3 Units Operation

45 hours lecture and 27 hours lab per term. This is an introductory course designed to teach the fundamental skills related to the setup and operation of computer numerically controlled machine tools. Safety, tool selection, machine and controller functions, calculation and input of offsets, are also included. (Degree Credit)

## MACH 087 F CNC Parts Programming

3 Units
45 hours lecture and 27 hours lab per term. This course covers manual programming techniques, calculations, and program development for CNC mills, machining centers, and lathes. Up to three axis of control will be discussed. Students will test part programs on CNC machines during lab hours. (Degree Credit)

MACH 088 F Advanced CNC Machining 3 Units
Advisory: MACH 086 F or industry experience operating both CNC lathes and mills and completion of MACH 087 F.
45 hours lecture and 27 hours lab per term. This course provides the student with advanced instruction and practice in the concepts and practices associated with the successful programming and set up of CNC mills and lathes. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills and lathes having various control types. Students will run programs and practice set-up processes during lab time. (Degree Credit)

## MACH 090 F Multiple Axis CNC Set and 3 Units Operation

Prerequisite: MACH 086 F with a grade of " C " or better, MACH 087 F with a grade of " C " or better and MACH 088 F with a grade of "C" or better.
45 hours lecture and 27 hours lab per term. This course provides the student with instruction associated with the successful programming and set up of CNC mills with four and five axis of control. Students will build upon prior experience with CNC machines to complete finished parts on CNC mills with four and five axis of control. Students will run programs and practice set-up processes during lab time. (Degree Credit)

## MACH 091 F Introduction to Machine Tools 5 Units

54 hours lecture and 108 hours lab per term. This is an introductory course designed to teach the fundamental skills used in the set up and operation of the engine lathe, milling machine, and surface grinder. Safety, shop mathematics, basic blueprint reading, cutting tool use and theory, selection of cutting speeds and feeds, and measurement techniques will also be included. (Degree Credit)

MACH 092 F Intermediate Machine Tools 5 Units
Prerequisite: MACH 091 F or MACH 116 F (both semesters) with a grade of " C " or better.
54 hours lecture and 108 hours lab per term. This intermediate level course is designed to advance the basic set up and operational skills developed in an introductory level machine tools course. Work will be performed on engine lathe, both vertical and horizontal milling machines, surface grinder, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics, and general machining techniques. (Degree Credit)

MACH 093 F Advanced Machine Tools 5 Units Prerequisite: MACH 092 F with a grade of " C " or better. 54 hours lecture and 108 hours lab per term. This advanced level course is designed to further the set up and operational skills developed in an intermediate level machine tools course. Work will be performed on engine lathes, both vertical and horizontal milling machines, surface grinders, and sawing equipment. Students will also advance their skills in the use of various measuring tools, blueprint reading, shop mathematics, and general machining techniques. Computer numerical control (CNC) machines will also be utilized to complete lab assignments. (Degree Credit)

## MACH 116 F Machine Tools

2 Units
18 hours lecture and 54 hours lab per term. This course is for students majoring in mechanical drawing, industrial arts, engineering, and for students who wish to familiarize themselves with the machine tools of industry. Fundamentals of the machinist trade are taught. Second semester work includes advanced work in the use of lathes, grinders, milling machines and measuring instruments. Methods planning for efficient machining is emphasized. (CSU) (Degree Credit)

## Marketing Management (MKT)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Marketing Management Courses

## MKT 090 F Current Issues in Marketing . 5 to 3 Units

$0-54$ hours lecture and 0-162 hours lab per term. This course offers timely marketing-related topics. Emphasis is placed on current changes in the marketplace and real-world marketing problems and solutions. Unit credit may range from .5-3 units in any given semester. Consult the class schedule to verify specific topic area and credit for a particular semester.

## MKT 100 F Introduction to Marketing 3 Units

54 hours lecture per term. This course is an introduction to marketing and e-marketing principles and their practical applications. Focus will be on the evolution of the marketing system and the research of the demographic and behavioral dimensions of markets. Topics include market analysis, marketing planning and implementation, consumer behavior, marketing research, marketing mix strategies and internet marketing. The course incorporates current developments in marketing to acquaint students with the present-day challenges of marketing activities, including the social, legal, ethical, and technological environments of marketing. This course lays the foundation for more advanced marketing courses and related subject areas. (CSU) (Degree Credit) AA GE

MKT 103 F Principles of Advertising 3 Units 54 hours lecture per term. This course covers the role of historical, economic and social aspects of advertising. The development of creative advertising copy, advertising budgets, analysis of successful advertising campaigns and the creation of advertisements for the three broad categories of media (broadcast, print and digital) are discussed. (CSU) (Degree Credit)

## MKT 151 F New Media Marketing

3 Units
54 hours lecture per term. This course will introduce students to marketing and promotions on the Internet. Emphasis will be placed on developing World Wide Web marketing skills, examining business resources on the Internet, and creating an Internet-focused marketing and advertising plan. Students will learn how to use the Internet for customer contact, customer service, order taking, and marketing research and business promotion. (CSU) (Degree Credit)

## MKT 152 F Internet Advertising

2 Units
27 hours lecture and 27 hours lab per term. This course will introduce students to advertising and promotional strategies using the Internet. Topics to be covered include new technologies in online advertising, buying and selling banner ads, direct marketing and sales promotion on the Internet, targeting and Web measurement techniques, and important legal issues. Students will develop an Internet promotional plan portfolio. (CSU) (Degree Credit)

MKT 153 F Customer Service on the Internet 2 Units 27 hours lecture and 27 hours lab per term. This course introduces the principles of relationship marketing and serving customers on the Internet. Topics include determining customer expectations, measuring success, using the website, e-mail, and extranets to increase customer satisfaction, and creating a relationship-based website. Students will develop an internet customer service plan. (CSU) (Degree Credit)

MKT 201 F Small Business Promotions 3 Units 54 hours lecture per term. This course focuses on the techniques used to promote a small business and develop effective marketing communication strategies. Emphasis is on creating an effective promotional plan and devising affordable ways to communicate with customers through local media, sales promotion, the internet, publicity, brochures, direct mail and other methods. (CSU) (Degree Credit)

## MKT 203 F Principles of Retail Management 3 Units

54 hours lecture per term. This course examines the principles and practices used in the management of successful retail stores. Topics include site selection, layout, organization, merchandising, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function. (CSU) (Degree Credit)

## MKT 205 F Understanding Multicultural Markets in U.S.

54 hours lecture per term. This course emphasizes the fundamentals of personal selling and the new practices needed to succeed in today's information economy. Topics include understanding buyer behavior, building trust, communication and negotiation sills, and the strategic selling process. The course will also cover the impact of electronic commerce, sales strategies used to build global relationships, ethical and legal considerations in selling, and a survey of customer relationship management technology. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) MULT CULT REQ

MKT 208 F Principles of Selling
3 Units
54 hours lecture per term. This course emphasizes the fundamentals of selling and the new practices needed to succeed in today's information economy. Topics include understanding buyer behavior, building trust, communication and negotiation skills, oral presentation skills and the strategic selling process. This course will also cover the impact of the World Wide Web, sales, strategies used to build global relationships, ethical and legal considerations in selling, and a survey of customer relationship management technology. (CSU) (Degree Credit)

## Mathematics (MATH)

Mathematics and Computer Science Division
Office: Bldg 600, Room 613-02-714.992.7041
Dean: Mark Greenhalgh
Website: math.fullcoll.edu

## Mathematics Courses

## MATH N01 F Supervised Tutoring: 0 Units Mathematics

NON-CREDIT COURSE: This course provides individual tutoring based on each student's needs in mathematics and computer science. Students wishing to use the Math Lab must enroll in this course.

## MATH $\mathbf{0 0 4} \mathbf{F}$ Basic Mathematics I <br> 2 Units

Pass/No Pass only.
36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations with whole numbers and fractions, rounding and estimation, and applied problems. Students are not permitted to use calculators.

## MATH 006 F Basic Mathematics II

## 2 Units

Pass/No Pass only.
Prerequisite: MATH 004 F with a grade of "Pass".
36 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. Topics include arithmetic operations and applied problems with decimals, rounding, estimation, ratios, problem solving with proportions, percent and applications, the arithmetic of denominate numbers, introduction to the metric system, and measurement geometry. Calculators will be required for selected topics.

## MATH 007 F Essentials of Basic Math

3 Units
Pass/No Pass only.
54 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes arithmetic operations with whole numbers, fractions, decimals, and percent, estimation, and solving applied problems.

## MATH 010 F Basic Mathematics

4 Units
72 hours lecture per term. This course is an intensive review of the fundamentals of arithmetic. The course includes: operations of arithmetic with whole numbers, fractions, decimals; percent; estimation; equations and applied problems; introduction to the metric system; and the arithmetic of denominate numbers. Calculators will be required for selected topics.

## MATH 015 F Pre-Algebra

4 Units
72 hours lecture per term. This course includes: operations on integers, fractions, mixed numbers and decimals, ratio, proportion and percentages working with variable expressions; interpretation of statistical graphs; measurement and geometry; and an introduction to polynomials and graphing. Calculators will be required for selected topics.

## MATH 020 F Elementary Algebra

4 Units
Advisory: MATH 015 F or any previous algebra course with a grade of "C" or better.
72 hours lecture per term. This course includes the properties of real numbers, factoring, exponents and radicals, solving and graphing linear equations, polynomials and rational algebraic expressions, and linear systems of equations. Calculators will be required for selected topics.

## MATH 030 F Plane Geometry

4 Units
Prerequisite: MATH O2O F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This course is an introduction to Euclidean geometry. It includes theorems and proofs, sets, congruent and similar polygons, circles, geometric constructions, areas, volumes, geometric loci, elementary logic, and deductive reasoning. Calculators may be required for selected topics. (Degree Credit)

## MATH 040 F Intermediate Algebra

4 Units
Prerequisite: MATH 020 F with a grade of " C " better or math skills clearance.
72 hours lecture per term. This course includes products and factoring, exponents and radicals, fractions, functions and graphs, linear and quadratic equations, linear inequalities, logarithms and related topics at an intermediate level. Calculators will be used for selected topics. (Degree Credit) AA GE

## MATH 041 F Combined Elementary and Intermediate Algebra

Advisory: MATH 015 F or any previous algebra course with a grade of "C" or better.
108 hours lecture per term. This course is designed for students who would like to complete elementary and intermediate algebra in one semester. It covers factoring, exponents, linear, quadratic, rational, and absolute value equations and inequalities, radical equations, operations with polynomials, radical and rational expressions, systems of equations and inequalities, linear, quadratic, exponential and logarithmic functions and their graphs, complex numbers, and conic sections. Students who have completed MATH 020 F are allowed to take MATH 040 F , MATH 043 F or MATH 041 F. (Degree Credit) AA GE

## MATH 043 F Intermediate Algebra for Statistics and Liberal Arts

Prerequisite: MATH 020 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This course emphasizes applications, mathematical modeling of data and interpretation of results. The course includes linear, quadratic, rational, exponential and logarithmic functions and their graphs, solving equations involving these functions, solving linear inequalities, and solving systems of linear equations at an intermediate level. Graphing calculators will be required for selected topics. (Degree Credit) AA GE

MATH $\mathbf{1 0 0}$ F Liberal Arts Mathematics 3 Units
Prerequisite: MATH 040 F with a grade of "C" or better or math skills clearance.
54 hours lecture per term. This course provides an introduction to a variety of mathematical topics including set theory, logic and deductive reasoning, geometry, probability, statistics, and other selected topics. This course is designed for students majoring in liberal arts, education or communication. Calculators or computers may be used for selected topics. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 120 F Introductory Probability and <br> 4 Units Statistics

Prerequisite: MATH 040 F with a grade of " $C$ " or better or math skills clearance.
Advisory: READ 096 F or reading skills clearance.
72 hours lecture per term. This course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120 F may not receive credit for SOSC 120 F. (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F and PSY 161HF, combined maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 120HF Honors Introductory Probability 4 Units and Statistics

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
Advisory: READ 096 F or reading skills clearance.
72 hours lecture per term. This Honors-enhanced course covers descriptive statistics, elementary probability theory and inferential statistics. Topics covered include: summarizing data in tables and graphs, computation of descriptive statistics, sample spaces, classical probability theory, rules of probability, probability distributions, confidence intervals for population parameters, hypothesis testing, correlation and regression and Chi-Square Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers utilizing software specifically designed for statistical calculations and graphing will be used for various topics. Students who receive credit for MATH 120HF may not receive credit for SOSC 120 F. (CSU) (UC Credit Limitation: MATH 120 F, MATH 120HF, PSY 161 F and PSY 161HF combined, maximum one course.) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 129 F College Algebra for Business 4 Units Calculus

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This course includes a review of basic topics from intermediate algebra, equations and inequalities, functions and graphing including exponential and logarithmic functions, building mathematical models in business, finance and economics, systems of equations and inequalities and an introduction to spreadsheets and/or graphing software. The course is designed for students planning to enroll in MATH 130 F. A scientific calculator will be required; a graphing calculator may be required. (This course does not meet requirements in the Business Division and will not substitute for BUS 151 F. See Business and Computer Information Systems Division for Business requirements.) (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## MATH 130 F Calculus for Business

## 4 Units

## (C-ID MATH 140)

Prerequisite: MATH 129 F with a grade of " $C$ " or better or math skills clearance.
72 hours lecture per term. This course includes fundamentals of analytic geometry and calculus; differential calculus, integral calculus, and selected applications of calculus; functions and managerial planning and their use in economics and business. A scientific calculator will be required; a graphing calculator may be required. Computer applications may be included. (CSU) (UC Credit Limitation; MATH 130 F, MATH 150AF and MATH 150HF, combined maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 141 F College Algebra

4 Units
Prerequisite: MATH 030 F with a grade of "C" or better and MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This course is designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141HF and MATH 142 F are required for enrollment in MATH 150AF. (CSU) (UC Credit Limitation; MATH 141 F and MATH 129 F; maximum combined credit, one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 141HF Honors College Algebra 4 Units

Prerequisite: MATH 040 F with a grade of "C" or better and MATH 030 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This Honors-enhanced course is a one-semester course designed to prepare students for the study of calculus. Topics to be covered include review of the fundamentals of algebra, relations, functions, solutions of first- and second-degree equations and inequalities, systems of equations, matrices and determinants, binomial theorem, mathematical induction, polynomial functions, exponential and logarithmic functions, analytic geometry and conic sections, geometric and arithmetic sequences and series, and miscellaneous topics. Graphing calculations will be incorporated. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F or MATH 141 HF and MATH 142 F are required for enrollment in MATH 150AF. (CSU) (UC Credit Limitation; MATH 141 F and MATH 129 F; maximum combined credit, one course) (Degree Credit) AA GE, CSU GE, IGETC

MATH 142 F Trigonometry 4 Units Prerequisite: MATH 030 F with a grade of "C" or better and MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This is a one-semester course in trigonometry designed to prepare students for the study of calculus. The topics to be covered include the following: algebraic skills, measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates and DeMoivre's theorem. Graphing calculators will be used for selected topics. Course may be taken concurrently with MATH 141 F or MATH 141 HF . Both MATH 141 F or MATH 141HF, and MATH 142 F are required for enrollment in MATH 150AF. (CSU) (Degree Credit) AA GE, CSU GE

## MATH 150AF Calculus I

4 Units

## (C-ID MATH 210)

Prerequisite: MATH 141 F with a grade of "C" or better or MATH 141HF with a grade of "C" or better and MATH 142 F with a grade of "C" or better or math skills clearance.
72 hours lecture per term. This course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, anti-derivatives and indefinite integrals, and the definite integral. Graphing calculators will be used for selected topics. (CSU) (UC Credit Limitation; MATH 130 F, MATH 150AF and MATH 150HF, combined maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 150BF Calculus II <br> 4 Units

## (C-ID MATH 220)

Prerequisite: MATH 150AF with a grade of "C" or better or MATH 150HF with a grade of "C" or better.
72 hours lecture per term. This is a second semester calculus course covering differential equations, applications of integration, integration techniques, L'Hopital's Rule, improper integrals, sequences and series, conics, parametric equations, and polar coordinates. Graphing calculators will be used for selected topics. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 150HF Honors Calculus I <br> 4 Units

## (C-ID MATH 210)

Prerequisite: MATH 141 F with a grade of "C" or better or MATH 141HF with a grade of "C" or better and MATH 142 F with a grade of "C" or better or math skills clearance.
72 hours lecture per term. This Honors-enhanced course covers limits and continuity, differentiation of algebraic, transcendental and inverse functions, applications of differentiation, antiderivatives and indefinite integrals, and the definite integral. Graphing calculators will be used for selected topics. (CSU) (UC Credit Limitation: MATH 130 F, MATH 150AF and MATH 150HF combined maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 170 F Discrete Structures



4 Units

## (C-ID MATH 160)

Prerequisite: MATH 141 F and MATH 142 F, with a grade of "C" or better.
Advisory: MATH 150AF.
72 hours lecture per term. This course covers fundamental topics for Computer Science such as logic, proof techniques, sets, introduction to computer programming, basic counting rules, relations, functions and recursion, graphs and probability ties. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MATH 171 F Discrete Mathematics

Prerequisite: MATH 141 F with a grade of "C" or better or MATH 141HF with a grade of "C" or better, and MATH 142 F with a grade of " C " or better, or math skills clearance
72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer-related disciplines. The topics covered include logic, truth tables, Boolean algebra, logic circuits, elementary set theory, functions, relations, proof techniques, combinatorics, elementary probability, and recurrence relations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MATH 172 F Graph Theory and Linear Algebra 4 Units Prerequisite: MATH 141 F or MATH 141HF with a grade of "C" or better and MATH 142 F with a grade of " C " or better.
72 hours lecture per term. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computer related disciplines. Topics include the theory of graphs, trees, finite state machines, and linear algebra including matrix operations, eigenvalues, vector spaces, linear transformations, and inner product spaces. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 203 F Mathematics for Future <br> 3 Units Elementary Teachers

Prerequisite: MATH 030 F with a grade of " C " or better and MATH 100 F with a grade of " C " or better.
54 hours lecture per term. This course is designed for prospective elementary teachers. Topics covered include: problem-solving techniques, whole numbers and numeration, set theory, elementary number theory, integers, rational numbers, ratios, proportions, decimals, and percents. The course includes instruction delivery design and activity-based explorations. (CSU) (Degree Credit) AA GE

## MATH 250AF Multivariable Calculus <br> 4 Units

## (C-ID MATH 230)

Prerequisite: MATH 150BF with a grade of "C" or better.
72 hours lecture per term. This is a third semester course in calculus covering solid analytic geometry, vectors in three dimensions, vector calculus, differential calculus of functions of several variables, multiple integration, vector fields and theorems. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC.

## MATH 250BF Linear Algebra and Differential 4 Units Equations <br> Prerequisite: MATH 250AF with a grade of " $C$ " or better.

72 hours lecture per term. This is a fourth semester course in calculus covering matrices, determinants, vector spaces, ordinary differential equations of the first order, linear second-order differential equations, power series and numerical solutions, and Laplace transformations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 250CF Additional Topics in Linear Algebra <br> Corequisite: MATH 250BF with a grade of " C " or better.

 36 hours lecture per term. This course completes the introduction to Linear Algebra begun in MATH 250BF. Topics covered include linear transformations and their properties, the Dimension-sum theorem, matrices of linear transformations, inner product spaces and their properties, orthogonality, the Gram-Schmidt process, diagonalizability of symmetric matrices, and simplifying quadratic forms. (CSU) (UC) (Degree Credit) AA GE
## MATH 255 F Linear Algebra



4 Units

## (C-ID MATH 250)

Prerequisite: MATH 150BF with a grade of " $\mathrm{C}^{\prime}$ or better.
72 hours lecture per term. 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. Properties of vectors in two and three dimensions are investigated, 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MATH 260 F Ordinary Differential Equations

4 Units

## (C-ID MATH 240)

Prerequisite: MATH 150BF with a grade of "C" or better. Advisory: MATH 250AF.
72 hours lecture per term. This course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. This course introduces the theoretical aspects of differential equations, including establishing when solution(s) exist and techniques for obtaining solutions, including series solutions and singular points, Laplace transformations and linear systems. (CSU) (UC) (Degree Credit) AA GE

MATH $\mathbf{2 9 0}$ F Pure Mathematics Seminar . 5 to 4 Units Prerequisite: MATH 040 F with a grade of " C " or better. 9-72 hours lecture per term and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the pure mathematics seminar(s) offered. This course is structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Seminar courses in mathematics can be taken in any order. (CSU) (UC Review required) (Degree Credit)

MATH 290HF Honors Pure Mathematics . 5 to 4 Units Seminar
Prerequisite: MATH 040 F with a grade of " C " or better.
9-72 hours lecture per term and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the pure mathematics seminar(s) offered. An enriched approach designed for Honors students. Pure mathematics seminars are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems in pure/ theoretical mathematics such as real analysis, complex analysis, geometry, topology, number theory, logic, experimental mathematics, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. MATH 290 F and MATH 290 HF differ from other Mathematics Seminars in that the topics are exclusively devoted to theoretical mathematics and proofs in it. Topics assigned to honors students will emphasize additional rigor and depth, and honors students will participate in local, regional, and/or national competitions and conferences in mathematical science. Seminar courses in mathematics can be taken in any order. (CSU) (UC Review required) (Degree Credit)

## MATH 291 F Applied Mathematics

. 5 to 4 Units Seminar
Prerequisite: MATH 040 F with a grade of " C " or better. 9-72 hours lecture and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the Applied Mathematics Seminar(s) offered. Historically, covered topics are new each time the course is offered and taught topics are never repeated, to ensure currency. This course is structured in order to engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (CSU) (UC Review required) (Degree Credit)

## MATH 291HF Honors Applied Mathematics Seminar

Prerequisite: MATH 040 F with a grade of " C " or better. 9-72 hours lecture and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the Honors Applied Mathematics Seminar(s) offered. This course is an enriched approach designed for honors students. This course will engage students in applied mathematics topics such as numerical analysis, dynamical systems, cosmology, finance, mathematical biology, inverse problems, as well as mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. (CSU) (UC Review required) (Degree Credit)

## MATH 295 F General Mathematics <br> Seminar <br> Prerequisite: MATH 040 F with a grade of " C " or better.

9-72 hours lecture and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the seminar(s) offered. This course is structured in order to engage students in a diverse number of dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (CSU) (UC Review required) (Degree Credit)

## MATH 295HF Honors General Mathematics Seminar

Prerequisite: MATH 040 F with a grade of " C " or better. 9-72 hours lecture and 0-162 hours lab per term. Lecture and lab hours will vary according to the nature of the seminar(s) offered. Math seminars are structured in order to engage students in dynamical mathematical subjects, including cutting-edge unsolved problems, abstract, interdisciplinary, computational, and experimental mathematics, mathematical typesetting and document preparation, advanced topics, careers in mathematical science, mathematical writing and speaking, math conferences, math competitions, and math service learning. An enriched approach in this course is designed for students in the Honors program. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. (CSU) (UC review required) (Degree Credit)

MATH 299 F Mathematics Independent Study 1 Unit 18 hours lecture or scheduled conferences per term. This course is for able students who wish to increase their knowledge of multiple areas of pure and/or applied mathematics through individual study and small group conferences. (CSU) (UC review required) (Degree Credit)

## Metallurgy (METL)

## Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Metallurgy Courses

## METL 192 F Fundamentals of Metallurgy 3 Units

54 hours lecture per term. This course is a survey of the field of metallurgy designed to familiarize the technical student with the production, use, and testing of metals. This course is applicable for students in all technical fields. (CSU) (Degree Credit)

## Microbiology (MICR)

Natural Sciences Division
Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Microbiology Courses

## MICR 220 F Medical Microbiology

4 Units
Advisory: Biological sciences lab course.
54 hours lecture and 54 hours lab per term. This course focuses on the study of microorganisms that pose significant health problems at both the personal and community level. Special attention is given to the topics of infectious disease transmission, immunology, sanitation and prophylaxis. Principles of applied microbiology are stressed. Recommended for students planning to enter twoyear allied health professional programs. (CSU) (Degree Credit) AA GE, CSU GE

MICR 262 F General Microbiology 5 Units
Prerequisite: CHEM 101 F or equivalent with a grade of "C" or better and a biological science lab course that includes cellular structurelfunction (such as ANAT 231 F, BIOL 101 F, BIOL 170 F, etc.)
54 hours lecture and 108 hours lab per term. This course studies the morphology, taxonomy, metabolism, and molecular genetics of microbes with emphasis on bacteria, protozoa, viruses, helminths and fungi. The role of microorganisms in the disease process, epidemiology, immunology and chemotherapeutic control measures, environmental impact and industrial application are discussed. Lab exercises focus on the development of basic techniques in aseptic handling, visualization, and quantification of microbes. Other lab exercises include sampling water and soil for medically or environmentally important microbes, assessing antibiotic sensitivity, fluorescent microscopy, and immunoassays. The course is designed for students pursuing a career or major in microbiology and various allied health professions. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Music (MUS)

## Fine Arts Division

Office: Bldg 1000, Room 1021-714.992.7034
Dean: John Tebay
Website: finearts.fullcoll.edu

## Music Courses

## MUS 001 F Instrumental Performance . 5 to 3 Units Practicum

9-54 hours lab per term. This course is for students who wish to increase their knowledge of instrumental performance. Various topics will be offered. Consult the class schedule to verify credit for a particular semester.

## MUS 021 F Piano Pedagogy I

## 3 Units

Letter Grade or Pass/No Pass option.

## Prerequisite: Piano audition.

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. The emphasis is on evaluating various pedagogical methods and skills for teaching beginning and elementary level students. Class activities include examining current piano method books, studio policy, business law, communication skills, networking, lectures, presentations and guest speakers.

## MUS 022 F Piano Pedagogy II

3 Units
Letter Grade or Pass/No Pass option.

## Prerequisite: Audition.

54 hours lecture and 18 hours lab per term. This course is designed for those interested in starting or continuing a career in piano teaching. Students will evaluate various pedagogical methods and skills for teaching intermediate and early advanced repertoires. Class activities include peer-teaching, piano competition, business etiquette, lesson plans, tutoring, adjudication, job interview, journal preparation, lectures and guest speakers.

## MUS 070 F Musical Theatre Techniques

2 Units Pass/No Pass only.
36 hours lecture per term. Students will participate in an in-depth analysis and application of the skills necessary for the performance in the styles of Musical Theatre, from audition to performance.

## MUS 081 F Music Tour Practicum

. 5 to 3 Units
$0-54$ hours lecture and 0-108 hours lab per term. This course is for students who wish to increase their knowledge and skills in a practical concert tour. This class will involve the students in the preparation, management, and performance venues appropriate for the genre. Various topics will be offered. Unit credit may range from .5 to 3 units in any given semester. Consult the class schedule to verify credit for a particular semester.

## MUS 100 F Music Laboratory

Pass/No Pass only.
Open Entry/Open Exit.
54-108 hours lab per term. For each 54 hours beyond the music requirements that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite 1114, one unit of credit will be granted. All hours must be verified by computer sign in. (CSU) (Degree Credit)

## MUS 101 F Music Fundamentals

3 Units
54 hours lecture per term. This course is designed as the entrylevel music theory for non-music majors and includes basic music terminology, rhythm and pitch notation, clefs, scales, intervals, and triads. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 102 F Music Reading

3 Units
54 hours lecture and 18 hours lab per term. This course is designed for the student whose music reading skills are nonexistent or very limited. Emphasis is upon learning by tapping rhythmic patterns and singing melodic materials, but includes enough of basic rhythm and pitch notation, intervals, scales, and meter by key signatures to make this possible. Open to all students but should be of special interest to prospective music majors, church choir members, and others who want to develop skills in music reading. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 103 F Beginning Musicianship

1 Unit

## (C-ID MUS 125)

(formerly MUS 104AF)
Prerequisite: MUS 106 F with a grade of " C " or better.
Corequisite: MUS 107 F with a grade of "C" or better.
Advisory: MUSA 131 F.
36 hours lecture per term. This is the first course in ear-training, sight singing, and musicianship skills for the music major. It includes developing melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (CSU) (UC) (Degree Credit) AA GE

MUS 104 F Intermediate Musicianship
1 Unit
(C-ID MUS 135)
(formerly MUS 104BF)
Prerequisite: MUS 103 F with a grade of " C " or better.
Corequisite: MUS 109 F with a grade of "C" or better.
Advisory: MUSA 131 F.
36 hours lecture per term. This course is a continuation of MUS 103 F. It includes the development, at increasingly more difficult levels of melodic and rhythmic performance skills as well as melodic, harmonic, and rhythmic dictation. (CSU) (UC) (Degree Credit) AA GE

## MUS 106 F Introduction to Music Theory

## Advisory: MUSA 131 F.

54 hours lecture per term. This course is designed as the entrylevel music theory class for music majors and includes basic music terminology, rhythm and pitch notation, clefs, scales, intervals, and triads. Keyboard and aural skills will also be introduced, along with a concise outline of the major style periods of music history. The ability to read music is strongly recommended and desirable. This course provides essential background for more advanced courses in music theory. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 107 F Harmony I

3 Units
(C-ID MUS 130)

## (formerly MUS 107AF)

Prerequisite: MUS 106 F with a grade of "C" or better.
Corequisite: MUS 103 F with a grade of "C" or better.
Advisory: MUSA 131 F.
54 hours lecture per term. This is the second course in music theory for music majors and includes four-part writing, cadences, 7th chords, chord inversions, figured bass symbols, tonality, phrases, periods, non-harmonic tones, harmonic progressions, and introduction to secondary dominants. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 108 F Introduction to Music Technology 2 Units

36 hours lecture per term. This course covers and explores the fundamental vocabulary, methods, concepts and devices used in contemporary music production and related media fields, including sound fundamentals, consumer audio equipment, personal computers and software, recording studios, electronic music, audio-visual productions, trade publications, relevant conventions, and employment opportunities. This course is required for most music programs. (CSU) (Degree Credit)

## MUS 109 F Harmony II <br> (C-ID MUS 140) <br> (formerly MUS 107BF) <br> Prerequisite: MUS 107 F with a grade of " C " or better. <br> Corequisite: MUS 104 F with a grade of " C " or better. Advisory: MUSA 131 F.

3 Units

54 hours lecture per term. This course follows MUS 107 F in the music theory sequence. It includes altered non-harmonic tones, and secondary dominants, modulation to closely and distantly related keys, modally borrowed chords, augmented sixth chords, the Neapolitan sixth, and altered dominants. Additional topics will include phrase, form, and advanced chords. (CSU) (UC) (Degree Credit)

## MUS 110 F Electronic Music I: Beginning 3 Units Music Production

Prerequisite: MUS 108 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course covers the history of electronic music, the classical tape lab, and the analogue voltage controlled synthesizer, as well as the fundamentals of electronic music theory and techniques for instrument synthesis and sound design. (CSU) (Degree Credit) AA GE, CSU GE

## MUS 112 F The Music Business

36 hours lecture per term. This course provides an introduction to intellectual property law, copyright forms, and agreements between songwriter, publisher, recording artist, producer, and personal management. This course takes an extensive look at the history of music business and how proof of authorship is possible. This course also explores the business dynamics of the music and entertainment industries. (CSU) (Degree Credit)

## MUS 113 F Jazz History - An Appreciation 3 Units

54 hours lecture per term. This course provides a historical study of jazz music, America's only original musical art form. The focus will be on developing for the student an appreciation and understanding of the music with secondary emphasis on the historical and cultural conditions which influenced each era of jazz music: Dixieland, Swing, Cool Jazz, Bebop, Free jazz, and Fusion. Active directed listening will be the primary activity in the classroom. Out-of-class activities will include music, listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MUS 116 F Music Appreciation

3 Units
(C-ID MUS 100)
54 hours lecture per term. This course is designed for the non-music major, and explores musical development from Middle Ages/Renaissance to the present. Emphasis is on active, directed listening to music and the discussion of choral, orchestral, solo, opera, and chamber works. Out-of-class activities include music listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MUS 118 F Introduction to Opera

## 3 Units

Letter Grade or Pass/No Pass option.
54 hours lecture and 18 hours lab per term. Introduction to the standard operatic repertoire in terms of development of musical style, dramatic structure, and performance tradition. Emphasis on elements of the art of operatic singing, voice classification, vocal range and technique, and dramatic values. Opportunities for attendance at operatic performances will be provided. Open to all students. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MUS 119 F History of Rock Music 3 Units

54 hours lecture per term. This course presents a historical study of the music of a rock musician. The principal focus will be on the music with analysis, secondary emphasis is placed on the sociological, political, and economic conditions which so heavily influenced this musical genre's development. Listening Active, directed listening, will be the primary function activity in the classroom. Out-of-class activities will include music listening and concert attendance. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MUS 120 F Survey of Music History 3 Units (C-ID MUS 100)
54 hours lecture per term. This course is a survey of the history of western art music from antiquity through the twentieth century including the contributions of other cultures with selected readings, recordings, and score analysis. Emphasis is placed on cultural influences, performance practices, media, composers, and characteristics of each style period. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MUS 122 F Advanced Music Business 2 Units
Prerequisite: MUS 112 F with a grade of "C" or better
36 hours lecture per term. This course builds on the information covered in and is meant to be sequential to MUS 112 F . This course covers the following topics in greater depth: artist management, marketing and promotion, venue management and promotion, music supervisor and music product sales and development. This course also explores new media and online methods for promotion and distribution. Guest speakers will appear according to availability. (CSU) (Degree Credit)

## MUS 124 F Recording Lab I: Beginning <br> 3 Units Techniques

Prerequisite: MUS 108 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course explores the fundamental concepts in audio recording technology, including lab business practices, microphones, mixers, signal processors, the sound field, monitors, recording and editing devices, synchronization, and production techniques. (CSU) (Degree Credit)

## MUS 125 F Recording Techniques Workshop <br> 3 Units for Performers

36 hours lecture and 54 hours lab per term. This course is designed for the music performer enrolled in a college performance ensemble that is involved in making a performance tape, CD, DVD or TV show. This course includes recording, use of clic tracks, mike placement/set up, use of headphones, proper overdubbing techniques, lip syncing when needed and developing advanced lab performance skills. Enrollment in this class is available only to students who are enrolled in a college performing group or small ensemble that is recording during the term the class is being offered or as a Recording/Production Career Technical Education student. (CSU) (Degree Credit)

## MUS 156 F Beginning Jazz Improvisation Instrumental

1 Unit
Advisory: MUS 100 F.
18 hours lecture and 36 hours lab per term. This course will give students a working knowledge of reading music and the ability to play major scales up to three sharps and three flats from memory. This course is designed for the beginning instrumental musician with an emphasis upon techniques of rhythmic, melodic and harmonic improvisation. Students will learn the art of constructing a melodic solo that is rhythmically and harmonically appropriate. (CSU) (UC) (Degree Credit)

## MUS 172 F Opera Theatre Workshop <br> Advisory: Audition.

1 Unit
18 hours lecture and 54 hours lab per term. This course is an in-depth analysis and application of the skills necessary for the performance in the styles of opera and theater from audition to performance. Course may be taken four times for credit. (CSU) (Degree Credit)

## MUS 180 F Collegiate Chorale

(C-ID MUS 180)
Advisory: Audition.
18 hours lecture and 36 hours lab per term. This course will cover standard choral literature which will be rehearsed and performed with an emphasis on basic choral techniques. This course is open to all students with limited or no singing experience. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 181 F Women's Chorale

1 Unit
(C-ID MUS 180)
Advisory: Audition. 18 hours lecture and 36 hours lab per term. This is a performing group which performs traditional choral music for treble voices in styles from the Baroque, Classical, Romantic, and Contemporary periods. This course is open to students with limited or no singing experience. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

MUS 196HF Honors Creative Arts - Music 3 Units
54 hours lecture and 18 hours lab per term. This course explores the nature of creativity through exposure to the performing arts, literature and the fine arts. Honors students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts and theatrical performances. Students who receive credit in this course may not receive credit in THEA 196HF or ART 196HF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MUS 203 F Counterpoint

## 3 Units

## (C-ID MUS 150)

Prerequisite: MUS 109 F with a grade of " C " or better.
Corequisite: MUS 204 F with a grade of "C" or better.
Advisory: MUSA 131 F with a grade of "C" or better.
54 hours lecture per term. This course introduces the contrapuntal style of 17 th and 18 th century counterpoint including application to the 20th century. This class explores, through analysis and writing, free counterpoint, technique of canonic writing, two-part invention, and three-part fugue. (CSU) (UC) (Degree Credit)

## MUS 204 F Advanced Musicianship <br> 1 Unit

## (formerly MUS 204AF)

Prerequisite: MUS 104 F with a grade of "C" or better. Corequisite: MUS 203 F with a grade of "C" or better.
Advisory: MUSA 131 F.
36 hours lecture per term. This course is a continuation of MUS 104 F . It includes the development of, at increasingly more difficult levels, melodic and rhythmic sight singing, along with melodic, harmonic, and rhythmic dictation. (CSU) (UC) (Degree Credit)

MUS 205 F Pop/Commercial Music Theory 3 Units
Prerequisite: MUS 109 F with a grade of "C" or better. Corequisite: MUS 206 F with a grade of " C " or better. 54 hours lecture per term. This advanced music theory class provides an intensive study of harmonic material as used in popular music and jazz. This course includes the study of chord progressions, substitutions, harmonic alterations and musical form. Special attention is paid to great American composers such as Duke Ellington and Cole Porter. (CSU) (UC) (Degree Credit)

## MUS 206 F Pop/Commercial Musicianship

1 Unit

## (formerly MUS 204BF)

Prerequisite: MUS 104 F with a grade of " C " or better. Corequisite: MUS 205 F with a grade of "C" or better.
36 hours of lecture per semester. This course is designed to enhance the student's aural skills through several different approaches to pop, jazz and commercial music. The course includes drills and exercises in three areas: singing of jazz-related scales and arpeggios, basic conducting skills and the transcription of pop harmony centered upon the music of the Beatles. (CSU) (UC) (Degree Credit)

## MUS 207 F Pop/Commercial Arranging/ Composing

Prerequisite: MUS 205 F with a grade of "C" or better.
54 hours lecture per term. This course provides analysis of contemporary and traditional songs and the study of techniques of scoring for various combinations of voices and instruments. This course places emphasis on using modern orchestration and scoring projects to be performed and recorded for class members. (CSU) (Degree Credit)

## MUS 208 F Music Copying and Notation 2 Units Software

Prerequisite: MUS 106 F with a grade of " C " or better. 36 hours lecture per term. This is a vocational, career-oriented course that covers the preparation of professional-quality manuscripts, vocal scores, and instrumental scores as well as transposition of instruments and copying from full instrumental scores. This course is open to all music majors, music teachers, or performers. (CSU) (Degree Credit)

## MUS 224 F Recording Studio II: Intermediate 3 Units Techniques

Prerequisite: MUS 124 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This course provides an introduction to digital audio concepts, recorders, synchronization, and the digital audio workstation. Students will be assigned projects in the recording facilities. (CSU) (Degree Credit)

## MUS 226 F Recording Studio III: Advanced 3 Units Techniques

Prerequisite: MUS 224 F with a grade of " C " or better or Audition.
36 hours lecture and 72 hours lab per term. This class is the final of three sequential recording studio classes. Student project work focuses on advanced recording techniques necessary to record and organize recording sessions for large choirs, ensembles and orchestras. (CSU)

MUS 256 F Advanced Jazz Improvisation Instrumental
Prerequisite: MUS 156 F with a grade of " $C$ " or better or Audition.
18 hours lecture and 36 hours lab per term in the Rhythm Laboratory, recording Studio, or Music Library with emphasis upon intermediate techniques of rhythmic, melodic, and harmonic improvisation. (CSU) (UC) (Degree Credit)

## MUS 259 F Steel Drum Ensemble

1 Unit
Prerequisite: Audition.
18 hours lecture and 18 hours lab per term. Lectures and demonstrations are combined with student performances that provide information and opportunities toward the goal of live musical performances in the Steel Pan Ensemble. Emphasis will be placed on sight reading and improvisation of music from Trinidad, modern jazz, and classical arrangements. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 260 F Guitar Ensemble

1 Unit
Prerequisite: Audition.
18 hours lecture and 18 hours lab per term. Students will rehearse and perform original and transcribed guitar ensemble literature from the Renaissance to contemporary styles; performances are required of all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 261 F String Ensemble

1 Unit

## (C-ID MUS 180)

Prerequisite: Audition.
18 hours lecture and 18 hours lab per term. This course includes the rehearsal and performance of standard and current string ensemble literature. (CSU) (UC) (Degree Credit)

## MUS 262 F Woodwind Ensemble

1 Unit

## (C-ID MUS 180)

Prerequisite: Audition.
18 hours lecture and 18 hours lab per term. This class will consist of study, rehearsal, and performance of Woodwind Ensemble music. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 263 F Brass Ensemble

1 Unit
Prerequisite: Audition.
18 hours lecture and 36 hours lab per term. This course is based upon performance of brass ensemble literature from all major stylistic periods in music. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 264 F Percussion Ensemble

1 Unit

## Prerequisite: Audition.

18 hours lecture and 36 hours lab per term. This course explores the rehearsal and public performance of standard percussion ensemble literature. This course is designed for music majors, but is open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 265 F Piano Ensemble

1 Unit
Prerequisite: MUSA 136 F with a grade of " C " or better or Audition.
18 hours lecture and 18 hours lab per term. This course is designed to enhance ensemble-playing skills by focusing on rehearsal technique, balance, and hand coordination. Emphasis is on performing standard and current duo pieces, four-hand literature, and pieces requiring more than two pianos and/or other instruments. Participation in piano ensemble recital and performances is required. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 266 F Jazz Combo

1 Unit

## Prerequisite: Audition.

Advisory: MUS 106 F - students should be able to read music notation and play major scales up to four sharps and four flats from memory.
18 hours lecture and 36 hours lab per term. This course provides a combination of lectures and demonstrations with student performances, recordings, and tours are used to increase understanding and appreciation of many jazz genres and their relationship to modern American music. The ability to play suitable instruments is required. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 268 F Jazz Guitar Ensemble

1 Unit
Prerequisite: Audition.
18 hours lecture and 18 hours lab per term. Lecture/demonstrations are combined with student performances to provide opportunities for learning and growth in the area of jazz guitar. Particular emphasis is placed on the application of advanced guitar techniques to standard jazz literature. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 269 F Alternative Jazz Lab Ensemble

1 Unit (C-ID MUS 180)
Prerequisite: Ability to play suitable instruments.
Advisory: MUS 106 F or basic skills on major instruments.
18 hours lecture and 36 hours lab per term. This course combined with student performances is used to increase understanding and appreciation of many musical genres including Fusion, Latin Rock, Pop, Salsa, Indiana, Afro-Cuban music and their relationship to modern American composition. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 270 F Electronic Music Ensemble

1 Unit

## Prerequisite: Audition.

18 hours lecture and 36 hours lab per term. This course allows students to learn to play collaborative works suitable for electronic music and synthesizer techniques. Develop interactive playing techniques with Ableton Live, Tactile controllers and electronically-modified acoustic instruments to realize avant-garde, techno-pop and dance music as well as improvised pieces with multi-media content. Course may be taken four times for credit. (Degree Credit)

MUS 271 F Fullerton College Symphony Prerequisite: Audition.
18 hours lecture, 36 hours lab and 18 arranged hours in rehearsals, studio recording, and concerts. This course includes the rehearsal and public performance of standard orchestral literature both on campus and in surrounding communities. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 273 F Concert Band

1 Unit
Prerequisite: Audition.
18 hours lecture and 36 hours lab per term. This course will rehearse and perform standard band literature. Public performances will be held at various locations. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 274 F Fullerton College Symphonic Winds 1 Unit

 (C-ID MUS 180)Prerequisite: Audition.
18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, recordings, and concerts per term. This course will include rehearsals and performance of standard band literature. The performances will take place on campus and in the community. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 275 F Pep Band

1 Unit
Prerequisite: Audition.
18 hours lecture and 36 hours lab per term. This course creates a performance opportunity for music majors to provide musical support to the Fullerton College Athletics program. The band will perform during football and basketball games and for special events. Emphasis is placed upon student leadership, and the performance literature is drawn from contemporary and traditional band sources. The emphasis of this course is on modern Pep Band ensemble literature. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 276 F Jazz Band

1 Unit
(C-ID MUS 180)
Prerequisite: Audition.
Advisory: MUS 106 F and concurrent enrollment in MUS 274 F. 18 hours lecture and 36 hours lab per term. This is a performing ensemble including studio recording, and concerts. Rehearsal, recording and concert performance of standard and current jazz fusion music. Student composition/arrangements encouraged. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 277 F Jazz Lab Band

1 Unit
(C-ID MUS 180)
Prerequisite: Audition.
Advisory: Concurrent enrollment in MUS 274 F.
18 hours lecture and 36 hours lab per term. This course explores standard and current jazz/fusion and swing big band music. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 281 F Concert Choir <br> (C-ID MUS 180) <br> Prerequisite: Audition.

18 hours lecture, 36 hours lab and 18 hours arranged lab per term in additional rehearsals, studio recordings, and concerts. This course covers standard choral literature which will be rehearsed and performed with an emphasis on early western music of the Renaissance and Baroque periods. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 282 F Fullerton College Master Chorale

1 Unit (C-ID MUS 180)
Prerequisite: Audition.
18 hours lecture, 36 hours lab and 18 hours arranged in additional rehearsals, recordings, and concerts. This course is a performance oriented class and incorporates traditional choral literature of a sacred and secular nature. There will be at least one major work performed per year on campus and in the community. This course is open to students and to all residents of the North Orange County Community College District. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 284 F Advanced Topics in Music . 5 to $\mathbf{3}$ Units

 18-54 hours lecture and 18-54 hours lab per term. This course is designed to meet the various needs of music areas that required advanced training and continuing education as well as provide professional growth for persons employed in the music business, production, recording, and performing fields. This course will be offered in modules of advanced topics. Unit credit may range from .5 to 3 units per module. Consult the class schedule to verify topic areas and credit offered for each topic. (Degree Credit)
## MUS 285 F Chamber Singers

1 Unit

## (C-ID MUS 180)

Advisory: Audition.
18 hours lecture and 36 hours lab per term. In this course, choral chamber music literature will be rehearsed and performed on campus in surrounding communities and schools and occasionally on tours. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 286 F Vocal Jazz Lab Singers <br> Advisory: Audition

1 Unit
18 hours lecture and 36 hours lab per term. This performance ensemble uses 2-3 part vocal jazz literature to teach the fundamentals of jazz harmony, blend, style, interpretation, and improvisation within a vocal group setting. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

MUS 287 F Vocal Jazz Ensemble
(C-ID MUS 180)
Prerequisite: Audition.
18 hours lecture, 36 hours lab and 18 hours arranged in rehearsals, studio recordings, workshops, festival competitions and concerts. The students in this course will rehearse and perform standard and current music from the Vocal Jazz genre. The vocalists will be accompanied by a small instrumental ensemble. There will be a secondary emphasis upon vocal improvisation in the scat style. Student compositions and arrangements are encouraged. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 291 F Electronic Music II: Intermediate 3 Units Music Production

(formerly MUS 910 F)
Prerequisite: MUS 110 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course explores the procedures, instruments, and techniques used in a contemporary DAW/MIDI synthesizer studio and the use of sequencers, editor/librarians, intelligent arrangers, algorithmic composers, and non-linear editing in a digital audio workstation. Students will do scoring projects and acquire advanced techniques in Digital Performer and Protools. Other DAW's may include Reason, Logic and Ableton Live. (CSU) (Degree Credit)

## MUS 292 F Electronic Music III: Advanced 3 Units Music Production <br> Prerequisite: MUS 110 F with a grade of " C " or better.

36 hours lecture and 54 hours lab per term. This course offers advanced music production training in Logic Pro and Ableton Live. It represents the last class course in a sequence of three Electronic Music classes dedicated to the teaching of Advanced Music creation and production skills using state of the art Digital Audio Workstations to produce music for Film, TV and Interactive Media. (CSU) (Degree Credit)

## MUS 298 F Music Internship

1 to 3 Units
54-162 hours lab per term. This course is designed to enable the music student to understand and demonstrate competence in a professional recording/production work environment through the combination of extended classroom learning and the interaction of a professional supervisor. It is the responsibility of the student to pursue their own internship opportunity. (Degree Credit)

## MUS 299 F Music: Independent Study

1 Unit
18 hours lecture per term. For advanced students who wish to pursue a particular area of music through individual study. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

# Music - Applied (MUSA) 

## Fine Arts Division

Office: Bldg 1000, Room 1021-714.992.7034
Dean: John Tebay
Website: finearts.fullcoll.edu

## Music - Applied Courses

## MUSA 100 F Introduction to Music <br> Laboratory

1 to 2 Units

## (formerly MUS 100 F )

Pass/No Pass only.
Corequisite: MUSA 200 F with a grade of "C" or better.
54 to 108 hours lab per term in the Computer Laboratory, Music Listening Library, or Practice Room Suite. This course is taken in conjunction with MUSA and includes the private lessons, directed learning time (coaching), and practice time required for that class. (CSU) (Degree Credit)

## MUSA 101 F Beginning Music Lab

1 to 2 Units
Open Entry/Open Exit.
Pass/No Pass only.
Prerequisite: MUSA 100 F with a grade of "Pass".
Corequisite: MUSA 200 F with a grade of "Pass".
54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the second semester of MUSA 200 F. (CSU) (Degree Credit)

## MUSA 102 F Intermediate Music <br> Laboratory

1 to 2 Units
Pass/No Pass only.
Prerequisite: MUSA 101 F with a grade of "Pass".
Corequisite: MUSA 200 F with a grade of "Pass".
$54-108$ hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room, one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a corequisite to the third semester of MUSA 200 F. (CSU) (Degree Credit)

MUSA 103 F Advanced Music Laboratory 1 to 2 Units
Open Entry/Open Exit.
Pass/No Pass only.
Prerequisite: MUSA 102 F with a grade of "Pass".
Corequisite: MUSA 200 F with a grade of "Pass".
54-108 hours lab per term. For each 54 hours that the student spends progressing in the Computer Lab, listening in the Music Library or practicing in the Practice Room Suite one unit of credit will be granted. All hours must be verified by computer sign in. This course is taken as a co-requisite to the fourth semester of MUSA 200 F. (CSU) (Degree Credit)

## MUSA 104 F Introduction to Concert Hour (formerly MUS 123 F)

18 hours lecture per term. This course is designed for the first semester music major, providing the student with opportunities to expand their knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College Music Department concerts and the preparation of concert reports. This course is required of all music majors but open to all students. (CSU) (Degree Credit) AA GE

MUSA 105 F Beginning Concert Hour 1 Unit
Prerequisite: MUSA 104 F with a grade of "C" or better.
18 hours lecture per term. This course is designed for the second semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)

MUSA 106 F Intermediate Concert Hour 1 Unit Prerequisite: MUSA 105 F with a grade of "C" or better.
18 hours lecture per term. This course is designed for the third semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Music Department concerts and the preparation of concert reports. (CSU) (Degree Credit)

MUSA 107 F Advanced Concert Hour 1 Unit
Prerequisite: MUS 106 F with a grade of " C " or better.
18 hours lecture per term. This course is designed for the fourth semester music major, providing the student with opportunities to expand knowledge of music performance and specific composers and musical genres, and learn from guest artists and guest speakers. Selected students will be given the opportunity to perform during the term. Outside class activities include attendance at Fullerton College concerts and the preparation of concert reports. (CSU) (Degree Credit)

## MUSA 110 F Fundamentals of Voice Training 1 Unit for Non-Majors

18 hours lecture and 18 hours lab per term. This course is the study of fundamentals of singing techniques in a class situation. Topics include instruction in tone production, breath control, pronunciation, and choice of song literature. Out of class time includes 1 hour of practice time in Practice Room per week and preparation for recitals. Open to all students and intended for avocational and inexperienced singers. (CSU) (UC) (Degree Credit)

## MUSA 111 F Beginning Voice <br> (formerly MUS 126 F)

18 hours lecture and 18 hours lab per term. This course is an entry level class for inexperienced singers who wish to explore the Voice Major. Providing a study of basic vocal techniques, the course explores tone production, breath control, pronunciation, and choice of song literature. Required out of class activities include one hour practice in Practice Room per week and participation in recitals. (CSU) (UC) (Degree Credit)

## MUSA 112 F Intermediate Voice I <br> (formerly MUS 227 F)

1 Unit
Advisory: MUSA 111 F or Audition.
18 hours lecture and 18 hours lab per term. This course, which provides a study of vocal literature and techniques in a class situation, emphasizes individual progress in tone production, breath control and diction. Repertoire is primarily 18th and 19th century Italian songs and arias. The course is designed for the voice major not yet qualified for MUSA 200 F or the Advanced Voice classes and for promising non-majors. Out of class activities include one hour of practice per week in Practice Room Suite and preparation for recitals. (CSU) (UC) (Degree Credit).

## MUSA 113 F Intermediate Voice II

1 Unit

## Advisory: MUSA 112 F.

18 hours lecture and 18 hours lab per term. This course, which is a study of vocal literature and techniques, emphasizes individual progress in tone production, breath control and diction. The course is designed for the more advanced non-major, or the voice major not yet qualified for Applied Voice-Individual Instruction or Advanced Voice. This course continues to build on the skills learned and practiced in MUSA 112 F. Repertoire is primarily 18th and 19th century Italian songs and arias. Out of class activities include one hour of practice per week in Practice room, and preparation for recitals. (CSU) (UC) (Degree Credit)

## MUSA 120 F Beginning Guitar <br> (formerly MUS 130 F)

18 hours lecture and 18 hours lab per term. This course focuses on the fundamentals of playing the guitar: technique, note reading, scales, chords, simple picking and strumming patterns. The repertoire includes a wide variety of musical styles, from classical to rock. (CSU) (UC) (Degree Credit)

## MUSA 121 F Intermediate Guitar <br> 1 Unit <br> (formerly MUS 231 F)

Prerequisite: MUSA 120 F with a grade of "C" or better, or by Audition.
18 hours lecture and 18 hours lab per term. This course is designed for more advanced non-guitar major or the guitar major who is not yet qualified for Classical or Jazz Guitar, this course continues the study of guitar study from MUSA 120 F with emphasis on more advanced literature and techniques. Emphasis is placed on individual progress in execution and interpretation. (CSU) (UC) (Degree Credit)

## MUSA 130 F Introduction to Piano for Non-Music Majors <br> (formerly MUS 135AF)

Letter Grade/Pass/No Pass option.
18 hours lecture and 18 hours lab per term. This course is designed for non-music majors whose piano skills are nonexistent or very limited. It provides an introduction to the fundamentals of piano playing: posture, keyboard topography, note reading, 5-finger-pattern exercises, sight-reading, and piano repertoires. It is open to all students. (CSU) (UC) (Degree Credit)

MUSA 131 F Keyboard Skills I
1 Unit
Prerequisite: MUSA 130 F with a grade of "Pass" or "C" or better or Audition.
Advisory: MUSA 136 F.
18 hours lecture and 18 hours lab per term. This course is designed for music majors preparing for a university keyboard proficiency exam, this course is the entry-level keyboard musicianship class with emphasis on basic keyboard harmonization, hand independence, transposition, sight-reading, rhythm accuracy and elementary piano repertoires. (CSU) (UC) (Degree Credit)

MUSA 132 F Keyboard Skills II
1 Unit
Prerequisite: MUSA 131 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course is a continuation of MUSA 131 F for music majors. It includes emphasis on basic keyboard harmonization using primary chord inversions, technique, transposition, accompaniment patterns, rhythm accuracy and late elementary/early intermediate piano repertoires. (CSU) (UC) (Degree Credit)

## MUSA 134 F Jazz Piano Technique and Repertoire I <br> (formerly MUS 238 F)

1 Unit

Prerequisite: MUSA 130 F with a grade of "Pass" or "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This is an introductory jazz piano course in which students will learn to improvise over the blues form using the blues scale, analyze standard tunes harmonically and play ii-V-i progression using shell voicings, Bud Powell shells and rootless voicings. (CSU) (UC) (Degree Credit)

MUSA 136 F Beginning Piano Sight-Reading 1 Unit Prerequisite: MUSA 130 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course is designed for those majoring in piano whose sight-reading skill is almost nonexistent. Piano sight-reading strategies will include familiarity with keyboard topography, vertical and horizontal groupings of notes and recognition of rhythm patterns. Students will read simple arrangements of popular and famous tunes. Also recommended for those enrolled in MUSA 131 F. (CSU) (UC) (Degree Credit)

MUSA 137 F Intermediate Piano Sight-Reading 1 Unit Prerequisite: MUSA 136 F with grade of " C " or better or Audition.
18 hours lecture and 18 hours lab per term. This course is designed for piano majors and is a continuation of MUSA 136 F and includes reading various styles of intermediate-level solo piano repertoire, ensemble, accompaniments and reading chord symbol notation. (CSU) (UC) (Degree Credit)

## MUSA 140 F Introduction to Strings for Non-Majors

18 hours lecture and 18 hours lab per term. This course is an exploratory study of the violin, viola, cello or string bass in a classroom situation. It presents the basic fundamentals of string technique and music reading. Since no previous experience is necessary, the course is open to all students. (CSU) (UC) (Degree Credit)

## MUSA 141 F Beginning Strings 1 Unit

18 hours lecture and 18 hours lab per term. This course is offered to majors and non-majors who wish to become familiar with the basic fundamentals of violin, viola, cello, and/or string bass techniques. Students are required to practice at least two hours per week. Emphasis is placed on sound production, articulation, and basic music sight reading and theory. In addition, more basic concepts of teaching methods are presented in order to help prepare those wishing to enter the teaching industry at the elementary and middle school levels teaching private or group string classes. (CSU) (UC) (Degree Credit)

## MUSA 142 F Intermediate Strings

1 Unit
Advisory: MUSA 140 F or MUSA 141 F or Audition.
18 hours lecture and 18 hours lab per term. This course teaches the intermediate fundamentals of violin, viola, cello, and/or string bass techniques; more intermediate-level string techniques are presented such as shifting, vibrato and tuning. (CSU) (UC) (Degree Credit)

## MUSA 150 F Introduction to Woodwinds for Non-Majors <br> Prerequisite: Audition.

18 hours lecture and 18 hours lab per term. This course offers an introduction to the flute, oboe, bassoon, clarinet, or saxophone in a class situation. No previous experience is necessary. This course is open to all students (CSU) (UC) (Degree Credit)

## MUSA 151 F Beginning Woodwinds (formerly MUS 146 F ) <br> Prerequisite: Audition.

18 hours lecture and 18 hours lab per term. This course provides a challenging introduction to the study of flute, oboe, bassoon, clarinet, or saxophone in a class setting. Although this course is designed for music majors, it is open to all students. (CSU) (UC) (Degree Credit)

MUSA 152 F Intermediate Woodwinds
1 Unit
Prerequisite: MUSA 150 F with a grade of " C " or better or 151 F with a grade of " C " better or Audition.
18 hours lecture and 18 hours lab per term. This course is a study of Woodwind literature and techniques in a class situation. Emphasis is placed on individual progress in tone production, breath support, technique, and intonation. The course is designed for more advanced non-majors, or for music majors not yet qualified for advanced woodwinds. (CSU) (UC) (Degree Credit)

## MUSA 161 F Beginning Brass <br> (formerly MUS 149 F)

1 Unit
18 hours lecture and 18 hours lab per term. This course provides an introductory level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Since no previous brass experience is necessary, it is open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)

## MUSA 162 F Intermediate Brass

1 Unit
Prerequisite: MUSA 161 F with a grade of " C " or better or by Audition.
18 hours lecture and 18 hours lab per term. This course is an intermediate level study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Some prior experience in playing a brass instrument is necessary. Students must provide their own instruments. (CSU) (UC) (Degree Credit)

## MUSA 170 F Introduction to Percussion for <br> 1 Unit Non-Majors <br> (formerly MUS 152 F)

18 hours lecture and 18 hours lab per term. This course is a study of the techniques and rhythmic theory needed to perform the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be identified and discussed. (CSU) (UC) (Degree Credit)

## MUSA 171 F Introduction to Drum Set <br> 1 Unit (formerly MUS 097 F)

Prerequisite: MUSA 170 F with a grade of " C " or better.
18 hours lecture and 18 hours lab per term. This course will teach students the fundamentals of popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of basic percussion technique, rhythmic theory and Jazz, Rock, Latin and Pop drumming styles. Students should be prepared to practice one half hour a day outside of class. (CSU) (Degree Credit)

## MUSA 172 F Intermediate Percussion

Prerequisite: MUSA 170 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for intermediate level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (CSU) (UC) (Degree Credit)

## MUSA 173 F Intermediate Percussion - <br> Drum Set

Prerequisite: MUSA 171 F with a grade of "C" or better or pass a basic entrance audition establishing elementary sight-reading skills.
18 hours lecture and 18 hours lab per term. Students will learn popular drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. Instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles. Students should be prepared to practice one half hour a day, outside of class. (CSU) (UC) (Degree Credit)

## MUSA 191 F Intermediate Vocal Jazz Styling 1 Unit and Improvisation I <br> (formerly MUS 157 F) <br> Advisory: Audition.

18 hours lecture and 18 hours lab per term. This course is designed to give vocal students beginning training in jazz styling techniques, rhythmic and melodic improvisation, and the fundamentals of lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. Students should have prior training in the fundamentals of voice and music theory. (CSU) (UC) (Degree Credit)

## MUSA 192 F Intermediate Vocal Jazz Styling 1 Unit and Improvisation II <br> Prerequisite: MUSA 191 F with a grade of "C" or better.

18 hours lecture and 18 hours lab per term. This course is designed to give vocal students intermediate training in jazz styling techniques, vocal improvisation, and basic lead sheet writing. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library. (CSU) (Degree Credit)

## MUSA 200 F Applied Music - Individual Private Study

(C-ID MUS 160)
(formerly MUS 225 F)
Prerequisite: Audition.
Corequisite: MUSA 100 F or MUSA 101 F or MUSA 102 F or MUSA 103 F with a grade of "Pass" or "C" or better.
18 hours lecture per term. This course provides a performance venue for music majors taking individual private lessons in their performance area of study, to include guitar, orchestral instruments, percussion, piano and voice. Lessons are taught by Fullerton College music faculty and a faculty jury is required every semester. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

MUSA 201 F Advanced Applied Music-
Individual Private Study
Prerequisite: MUSA 200 F with a grade of "C" or better and Audition.
18 hours lecture and 18 hours arranged in scheduled private lessons and coaching per term. This course provides a performance venue for advanced music majors taking individual private lessons in their performance area of study, to include guitar, orchestral instruments, percussion, piano and voice. Lessons are taught by Fullerton College music faculty and a faculty jury is required every semester. Course may be taken twice for credit. (CSU) (Degree Credit)

## MUSA 210 F Advanced Voice <br> (formerly MUS 228 F)

1 Unit
Advisory: MUSA 112 F or Audition.
18 hours lecture and 18 hours lab per term. This course offers individual instruction in vocal techniques and interpretation of solo voice literature in a class situation. Emphasis is placed upon repertoire and public performance. Participation in recitals plus one hour practice in Practice Room Suite 1114 per week is required. Designed for music majors but open to all students. (CSU) (UC) (Degree Credit)

## MUSA 211 F Advanced Voice-German Lieder <br> 1 Unit <br> Advisory: MUSA 112 F or Audition.

18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of German Lieder in a class situation, emphasizes, repertoire and public performance. Out of class activities include one hour practice in the Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. (CSU) (Degree Credit)

## MUSA 212 F Advanced Voice-French Melodie 1 Unit

Advisory: MUSA 112 F or Audition.
18 hours lecture and 18 hours lab per term. This course, which provides Individual instruction in vocal techniques and interpretation of French Melodie in a class situation, emphasizes learning and performing French repertoire. Out of class activities include one hour practice in the Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. (CSU) (UC) (Degree Credit)

MUSA 213 F Advanced Voice-Spanish Cancion 1 Unit Advisory: MUSA 112 F or Audition.
18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of Spanish Canciones, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors this course is open to all students. (CSU) (UC) (Degree Credit)

## MUSA 214 F Advanced Voice-English and American Art Song

Advisory: MUSA 112 F or Audition.
18 hours lecture and 18 hours lab per term. This course, which offers individual instruction in vocal techniques and interpretation of English and American Art Songs in a class situation, emphasizes repertoire and public performance. Out of class activities include one hour practice in Practice Room per week and participation in recitals. Although designed for music majors, this course is open to all students. (CSU) (UC) (Degree Credit)

## MUSA 220 F Classical Guitar: Renaissance to Baroque <br> Prerequisite: MUSA 121 F or by audition.

18 hours lecture and 18 hours lab per term. Designed for music majors, this course provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. Emphasis on building repertoire and performing music from the Renaissance to Baroque periods. (CSU) (UC) (Degree Credit)

## MUSA 221 F Classical Guitar: Classical to <br> 1 Unit Contemporary

Prerequisite: MUSA 121 F with a grade of "C" or better.
18 hours lecture and 18 hours lab per term. Designed for music majors, this advanced class provides intensive individual instruction in guitar techniques and interpretation of solo guitar literature. This course places emphasis on building repertoire and performing music from the Classical Music to Contemporary periods. (CSU) (UC) (Degree Credit)

## MUSA 223 F Jazz Guitar: Scales and Arpeggios 1 Unit Advisory: MUSA 121 F or by Audition.

18 hours lecture and 18 hours lab per term. This course is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on improvisation in a single-line (linear) style. Linear playing will explore both scales and arpeggios and their incorporation into improvised melodies over a variety of chord changes. Students should have at least intermediate playing skills (at least two years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised. Previous exposure to playing jazz is not required. (CSU) (UC) (Degree Credit)

## MUSA 224 F Jazz Guitar: Chords

1 Unit
Advisory: MUSA 121 F or by Audition.
18 hours lecture and 18 hours lab per term. This class is designed to advance the student's ability in a variety of jazz guitar styles with specific emphasis on chord playing, which will be addressed in both accompaniment and solo playing. Students should have at least intermediate playing skills (2 years guitar playing experience) and some knowledge of music theory. Music reading is not necessary, but is advised, for success in this class. Previous exposure to playing jazz is not required. (CSU) (UC) (Degree Credit)

1 Unit

1 Unit


MUSA 232 F Keyboard Skills IV
1 Unit
Prerequisite: MUSA 231 F with a grade of " $C$ " or better or Audition.
18 hours lecture and 18 hours lab. This course is an advanced level in keyboard musicianship sequence. Rigorous individualized instruction will focus on keyboard harmony using secondary dominant chords, 3 -voice choral score reading, specialized rhythm, intermediate to late intermediate standard repertoires, memorization, and self-critiquing skills. (CSU) (UC) (Degree Credit)

## MUSA 234 F Jazz Piano Technique and <br> Repertoire II

Prerequisite: MUSA 134 F with a grade of " C " or better.
18 hours lecture and 18 hours lab. This course, which is a continuation of MUSA 134 F for jazz piano majors, builds on playing standard jazz repertoire for solo piano and piano trio, jazz theory and practicing strategies. Students will learn to play and improvise over minor ii-V-i progression using shell and rootless voicings. (CSU) (UC) (Degree Credit)

MUSA 236 F Advanced Piano: Baroque to 1 Unit Classical
Prerequisite: MUSA 137 F with a grade of " $C$ " or better or Audition.
18 hours lecture and 18 hours lab per term. This course provides
individualized instruction and lecture on piano techniques and interpretation of baroque and classical piano repertoire for pianists. (CSU) (UC) (Degree Credit)

## MUSA 237 F Advanced Piano: Romantic to <br> 1 Unit Contemporary

Prerequisite: MUSA 137 F with a grade of " C " or better or Audition.
18 hours lecture and 18 hours lab per term. This advanced class for piano majors studies Romantic to Contemporary keyboard literature and techniques. Emphasis will be on individual progress in building musical vocabulary, phrasing, articulations, technique, and interpretation. (CSU) (UC) (Degree Credit)
MUSA 231 F Keyboard Skills III
1 Unit
Prerequisite: MUSA 132 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab. This course follows MUSA 132 F in keyboard musicianship sequence. Individualized instruction will focus on keyboard harmony using primary and secondary chords, introduction to basic score reading, transposing to concert pitch, rhythm, and early intermediate/intermediate piano repertoires including classical, blues, national and folk tunes. (CSU) (UC) (Degree Credit) -

## MUSA 240 F Advanced Strings <br> (formerly MUS 244 F)

Prerequisite: MUSA 142 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course, which follows MUSA 142 F, provides rigorous instruction for violin, viola, cello, and/or string bass techniques. Students are required to practice at least 2 hours per week. More advanced-level string techniques are presented, including higher fingerboard positions, double-stops, and more difficult key signatures for the string player. (CSU) (UC) (Degree Credit)

## MUSA 250 F Advanced Woodwinds I

1 Unit

## (formerly MUS 247 F)

Prerequisite: MUSA 152 F with a grade of " C " or better or Audition.
8 hours lecture and 18 hours lab per term. Designed for the woodwind major, this course provides Individual instruction in woodwind techniques and ensemble interpretation of solo woodwind literature in a class situation. Emphasis is on repertoire and public performance. Participation in recitals is required. Although the course is designed for Music Majors, it is open to non-majors as well. (CSU) (UC) (Degree Credit)

## MUSA 251 F Advanced Woodwinds II

1 Unit
Prerequisite: MUSA 250 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. For the advanced woodwind player, this course provides intensively individualized instruction in woodwind techniques and interpretation of solo woodwind literature in a class situation. Emphasis is on continuation of technical and repertoire development. One or more woodwind instruments may be explored in this course. Participation in public recitals is required. (CSU) (UC) (Degree Credit)

## MUSA 260 F Advanced Brass I

1 Unit

## (formerly MUS 250 F)

Prerequisite: MUSA 162 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course involves an advanced level instruction and study of the trumpet, trombone, French horn, euphonium, or tuba in a class room situation. Emphasis will be on technique, presentation, and execution of higher levels of repertoire. Designed for music majors but open to all students. Students must provide their own instruments. (CSU) (UC) (Degree Credit)

## MUSA 261 F Advanced Brass II

1 Unit
Prerequisite: MUSA 260 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab per term. This course involves the highest level of advanced instruction and study of the trumpet, trombone, French horn, euphonium or tuba in a classroom situation. Emphasis will be on technique, presentation, and execution of the highest levels of repertoire. This course is designed for music majors but it is open to all qualified students. Students must provide their own instruments. (CSU) (Degree Credit)

MUSA 270 F Advanced Percussion I (formerly MUS 253 F)
Prerequisite: MUSA 172 F with a grade of "C" or better or by audition.
18 hours lecture and 18 hours lab per term. This course is a continuation study of the techniques and rhythmic theory needed for advanced level performance of the snare drum, drum-set, and world percussion instruments in a class situation. A variety of keyboard and orchestral percussion instruments will also be instructed and performed. (CSU) (UC) (Degree Credit)

MUSA 271 F Advanced Percussion II
1 Unit
Prerequisite: MUSA 173 F with a grade of "C" or better or pass a basic entrance audition establishing elementary sight-reading skills.
18 hours lecture and 18 hours lab per term. Students will learn advanced drum set techniques through lecture, demonstration, text, audio and video recordings and class participation. The instructor will give group and individual instruction and present an overview of Jazz, Rock, Latin, and Pop drumming styles and their many subcategories. Students should be prepared to practice one half hour per day, outside of class. (CSU) (UC) (Degree Credit)

## MUSA 290 F Advanced Vocal Jazz Styling <br> 1 Unit and Improvisation I <br> (formerly MUS 257 F)

Prerequisite: MUSA 192 F with a grade of "C" or better or Audition.
18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and lead sheet writing on the latest notation computer software. Students will begin to compile a personal working songbook. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## MUSA 291 F Advanced Vocal Jazz Styling 1 Unit and Improvisation II <br> Prerequisite: MUSA 290 F with a grade of " $C$ " or better.

18 hours lecture and 18 hours lab plus 4 hours arranged time in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and fundamentals of arranging on the latest notation computer software. Students will add to their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## MUSA 292 F Advanced Vocal Jazz Styling and Improvisation III

Prerequisite: MUSA 291 F with a grade of "C" or better. 18 hours lecture and 18 hours lab plus 4 hours private coaching time per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and beginning arranging on the latest notation computer software. Students will continue building their personal working songbook and begin to compile a promotional packet. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## MUSA 293 F Advanced Vocal Jazz Styling and Improvisation IV

Prerequisite: MUSA 292 F with a grade of "C" or better. 18 hours lecture and 18 hours lab and 4 hours in private coaching lessons per term. This course is designed to give vocal students advanced training in jazz styling techniques, improvisation, and intermediate arranging on the latest notation computer software. Students will complete their personal working songbook and promotional packet for professional use. Students are required to spend no less than 30 minutes per week in the practice rooms and/or listening library in addition to class time. (CSU) (UC) (Degree Credit)

## Office Technology (OT)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Office Technology Courses

## OT 071 F Professional Business Entertaining . 5 Units and Dining: Protocol and Etiquette

9 hours lecture per term. This course covers business protocol skills needed to be successful in the global economy. This course will provide the skills necessary for the student to appear confident and authoritative in a business environment. Students will learn how to be a savvy and successful host and guest. Topics include the business lunch/dinner, business receptions, receiving lines, making toasts, American and Continental styles of eating, dining skills, navigating place settings, and eating difficult foods.

## OT 072 F Presenting a Professional Image for Business Travel: Protocol and Etiquette

9 hours lecture per term. This course will provide the skills needed for the student to appear confident and authoritative in the business arena. It will examine how to dress for success and how to prepare a traveling business wardrobe, as well as protocol, ethics, and etiquette skills for business travel. Topics include how to put together a professional business wardrobe, how to choose colors to enhance a presentation, how to travel light but pack everything needed for a business presentation, and how to feel comfortable and fit into the world of business professionals based on dress, color choices, grooming and personal style.

## OT 073 F Introductions, Business Meetings, . 5 Units Networking, and Techno Etiquette

9 hours lecture per term. This course covers business etiquette and protocol skills, and provides the skills necessary for the student to appear confident and authoritative in the business environment. Topics include how to make savvy introductions, proper handshakes, conducting business meetings, techno etiquette skills for the professional office, communication skills and business correspondence.

## OT 074 F Saying the Right Thing: Professional Ethics and Gift Giving

. 5 Units
9 hours lecture per term. This course will give students confidence and sensitivity to interact with people with disabilities and thereby enhance their understanding of the protocol and etiquette. Students will discover the ins and outs of gift giving from clients to staff to CEOs and learn to distinguish between appropriate actions and unethical business dealings.

## OT 080-Keyboarding-Beginning <br> 1.5 Units

27 hours lecture and 18 hours lab per term. This is a beginning course in keyboarding, including mastery of the alphanumeric keyboard, 10-keypad, and knowledge of correct keyboarding techniques. This course is recommended for all vocational business majors. (Degree Credit)

OT 081 F Keyboarding: Speed \& Accuracy 1.5 Units 27 hours lecture and 18 hours lab per term. This class teaches students who have mastered correct fingering skills for alphabetic and symbol keys to increase their typing speed and accuracy. This course provides individualized diagnostic and prescriptive work to achieve the speed and accuracy increases.

## Paralegal Studies (PLEG)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Paralegal Studies Courses

## PLEG 090 F Contemporary Issues in the Law

 1 to 3 Units18 hours lecture and 54 hours lab per term. This course offers timely and contemporary law-related topics designed to enhance job skills, expand the students' knowledge of the legal environment, and increase employment opportunities. Unit credit may range from one to three units in any given semester. Consult the class schedule to verify specific topic area and credit offered in a particular semester. (Degree Credit)

PLEG 101 F Introduction to Paralegal Studies 3 Units 54 hours lecture per term. This course is a practical introduction for those seeking a career as a paralegal. Topics include an overview of the law and our court system, the fundamentals of legal research and writing, an introduction to the use of computers in a law office, professional ethics, and the role of the paralegal in the modern law office. (CSU) (Degree Credit)

## PLEG 104 F Introduction to Legal Research and Terminology

54 hours lecture per term. This course is an introduction to the terminology unique to the practice of law and the legal environment, and to the techniques and procedures utilized in conducting effective legal research. Topics include an overview of the legal system, legal terminology for all major areas of law, understanding the purpose and function of primary and secondary authority, basics of legal research, and techniques for updating the law. (CSU) (Degree Credit)

## PLEG 105 F Introduction to Legal Writing

3 Units
Prerequisite: PLEG 101 F and PLEG 104 F and ENGL 100 F or ENGL 100HF, with a grade of "C" or better.
54 hours lecture per term. This course is an introduction to the practical writing skills and necessary analytical skills required in the law office. Topics include analysis of cases, analysis of statutes and administrative regulations, drafting and generating objective documents used in the legal environment, and generating and drafting persuasive documents submitted by attorneys to the trial and appellate courts. (CSU) (Degree Credit)

## PLEG 116 F Computers in the Law Office 3 Units

54 hours lecture and 18 hours lab per term. This course acquaints the student with the computer basics and the popular Microsoft Office Suite in use in legal offices. Students will learn Microsoft Office components including Word, Excel, Access, PowerPoint and Outlook, and the Windows operating system as they are used in the day-to-day life of paralegals. (CSU) (Degree Credit)

PLEG 201 F Civil Litigation I 3 Units
Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course examines civil court procedures before trial and is designed to provide expertise in drafting legal documents from the inception of the civil action through the pleading stage. Topics include parties to the action, jurisdiction and venue, the summons, defaults, pleadings, and attacking the pleadings. Students are also introduced to the law of evidence. (CSU) (Degree Credit)

## PLEG 202 F Civil Litigation II

3 Units
Prerequisite: PLEG 101 F and PLEG 104 F and PLEG 201 F, with a grade of "C" or better
54 hours lecture per term. This course continues the study of civil procedures from pretrial through trial, appeals, and collection, emphasizing the drafting of discovery documents. Students gain practical experience in all stages of a civil case. (CSU) (Degree Credit)

PLEG 203 F Personal Injury 3 Units
Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course will examine those topics that are important in a personal injury practice, including prelitigation investigation, employment of experts, evaluation of damages, settlements, arbitration, and preparing for trial. (CSU) (Degree Credit)

PLEG 204 F Family Law 3 Units
Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides an overview of family law practice. Students become familiar with family law forms and the preparation of various family law matters. Topics include the initial client interview, preparing pleadings, child and spousal support, custody and visitation, marital property rights and obligations, trial preparation, enforcement procedures, and post-judgment modifications. (CSU) (Degree Credit)

PLEG 205 F Probate, Wills and Trusts 3 Units
Prerequisite: PLEG 101 F and PLEG 104 F , with a grade of "C" or better
54 hours lecture per term. This course provides an overview of estate planning and probate practice. Through drafting simple wills and trusts and by lecture, students will become familiar with the specialized documents and procedures of probate practice. (CSU) (Degree Credit)

PLEG 206 F Bankruptcy Law and Procedure 3 Units Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides an overview of bankruptcy law and practice. Students will become familiar with bankruptcy forms and the federal bankruptcy courts. Topics include: the role of the paralegal in bankruptcy, bankruptcy and research, Chapters 7, 11, 12, and 13 of the bankruptcy code, and examining bankruptcy cases. (CSU) (Degree Credit)

## PLEG 207 F Computer Assisted Legal Research <br> Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better <br> 54 hours lecture per term. This course provides the student with an opportunity to explore and master legal research databases available through on-line and Internet services. In particular, this course will emphasize LEXIS/Westlaw on-line service, Internet accessibility to law libraries, and the use of CD ROM technology in conducting legal research. (CSU) (Degree Credit)

## PLEG 208 F Workers' Compensation Law 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides an overview of Workers' Compensation practice. Students become familiar with Workers' Compensation forms and the preparation of various Workers' Compensation matters. Topics include a study of the Workers' Compensation system, client interview, initiating benefits to the injured worker, discovery proceedings, vocational rehabilitation, trial preparation, appellate procedure and professional ethics. (CSU) (Degree Credit)

## PLEG 209 F Criminal Law and Procedure 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F , with a grade of "C" or better
54 hours lecture per term. This course provides an overview of criminal law and practice. Students will become familiar with the substantive and procedural aspects of criminal proceedings in both state and federal courts. Topics include: the role of the paralegal in prosecution and defense of criminal defendants, researching and drafting criminal court documents, constitutional ramifications in criminal courts, and sentencing procedures. (CSU) (Degree Credit)

## PLEG 210 F Paralegal Internship <br> 1 to 4 Units

Prerequisite: PLEG 101 F, PLEG 104 F, PLEG 105 F, PLEG 201 F and PLEG 202 F with a grade of "C" or better.
18 hours lecture per semester and 85 hours supervised employment/volunteer work per semester in a legal office. An additional 85 hours per semester of supervised employment is required for each additional unit of credit. This course provides vocational learning opportunities for a student through employment in a law office or other legal environment. (CSU) (Degree Credit)

## PLEG 211 F Real Property Law and Procedure 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides an overview of the law of real property and practice. Students will become familiar with the substantive and procedural aspects of real property law and the transactional requirements of conveyance. Topics include: the role of the paralegal in real estate practice, the appraisal and financing of real estate; researching and drafting real estate litigation and transactional documents, including but not limited to escrow instructions; sale, purchase and exchange agreements, deeds, deeds of trust, promissory notes, leases, and other instruments. (CSU) (Degree Credit)

PLEG 212 F Medical Records Review 1.5 Units
Prerequisite: PLEG 101 F with a grade of "C" or better and PLEG 104 F with a grade of " C " or better
27 hours lecture per term. This course provides an overview of analyzing medical records. Students will be instructed on how to interpret, analyze, and organize complex information found in medical records. The legal implications of medical records for the medical profession will be analyzed as they relate to litigation. (CSU) (Degree Credit)

## PLEG 213 F Employment and Labor Law

3 Units
Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides students with an overview of the legal relationship between employer and employee and a basic understanding of employment and labor related law and its impact on the employer/employee relationship. The student will study both federal and state laws applicable to the employer/employee relationship. Areas covered include the basis for the employer/employee relationship, pre-employment concerns, legal aspects of the employment relationship, discrimination issues, discrimination actions, termination of the employer/ employee relationship, the collective bargaining process, employee unions, union certification and de-certification and ethical issues. (CSU) (Degree Credit)

## PLEG 214 F Contract Law and Procedure 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides an overview of the law of contracts and contract law practice and procedure. Students will become familiar with the substantive and procedural aspects of the law relating to contracts and the transactional requirements for the creation, administration, modification, and termination of contracts. (CSU) (Degree Credit)

## PLEG 215 F Discovery in Electronic Age 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course provides students with an overview of managing document production and organization during litigation. The student will learn how to handle a client's documents, obtain documents from opposing parties and non-parties, index and organize documents as they are received, utilize computer-assisted litigation support programs and use documents at trial. (CSU) (Degree Credit)

## PLEG 216 F Computers in the Law Office II 3 Units

54 hours lecture per term. This course acquaints the student with the computer basics and application software that is unique to the legal environment and utilized by legal personnel. Students will be exposed to an array of legal software programs that maximizes efficiency in the legal community. Types of programs reviewed include, but are not limited to, programs for document preparation, case management, docketing, retrieval, billing and calendaring system. (CSU) (Degree Credit)

## PLEG 217 F Immigration Law

3 Units
Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course is a practical examination of the immigration and nationality laws of the United States involving a history of immigration migration, the evolution of the country's policies toward aliens and the interplay of the administrative agencies involved in the administration and enforcement of those laws: Justice Department, Labor Department, State Department and Homeland Security. Subjects will include applying for residence and work visas, attaining citizenship, granting of asylum and avoiding deportation and related proceedings. (CSU) (Degree Credit)

## PLEG 218 F Entertainment and Sports Law 3 Units

54 hours lecture per term. This course is a practical examination of the field of entertainment and sports law in the United States. Students will examine these unique industries from a legal standpoint. Emphasis will be placed on understanding the interrelationships among the various occupations inherent in the business of entertainment and sports. Students will be exposed to contracts that govern both industries and will learn how to draft, interpret and litigate those contracts. (CSU) (Degree Credit)

## PLEG 219 F Intellectual Property 3 Units

Prerequisite: PLEG 101 F and PLEG 104 F, with a grade of "C" or better
54 hours lecture per term. This course is a practical examination of the law of intellectual property, namely, trademarks, copyrights, patents and trade secrets. The methods by which each is created, procedures to register or protect each, duration of rights, protection from infringement, and new and international developments for each of these fields of intellectual property is explored. (CSU) (Degree Credit)

## PLEG 220 F Elder Law

1.5 Units

Prerequisite: PLEG 101 F and PLEG 104 F with a grade of " C " or better
27 hours lecture per term. This course examines issues regarding law and procedure for the aging population; financial planning covering advanced directives, wills, power of attorney, trusts; interviewing; patient's rights in healthcare decisions; entitlement programs; managed care; social security and elder abuse. (CSU) (Degree Credit)

## PLEG 221 F Ethics for Paralegals (formerly PLEG O90FF)

2 Units 36 hours lecture per term. This course is designed to acquaint the student with the rules of professional conduct and ethical requirements for a paralegal in today's legal environment. California State Rules, the A.B.A. Model Rules and Codes, and the N.F.P.A./N.A.L.A. Codes of Ethics will be explored. Students will examine such issues as attorney supervision of paralegals, unauthorized practice of law, confidentiality, conflicts of interest, advertising and solicitation, attorneys' fees and fiduciary duties, competence, malpractice, and ethical conduct issues in litigation. (CSU) (Degree Credit)

## PLEG 225 F Law Office Management

3 Units
54 hours lecture per term. This course is an introduction to the role of the paralegal in law office management. Topics include: the managerial challenges in the legal environment; historical development of law firm management; the four principal managerial activities and roles of the office administrator; comprehensive understanding of financial resources, human resources, and supervision unique to the legal environment. (CSU) (Degree Credit)

## Philosophy and Religious Studies (PHIL)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Philosophy and Religious Studies Courses

## PHIL 100 F Introduction to Philosophy <br> 3 Units (C-ID PHIL 100)

54 hours lecture per term. This course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHIL 100HF Honors Introduction to Philosophy

3 Units
(C-ID PHIL 100)
54 hours lecture per term. This Honors-enhanced course studies various viewpoints, problems, and issues regarding human nature, moral and religious understanding, knowledge of self and the world, and other selected topics. This class will employ enhanced teaching methods such as a seminar approach, more researchbased writing assignments, and assignments calling for a higher level of critical thinking. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

PHIL 101 F Introduction to Religious Studies 3 Units
54 hours lecture per term. This course is an introductory study of religion with emphasis on the origins and functions of religion, religious experience, and religious and theological modes of expression. Course content will be drawn from Eastern and Western traditions, ancient, medieval and modern times. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

PHIL 105 F World Religions 3 Units
54 hours lecture per term. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## PHIL 105HF Honors World Religions

3 Units
54 hours lecture per term. This Honors-enhanced course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## PHIL 135 F Social and Political Philosophy 3 Units

54 hours lecture per term. The course is an introduction to social, psychological, and political philosophies, ancient and modern; inquiry into views of human nature, the nature and varieties of social institutions, the personal and social implications of the human experience, and other selected topics. (CSU) (UC) (Degree Credit) AA GE, CSU GE, iGETC

## PHIL 160 F Introduction to Ethics

3 Units
(C-ID PHIL 120)
54 hours lecture per term. This course will survey basic ethical theories in modern times in order to show how they have affected analysis of various ethical problems and their solutions both for the individual and societies. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PHIL 170 F Logic and Critical Thinking <br> <br> (C-ID PHIL 100)

 <br> <br> (C-ID PHIL 100)}3 Units
54 hours lecture per term. This course focuses on an understanding of the relationship of language to logic, which should lead to the ability to identify and evaluate various inductive and deductive arguments. The course is also concerned that students become aware of semantic confusions and of the nature and importance of definitions. The minimal competence expected of the student is the ability to distinguish fact from judgment, belief from knowledge and skills in inductive and deductive processes, including an understanding of the formal and informal fallacies. The evaluation of an extended argument may be required by the instructor and designed to satisfy the critical thinking requirement for those planning to transfer to the CSU system. (CSU) (UC) (Degree Credit), AA GE, CSU GE

## PHIL 172 F Critical Thinking/Writing 3 Units

Prerequisite: ENGL 100 F or ENGL 100HF, with a grade of " C " or better.
54 hours lecture per term. This course will cover all the standard topics of a traditional critical thinking course: Form vs. Content; Inductive vs. Deductive logic; validity, truth and soundness or good definitions; and the standard formal and informal fallacies as reflected in evaluative writing. Progress toward the refining of various writing skills will be evaluated in the writing and re-writing of the extended argument as well as other areas of the course. This course is specifically designed to meet the IGETC critical thinking/writing requirement. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

PHIL 195 F Women's Issues in Philosophy 3 Units 54 hours lecture per term. This course will look at philosophical issues with which women in philosophy are concerned, such as theoretical accounts of the relations between men and women, theories of knowledge, world views, and the question of social justice. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

PHIL 200 F Introduction to Christianity 3 Units
54 hours lecture per term. This course will provide an introduction to the Christian religion, giving attention to the history of its development. Its scriptures, rituals, and beliefs will be examined, as well as important persons, groups, and events which have developed among the Roman, Orthodox, and Protestant communities of Christianity. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHIL 201 F History of Philosophy: <br> 3 Units Ancient and Medieval <br> (C-ID PHIL 130)

54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: Ancient Greek and Medieval. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHIL 202 F History of Philosophy: Modern 3 Units and Contemporary <br> (C-ID PHIL 140)

54 hours lecture per term. This course is a historical introduction to the western philosophic tradition. Selected philosophers will be examined from each of the following periods: modern and contemporary. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHIL 210 F Introduction to Judaism

3 Units
54 hours lecture per term. This course will provide an introduction to the religion of Judaism, with emphasis given to its historical development, scriptures, laws, rituals, customs, and theology. Attention will also be given to the modern developments of Judaism. (CSU) (UC) (Degree Credit) CSU GE, AA GE, IGETC

## PHIL 220 F The Holocaust

## (formerly PHIL 198AF)

54 hours lecture per term. This course will provide a review of the forces which resulted in the Jewish experience known as the Holocaust, the events that transpired during this period, and subsequent Jewish life after the Holocaust. In addition, reflections by both Jews and non-Jews on the Holocaust will be examined, as well as reflections on genocide in general. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PHIL 225 F The American Religious <br> Experience

3 Units
54 hours lecture per term. This course provides an overview of religious life in America, with the emphasis upon how the American cultural experience has shaped the religions of Africa, Europe, and Asia in their American manifestations. Particular focus will be given to religious thinking, ethics, rituals, and institutional forms. (CSU) (UC) (Degree Credit)

## PHIL 250 F The Religion of Islam

3 Units
54 hours lecture per term. This course will provide an introductory study of the religion of Islam, with emphasis upon its history, its main teachings, and its major practices. Topics to be studied include the rise and spread of Islam, scriptures, law, theology and philosophy, mysticism, rituals, and modern developments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

PHIL 270 F Introduction to Asian Religions 3 Units 54 hours lecture per term. This course provides an overview of the variety of religious traditions and communities found throughout Asia. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

PHIL 299 F Philosophy Independent Study 1 Unit
54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC review required) (Degree Credit)

## Photography (PHOT)

## Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Photography Courses

## PHOT 100 F Basic Photography

3 Units
Letter Grade or Pass/No Pass option.
54 hours lecture per term. This course is for beginning photographers, and covers basic camera operation, composition, color, lighting, landscapes, portraits, night photography, closeups, architectural work and photo essays. Students must provide their own camera as well as film and processing. This class will not utilize the darkroom. (CSU) (Degree Credit) AA GE, CSU GE

## PHOT 101 F Introduction to Photography 3 Units

36 hours lecture and 72 hours lab per term. This course covers the historical, cultural and aesthetic foundations of photography. Students have the opportunity to acquire knowledge of traditional film photography. Students must provide their own 35mm cameras with full manual capabilities. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHOT 103 F Intermediate Photography

Advisory: PHOT 101 F.
36 hours lecture and 72 hours lab per term. This course is an introduction to professional photography. Use of $4^{\prime \prime} \times 5^{\prime \prime}$ camera, and lab lighting techniques will be emphasized. Students will learn to use the camera and lab lighting to photograph products, people and architectural subjects. Students must provide their own 35 mm camera with adjustable aperture, shutter speed and focus. (CSU) (Degree Credit)

## PHOT 104 F Wedding Photography

3 Units
Advisory: PHOT 111 F or PHOT 112 F or PHOT 216 F or demonstrate competency in performing a variety of basic camera functions.
36 hours lecture and 72 hours lab per term. This course is designed to introduce the student to the aesthetic concepts, basic skills, and techniques used by wedding photographers. Students will acquire hands-on knowledge of photographic applications used in wedding photography. Students must provide their own DSLR cameras with full manual operations and capable of using an external flash. (CSU) (Degree Credit)

## PHOT 109 F Portrait Photography

## 3 Units

Advisory: PHOT 101 F.
36 hours lecture and 54 hours lab per term. This course is designed to give the student a working knowledge of portrait styles and techniques. The student will work with both natural and artificial lighting and learn the possibilities and limitations of both. Students will have an opportunity to investigate and imitate the styles of well-known portrait photographers. Students must provide their own 35 mm camera with adjustable aperture, shutter speed and focus. (CSU) (Degree Credit)

## PHOT 111 F Introduction to Photography from Analog to Digital

36 hours lecture and 72 hours lab per term. This course focuses on the cultural significance, historical progression, personal artistic expression, aesthetic experience, and the technical aspects of photography from analog to the emergence of digital photography. The course will include lectures and discussions about conceptual connotation, intellectual response, self-expression, mixed media, and introduces both camera operation and digital imaging techniques. A variety of point and shoot cameras as well as DSLR cameras may be used. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHOT 112 F Introduction to Professional 3 Units Digital Photography

36 hours lecture and 72 hours lab per term. This course covers an introduction to the basic functions and operations of the digital camera. The course covers the historical, cultural, and aesthetic foundations of photography. The student also explores the emergence and significance of digital technology into photography. Students may use a variety of digital cameras from point to shoot as well as Digital SLR's. (CSU) (Degree Credit)

## PHOT 114 F Professional Portrait <br> Photography I <br> Prerequisite: PHOT 111 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This course will focus on portrait photography using strobe lighting, posing, digital photography, color imaging, and project workflow. Photographic subjects will include beauty, theatrical, commercial, fashion, family and portrait. Students are required to have a DSLR camera with full manual capabilities including external flash capabilities. (CSU) (Degree Credit)

## PHOT 196 F Photography Seminar . 5 to 4 Units (formerly known as Communications Seminars)

Advisory: PHOT 101 F or PHOT 111 F or advanced knowledge in photography including both digital and analog applications.
$0-72$ hours lecture and $0-216$ hours lab per term. Hours will vary according to the nature of the seminar. This course is designed to expose the students to current equipment, methods, techniques and materials. This course offers the student an opportunity for specialized training in greater depth than can be offered in a general course. This course will vary from semester to semester depending on student interest, new developments in the industry and the need for specialized training. (CSU) (Degree Credit)

## PHOT 199 F Photography Independent Study

1 to 3 Units
54-162 hours independent study per term. This course is designed for students who wish to increase their knowledge of photography through individual study. Projects with written reports or outside reading with written reports are required. (Degree Credit) (UC review required)

## PHOT 214 F Professional Portrait II <br> 3 Units

Prerequisite: PHOT 114 F with grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course will emphasize advanced portrait techniques to advance and refine portrait photography skills in preparation for client portfolio. Students will begin to define areas of portrait photography specialization. (CSU) (Degree Credit)

PHOT 216 F Advanced Digital Photography 3 Units
Advisory: PHOT 111 F or PHOT 112 F with a grade of "C" or better or demonstrate competency in performing various digital photography skills.
36 hours lecture and 72 hours lab per term. This course is designed to provide the student with advanced knowledge of digital photography. The integration of technical skills and aesthetic expression will be emphasized. This course introduces students to Adobe Lightroom and the use of the Wacom table. Students will explore a variety of subjects including portraiture, industrial scientific, landscape, directorial, photojournalism and fine-art photography. Students may use a variety of digital cameras including point and shoot as well as digital DSLRs. (CSU) (Degree Credit)

PHOT 217 F Applied Digital Photography 3 Units
Prerequisite: PHOT 216 F with a grade of " C " or better.
36 hours lecture and 72 hours lab per term. This course is designed to provide students with the skills to apply advanced digital photography techniques towards a professional portfolio presentation and prepare a strategy for career development. (CSU) (Degree Credit)

## PHOT 221 F Studio Specialties

3 Units
Advisory: PHOT 111 F or PHOT 112 F or PHOT 216 F with a grade of "C" or better or demonstrate competency in performing various digital photography functions.
36 hours lecture and 72 hours lab per term. This course focuses on studio practices and lighting techniques. Students will practice studio techniques for a variety of studio photographic subjects that include commercial table top, architectural, publicity, and location shooting. Emphasis will be on the use of strobe lighting, mixed lighting, and special effects. Camera format will be tethered digital view camera system. Students must have a DSLR camera with full manual adjustments and that is capable of using external flash. (CSU) (Degree Credit)

## PHOT 224 F Business Practices for Photography

54 hours lecture per term. This course focuses on business practices for professional photographers including both commercial and fine-art photography. This course will include lectures on business operations, legal responsibilities, branding, contracts, estimates, copyright, project workflows, and business promotion. (CSU) (Degree Credit)

PHOT 290 F Internship in Photography I 2 to 4 Units 18 hours lecture per term and 90 hours lab per term. This course offers career development opportunities for students and industry professionals who need to strengthen or broaden their skills to retain their current position or wish to advance in their current careers. Students obtain vocational learning opportunities through employment/internships photography and allied areas. (CSU) (Degree Credit)

PHOT 291 F Internship in Photography II 2 to 4 Units
Prerequisite: PHOT 290 F with a grade of " C " or better.
18 hours lecture and 90-270 hours of supervised employment or unpaid internship per term. This course will further prepare students for the next level of career exploration. Topics will include networking, interviewing skills, and clarifying employer/client expectations. (CSU) (Degree Credit)

## PHOT 292 F Internship in Photography III 2 to 4 Units

Prerequisite: PHOT 291 F with grade of " C " or better.
18 hours lecture and 90 hours of employment or unpaid internships per term. An additional 90 hours of supervised employment for each additional unit. This course is designed to give the students the skills needed to market themselves as professionals in photography related industries. (CSU) (Degree Credit)

PHOT 293 F Internship in Photography IV 2 to 4 Units Prerequisite: PHOT 292 F with a grade of "C" or better. 18 hours lecture and 90-270 hours lab per term. This course is designed to help the student transition to working as an independent contractor for photographic related industries while still completing internship. (CSU) (Degree Credit)

## Physical Education (PE)

## Physical Education Division

Office: Bldg 1200, Room 1206-714.992.7045
Dean: David Grossman
Website: pe.fullcoll.edu/

## Physical Education Courses

## PE 102 F Yoga <br> 1 Unit

54 hours lab per term. This course provides an overview of yoga, an integrated study of health. It involves the practice of breathing techniques, Hatha yoga postures (asanas), meditation, and relaxation. Emphasis is on practicing the principles of pranayama (breathing) and deep relaxation to reduce stress and improve concentration, circulation, and flexibility, and unify body, mind, and spirit. The Hatha yoga portion will also help to tone and strengthen muscles. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 103 F Aikido <br> 1 Unit

54 hours lab per term. This course will introduce Aikido as a relatively modern Japanese martial art based upon nonresistance rather than strength. It is a non-aggressive, non-competitive art based upon a philosophy that stresses harmony with nature and control of body and mind. Comparison and introduction to related forms of throwing arts is included. Self-confidence is enhanced through the study of technique. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 104 F Spinning

1 Unit
54 hours lab per term. This course provides a unique, indoor, group stationary cycling program. This efficient, high-energy group exercise integrates music, camaraderie and visualization in a complete body-mind exercise routine. This philosophy of being mentally and physically fit is the basis of spinning. Spinning emphasizes everyone's individual needs, regardless of athletic ability, taught in a group atmosphere. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 105 F Badminton

1 Unit
54 hours lab per term. This course covers fundamental strokes with emphasis on court strategy for singles and doubles play. Rules, court etiquette, and different types of tournaments will be introduced. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 111 F Decathlon
1 Unit
54 hours lab per term. This course covers instruction in the fundamental skills associated with the decathlon event. Students will be taught and perform appropriate running, jumping and throwing skills. Aerobic, anaerobic, flexibility and strength training methods will be taught and practiced in preparation for intercollegiate competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 112 F Fencing

1 Unit
36 hours lab per term. This course includes basic positions weapon, simple and compound actions, defenses, drills, and activity. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 114 F Cardiovascular Conditioning 1 Unit
54 hours lab per term. This course is a program of personalized exercises designed for the student interested in achieving physical fitness through a program of cardiovascular conditioning. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 115 F Golf

1 Unit
54 hours lab per term. This course will stress rules, fundamentals and etiquette of the game of golf. Facility use fee required. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 117 F Gymnastics

1 Unit
54 hours lab per term. This course offers the students the opportunity to explore the possibilities of human motion in gymnastic framework. This course is designed to instruct students in a progressional motor learning experience. The skill range is from simple to complex and includes all women's and all men's apparatus and tumbling. The course integrates the beginning, intermediate and advanced level gymnastic students together in an educational environment. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 121 F Walking for Fitness

1 Unit
54 hours lab per term. This course will emphasize walking for health and fitness for men and women who are interested in instruction and practice in cardiovascular walking. The class is designed to decrease the risk of coronary heart disorders by increasing heart efficiency, vital lung capacity, and the knowledge of each through aerobic and anaerobic conditioning. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 125 F Aquatic Fitness-Crosstraining . 5 to 2 Units
Advisory: Swim 50 yards and tread water for 5 minutes.
4.5-18 hours lecture and 13.5-54 hours lab per term. This course is designed to examine biomechanics and develop cardiovascular fitness and muscle strength through aquatic crosstraining. Students will engage in a variety of strategies that include swim fitness, fitness through paddling, and wave riding. This course includes units on water safety, technique, equipment examination. Participants seeking a crosstraining program may expect to improve their overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 126 F Beach Volleyball

1 Unit
54 hours lab per term. This course provides basic instruction and strategies in beach volleyball. Designed to develop basic skills, knowledge of rules, team strategies and desire for future participation during leisure times. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 127 F Racquetball-Indoors

1 Unit
54 hours lab per term. This course offers students the opportunity to learn and improve the essential strokes of racquetball. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. $\$ 50$ facility use fee required. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 129 F Step Aerobics

. 5 to 1 Units
27-54 hours lab per term. This course will provide vigorous aerobic activity through coordinated stepping movements. The class will be held in a musical setting with emphasis on cardiovascular improvements, muscle development, and an increased awareness of body composition. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 131 F Bodyboarding <br> 1 to 2 Units

Advisory: Swim 50 yards and tread water for 3 minutes.
9-18 hours lecture and 27-54 hours lab per term. This course offers bodyboarders the opportunity to learn and improve the skills of wave riding. Examination and analysis of paddlling, kicking, wave-selection, water safety, equipment, tides, eurrent and etiquette are-emphasized for bodyboarding. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 134 F Swimming

1 Unit
36 hours lab per term. This course emphasizes developing fundamental skills of swimming. All strokes are taught along with elementary diving and basic survival skills. Endurance training and cardiovascular fitness will be discussed. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 136 F Springboard Diving

1 Unit
54 hours lab per term. This course covers instruction in forms of springboard diving emphasizing balance, strength, flexibility, coordination, and kinesthetic ability. The anaerobic workout includes the techniques of approach steps, hurdle and takeoffs. Entries into the water and mid-air maneuvers will be identified and practiced on one meter and three meter diving boards. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 137 F Triathlon

1 Unit
54 hours lab per term. This course provides cardiovascular fitness training and nutritional program information to compete successfully in a triathlon. This class offers techniques in swimming, biking and running for ultimate performance. Bike rental fee if you do not own your own bicycle. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 139 F Tennis
54 hours lab per term. This course offers students the opportunity to learn and improve the essential strokes of tennis. Emphasis is on skill development, knowledge of rules and basic strategies for singles and doubles play. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 141 F Tennis Workshop

. 5 to 2 Units
27-108 hours lab per term. This course is designed for those students desiring intermediate to advanced instruction in tennis. The class gives students the opportunity to put tennis techniques into practice through placement in the various levels of tennis ability. Twenty hours required for each half unit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 142 F Mountaineering/Rock Climbing

1 Unit
18 hours lecture and 18 hours lab per term. This course covers the instruction and participation in the fundamentals of rock climbing with practice on rope handling, knot tying and climbing styles. Discussion will include use of equipment, environmental concerns, and survival techniques. Facility use fee required. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

PE 144 F Volleyball-Beginning
. 5 to 1 Units
27-54 hours lab per term. This course provides instruction in basic skills, rules and etiquette in the sport of volleyball. Students will experience improvement through supervised instruction and participation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 145 F Volleyball - Intermediate

. 5 to 1 Units
27-54 hours lab per term. This course is designed to provide progressive instruction for intermediate skill development, player positioning in an offensive and defensive system, and team play. Intermediate techniques and strategies are applied. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 148 F Non-Impact Aerobics

. 5 to 1 Units
27-54 hours lab per term. This course consists of group and individual exercise program without jogging, jumping or other jarring movements. Emphasis is on cardiovascular development through static and locomotive movements set to music. This course is designed for first-time aerobicisers of any age, or those medically restricted or with weight-related conditions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 149 F Swim for Fitness

1 Unit
54 hours lab per term. This course is designed to increase the knowledge of the cardiovascular system through the use of aerobic workouts. Swimming strokes will improve through endurance and repetitive training. Participants seeking a fitness program may expect to improve their overall fitness levels. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 150 F Latin Aerobic Exercise

.5 to 1 Units
27-54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through Latin rhythm movements. Activities will include Merengue, Cha-Cha, Cumbia, Reggaeton, and floor exercise in a dance setting to music. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 151 F Water Aerobics/Pool Exercise <br> 1 Unit

54 hours lab per term. This course is a fitness and recreational exercise program done in the water. Various water exercise programs are included, such as aerobics to music, flexibility activities, and conditioning activities designed for special needs. (Especially recommended for 40+ individuals and those with handicaps or movement limitations.) (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 152 F Fitness Training Lab-Circuit

. 5 to 2 Units

## Letter Grade or Pass/No Pass option.

Open Entry/Open Exit.
18-72 hours lab per term. In this course, students will utilize the equipment used in the circuit training facility and is designed with the non-athlete in mind. Emphasis is placed on good muscle tone and cardiovascular fitness. This type of training gives maximum return in a controlled workout. Flexible hours and variable units. 20 hours required for each half unit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 153 F Strength Training and Conditioning 3 Units 162 hours lab per term. This course is designed to allow students to strength train and cardiovascular condition their body. This class enables students to work out with a prescribed individual weight program to improve their overall physical fitness. This class will involve specific resistance exercises and cardiovascular exercises to develop parts of the body used in all types of activities. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 154 F Fitness Testing with Exercise Prescription

36 hours lecture and 18 hours lab per term. This course will provide methods and concepts of lifetime fitness and nutritional understanding based on fitness needs. Students will learn, on an individual basis, the practical techniques for evaluating physical fitness status. With the use of computer analysis, the student will be exposed to several programs for aiding the individual in becoming fit and more healthy and efficient in daily life. The lab section of the class will involve the student in a testing and evaluation program to analyze their needs for personal fitness and nutritional guidelines. Each student will help develop, through these methods, a personal individualized prescription program to fit their needs for a year round fitness program. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PE 155 F Aquatic Conditioning-Seniors

1 Unit
36 hours lab per term. This course is designed to develop and maintain physical fitness through swimming. Emphasis will be placed on endurance training for improved cardiovascular fitness. Activity designed for, but not limited to, senior citizens. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

## PE 158 F Personalized Fitness

1 Unit
54 hours lab per term. This course is a supervised, group-circuit exercise program using a variety of exercise equipment that focuses on individual needs which includes the various principles and techniques of exercise as they relate to the older adult. Individual assessments will include review of medical history, resting and exercising heart rate, blood pressure, and body weight. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

## PE 159 F Strength Training-Olympic Weights

Letter Grade or Pass/No Pass option.
Open Entry/Open Exit.
18-72 hours lab per term. This course is an open-entry lab experience for those people who want to get maximum physical return for a limited time invested. This course is designed to provide instruction and supervision of students with individualized strength programs using Olympic weights and nautilus apparatus. It is for men and women of all age groups who are interested in muscle toning, muscle rehabilitation, strength increases and body building. Workout times are adjusted to the student's schedule. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

PE 160 F Basketball - Recreational
1 Unit 36 hours lab per term. This course provides instruction and strategies in the basic skills, rules and etiquette of basketball. Students will receive improvement through supervised instruction and participation. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

## PE 161 F Body Conditioning and Fitness

1 Unit
54 hours lab per term. This course will focus on individual exercise for contouring, conditioning, posture, weight training, aerobics and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 162 F Conditioning for AthletesStrength

27-108 hours lab per term. This course is designed to organize and employ individual conditioning programs for athletes. The program includes analysis and appraisal of strength, cardiovascular, and flexibility of each athlete along with program prescriptions. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

PE 163 F Kickboxing 1 Unit
54 hours lab per term. This course provides instruction in kickboxing that stress cardiovascular endurance, strength development, and improved flexibility. The aerobic workout will include influences from several martial arts. For interested students, the sparring and self-defense aspects of kickboxing will be included. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

## PE 165 F Lifetime Fitness

1 Unit
36 hours lab per term. This course provides cardiovascular fitness training, strength and conditioning exercises and nutrition programs to improve in the components of health related physical fitness. Each student will develop an individual program suited to his/her goals. Lab will cover cardio and strength training exercises, nutritional links, exercise goal setting and adaptation. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE

## PE 167 F Cardio Kickboxing Aerobics

1 Unit
54 hours lab per term. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through basic kick-boxing aerobic movements. Activities include stretching, strength training, and basic kick-boxing exercise (no physical contact) set to music. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 168 F Boot Camp Workout

. 5 to 1 Units
27-54 hours lab per term. This course will focus on individual exercises including obstacle course, calisthenics, conditioning, weight training, aerobics, yoga, Pilates, and overall fitness. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 169 F Advanced Water Polo 1 Unit
Advisory: PE 192 F or the equivalent with a grade of "C" or better.
54 hours lab per term. This course is designed to cover strategies and game-type situations for those with a basic knowledge of the game. Instruction will be given in advanced skills, techniques, fundamentals and tactics in the sport of water polo. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 171 F Soccer - Recreational

1 Unit
54 hours lab per term. This course offers instruction on the basic skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic and designed primarily for women. The course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 172 F Competitive Fast Pitch Softball 1 Unit

Advisory: Intermediate skill level in catching, throwing, and hitting.
54 hours lab per term. This course is designed for experienced softball players to give instruction in advanced techniques and game strategies. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 175 F Volleyball - Team Development . 5 to 2 Units 27-108 hours lab per term. This course is designed for the potential intercollegiate player with advanced skill and knowledge in volleyball. Students will receive training in basic skills and strategies involved with competition. Course may be taken two times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 179 F Intercollegiate Spirit Squad

Prerequisite: Audition.
180 hours lab per term. This course is designed for cheer and dance team members. The focus is on the skills required for a successful spirit squad individual and group. The class will emphasize the fundamentals of tumbling, stunts, pom-pom and dance technique, choreography, competition, leadership skills, and crowd motivation. Performance at school athletic events and campus functions is mandatory. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 180 F Baseball

1 Unit
36 hours lab per term. This course has an emphasis on learning the fundamental aspects of baseball. There will be instruction in all areas of baseball, including: hitting, bunting, fielding, throwing, running, and sliding. There will also be emphasis on the offensive and defensive fundamentals. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 181 F Basketball

1 Unit
36 hours lab per term. This course stresses development of the fundamental skills of basketball and promotes body conditioning. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 182 F Body Building/Body Development and Weight Lifting

36 hours lab per term. This course includes those resistive exercises designed to develop and increase size and strength of muscle tissue with emphasis on safe and proper weight lifting techniques. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 183 F Conditioning for Athletes - Circuit 1 Unit 27-108 hours lab per term. This course is designed for instruction and practice in weight training, weight lifting, anaerobic and aerobic fitness and flexibility for competition in various sports. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 185 F Football - Defense <br> 3 Units

162 hours lab per term. This course is designed to give students the proper knowledge and mental preparation necessary to play collegiate football, specifically at the defensive position. Emphasis is placed on acquiring specific position skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set for the by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 186 F Football - Offense

3 Units
162 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play collegiate football, specifically at the offensive position. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Commission on Athletes (COA). (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 187 F Physical Fitness

1 Unit
36 hours lab per term. In this course, physical fitness for men would be achieved through the use of resistive exercises and body-building routines. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 188 F Self Defense-Boxing 1 Unit
54 hours lab per term. This course is designed to teach the students the fundamentals of boxing and self-defense. Instruction will be given on the rules and regulations of boxing. The students will learn the necessary skills for participation in amateur boxing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 189 F Soccer

1 Unit
54 hours lab per term. This course provides instruction on the basic skills of soccer: technique, tactics and rules of the game. The workout will be both aerobic and anaerobic. The course will include interclass competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 191 F Volleyball-Advanced

. 5 to 2 Units
27-108 hours lab per term. This course is designed for the advanced volleyball athlete with advanced skill and knowledge in the sport of volleyball. Students will receive training in fundamentals and strategies necessary for successful competition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 192 F Water Polo

1 Unit
Advisory: Ability to swim 50 yards and tread water for three minutes.
54 hours lab per term. This course covers instruction which will be given in the fundamentals of water polo to include physical skill development, conditioning, game strategy, and terminology. The course is designed to provide aquatic game activity for the intermediate and advanced swimmer and to develop a greater understanding of the game of water polo. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 193 F Weight Training/Weight Lifting 1 Unit

54 hours lab per term. This course provides instruction in strength training and focuses on weight lifting techniques that will produce muscle endurance and muscle strength. The class will also teach and demonstrate Olympic style lifts. Each student will develop an individual program. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 196 F Swimming - Recreational

1 Unit
54 hours lab per term. This course will provide intermediate instruction and practice in the fundamentals of swimming, including beginning diving and water-safety instruction. This course is designed to develop proficiency in basic strokes to meet prerequisite for advanced Lifesaving and Water-Safety Instruction (WSI) courses. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 199 F Physical Education Independent Study

54-108 hours lab per term. In this course, students should choose an interest area and schedule conferences. This class is for students who wish to participate in acceptable non-curricular physical activities or who wish to work in the field as a teaching assistant or official or to study special programs in physical education. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 202 F Baseball

2 Units
180 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Mission Conference, Orange Empire Conference, and the South Coast Conference. Daily after-school practice or play for a minimum of ten hours per week. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 203 F Intercollegiate Basketball - Men 1 Unit
Advisory: A grade of "C" or better in a minimum of two years of varsity high school basketball.
85.5 hours lab per term. This course is designed for advanced male basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum 175 lab hours per semester is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student athletes will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 204 F Intercollegiate Basketball - Women 1 Unit
Prerequisite: A grade of " C " or better in a minimum of two years of varsity high school basketball.
85.5 hours lab per term. This course is designed for advanced female basketball players wanting to participate on the intercollegiate basketball team. Daily practice or play for a minimum of ten hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the COA and Orange Empire Conference. Student Athlete will need to pass the sports physical administered by a team physician prior to competition. The following intercollegiate sports offer credit. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 205 F Cross Country-Men \& Women 2 Units

180 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Mission Conference, Orange Empire Conference, and the South Coast Conference. Student athletes will need to pass the sports physical administered by a team physician prior to competition. Daily after-school practice or play for a minimum of ten hours per term. The following intercollegiate sport offers credit. NOTE: Physical Education majors, see counselor for transfer requirements. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 207 F Football

2 Units
Advisory: Tryouts required.
180 hours lab per term. This course needs to be taken in order for a student athlete to participate in intercollegiate football. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Southern California Football Association and the California Commission on Athletics. This will include daily after-school practice designed to meet the needs of those interested in football. Student must pass a physical. Course may be taken four times for credit. Materials fee of \$200 is payable at registration. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 208 F Intercollegiate Golf - Women 2 Units

175 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the California Community College Athletic Association (CCCAA) and Orange Empire Conference (OEC), including pass a physical exam given by the team doctor. Daily practice or play is required. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 209 F Intercollegiate Soccer Men and Women

175 hours lab per term. This course provides student athletes the opportunity to participate in intercollegiate soccer. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference. Daily practice or play for a minimum of ten hours per week. The following intercollegiate sport offers credit. Physical Education majors must see counselor for transfer requirements. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 210 F Intercollegiate Softball - Women 2 Units

 Advisory: Subject to audition.175 hours lab per term. This course is designed for advanced female softball players to participate on the intercollegiate softball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 211 F Swimming - Men

2 Units
Advisory: Try-out required.
180 hours lab per term. For this course, students must meet the eligibility requirements of the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Daily after-school practice for a minimum of ten hours per term. Team standards and expectations established. Competition versus local college teams. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 212 F Swimming - Women
2 Units
180 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Daily after-school practice for a minimum of ten hours per term. Team standards and expectations established. Competition versus local college teams. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 214 F Intercollegiate Tennis

2 Units
180 hours lab per term. This course is designed for the advanced tennis player wanting to participate on the intercollegiate tennis teams. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference. Daily after-school practice or play for a minimum of ten hours per term. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 215 F Track - Men/Women

2 Units
180 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Mission Conference, Orange Empire Conference, and the South Coast Conference. Daily after-school practice or play for a minimum of ten hours per week. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 217 F Intercollegiate Sand Volleyball- 2 Units Women

Advisory: Student needs to be able to perform competitive collegiate-level volleyball skills as assessed by the instructor.
180 hours lab per term. This course is designed for advanced sand volleyball players with a strong desire to participate on the intercollegiate sand volleyball team. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

PE 218 F Intercollegiate Volleyball - Women 2 Units Advisory: The student needs to be able to perform collegiate level volleyball skills as assessed by the instructor.
175 hours lab per term. This course is designed for advanced female volleyball players to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference (OEC). Student athletes will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 219 F Intercollegiate Water Polo

2 Units
180 hours lab per term. This course is designed for the competitive student athlete participating in water polo. Course content will include aspects of competitive training such as weight training, repetitive swim sets, offensive and defensive game strategy, and intercollegiate contests. All participants will need to meet eligibility requirements set by the California Community College Athletic Association (CCCAA). Student athlete will need to pass the sports physical administered by a team Physician prior to competition. They will also be governed by their given conference rules and regulations. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 221 F Intercollegiate Volleyball - Men 2 Units

Advisory: Perform collegiate level volleyball skills as assessed by the instructor.
175 hours lab per term. This course provides advanced male volleyball players the opportunity to participate on the intercollegiate volleyball team. Daily practice or a minimum of 10 hours per week is required. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA (California Community College Athletic Association) and the Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Course may be taken three times for credit (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 222 F Badminton - Women

2 Units

## Advisory: Audition

180 hours lab per term. For this course, in order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. Also, candidates must pass a physical exam. A tryout is required to demonstrate skills and badminton ability. Daily practices and games per schedule. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 223 F Pilates Mat I

1 Unit
54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include beginning level mat work, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 224 F Pilates Mat II <br> 1 Unit

Prerequisite: PE 223 F with a grade of " C " or better.
54 hours lab per term. This course provides instruction in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. This course will include advanced level mat work using mats, rings, and foam rollers, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 226 F Pilates Apparatus
2 Units
Prerequisite: PE 223 F with a grade of "C" or better.
108 hours lab per term. This course emphasizes beginning through advanced levels of instruction of exercises and concepts developed by Joseph H. Pilates and incorporating various equipment. This course focuses on exercises for Pilates apparatus, including the Trapeze Table/Cadillac/Tower, Pilates Chair, Step Barrel and Ladder Barrel. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 227 F Effective Teaching Methods for Pilates

Corequisite: PE 226 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course covers the principles, sequencing, progressions, cues, modifications, muscular integration and appropriate terminology that students need to effectively teach Pilates exercises. (CSU) (Degree Credit)

PE 228 F Pilates Internship 2 Units Prerequisite: PE 227 F with a grade of "C" or better. 18 hours lecture and 54 hours lab per term. This course gives students the opportunity to assist and teach Pilates on all pieces of equipment, including Mat, Reformer, Cadillac, Chair, Barrel, and Spine Corrector. (CSU) (UC review required) (Degree Credit)

## PE 229 F Pilates Clinic

2 Units
Corequisite: PE 228 F with a grade of " C " or better. Advisory: WELL 265 F.
18 hours lecture and 54 hours lab per term. This course offers students the practical experience of instructing Pilates. This lab experience develops student confidence and professional Pilates training while working with the public under supervision of instructor. (CSU) (Degree Credit)

## PE 235 F First Aid, CPR, and Safety Education 3 Units (C-ID KIN 101)

54 hours lecture per term. This course clarifies when and how to call for emergency medical help, eliminating the confusion that is frequently a factor in any emergency. This course also emphasizes the importance of a safe, healthy lifestyle. The American Red Cross instructional outline will be followed. Upon successful completion the students will be certified in both Standard First Aid and CPR. (CSU) (UC) (Degree Credit)

## PE 236 F Prevention and Care of Athletic Injuries

54 hours lecture per term. This course provides basic exposure to the care and prevention of sports-related injuries and illnesses. Discussion includes mechanism of injury, signs and symptoms and the appropriate treatment for the most common injuries. Some class time is spent in the Fullerton College training room learning how to tape ankles and better understand the necessary equipment. (CSU) (UC) (Degree Credit)

## PE 238 F Water Safety Instruction

3 Units

## Prerequisite: Ability to swim.

36 hours lecture and 36 hours lab per term. This is a course with intensive work in how to teach others in the area of swimming and lifesaving. The student is given the opportunity to obtain a Red Cross WSI certificate that is required by the State of California when working at either a private or public pool where swimming lessons are offered. This is a class in which theory and practical application, along with practice teaching, are stressed. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 239 F Open Water Scuba Diving 3 Units

Advisory: Ability to swim 50 yards and tread water for 3 minutes.
36 hours lecture and 72 hours lab per term. This is a course designed to prepare the student to perform skills of skin and SCUBA diving. Instruction will identify, discuss, and employ safety techniques in all phases of underwater diving. Confined water training will be practiced in the pool and repeated during open-water (ocean) dive trips. Field trips and boat dives are required for certification, but certification is not required for completion of this course. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 240 F Sports Officiating for Men 2 Units

36 hours lecture and 36 hours lab per term. This course covers the basic rules and mechanics of officiating the sports of football, basketball, baseball, and softball.. Students will receive practical experiences in officiating. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 243 F Stress Management

3 Units
54 hours lecture per term. This course examines productive and non-productive stress and the influence of various types of stress on health and wellness. Topics include the physiological aspects of stress and its effects on health, assessments of personal coping style, strategies for coping effectively with stress, relaxation techniques, mindful awareness, and positive self-talk. Emphasis is placed on practical application of stress management techniques in daily life. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 244 F Techniques and Principles of Coaching

3 Units
54 hours lecture per term. This course will focus on the factors related to coaching strategies, techniques, principles, and philosophies. Units on nutrition and substance use. ASEP Coaching Certification offered through this course. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 245 F Lifesaving, Basic Rescue and CPR 2 Units Prerequisite: Ability to swim.

36 hours lecture and 18 hours lab per term. This course is designed to develop and perfect the basic swimming strokes needed to successfully execute the various lifesaving skills, as well as improve general skills and proficiency in the water. Upon completion of the class, a student who successfully passes written and practical exams will be qualified to be certified for an American Red Cross Emergency Water Safety, Basic Lifeguarding, or Lifeguard Training Certificate. Cardiopulmonary resuscitation is also covered in class and a certificate of completion is issued when successfully completed. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 246 F Advanced/Master SCUBA Diver 3 Units

Advisory: Demonstrate the basic skills of scuba according to the national standards of NAUI. (Regulator clear, mask clear, Iow and out of air emergency). Students need to be able to swim in order to complete the water component of the course.
36 hours lecture and 72 hours lab per term. This course is an intensive program consisting of lectures and practical application of water skills. The information presented will increase the student's knowledge in the area of equipment, ocean environment, safety, decompression, leadership and specialty diving options. This course provides the opportunity to receive certification not only for Advanced and/or Master, but also for specialties such as Rescue, Deep Water, Night, and Decompression diving, etc. NAUI standards and certification will be utilized. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 247 F Sports Management

3 Units
54 hours lecture per term. This course introduces organization, management, planning, staffing, directing, and controlling a sports program. The course also includes such areas as budget, facilities, scheduling, officials, transportation, public relations, parent and booster clubs, purchase and care of athletic equipment, fundraising, and marketing. (CSU) (Degree Credit) AA GE, CSU GE

## PE 248 F Psychology of Sport <br> 3 Units

54 hours lecture per term. This course will assist students to understand the effects of psychological factors on motor performance. In addition, students will gain an understanding of the effects of participating in physical activity on psychological development, health, and well-being. (CSU) (Degree Credit) CSU GE

## PE 250 F Sports and Society 3 Units

54 hours lecture per term. This course examines the role of sport in modern society; looks at how sport influences and shapes global attitudes among nations; and investigates the historical, social, economic and political impact of sport on society. This course fulfills Multicultural Education Requirement for graduation. (CSU) (Degree Credit) CSU GE, MULT CULT REQ

## PE 252 F Introduction to Kinesiology

3 Units
54 hours lecture per term. This course is an introduction to kinesiology as a profession and as an academic discipline. This course explores sub-disciplines, opportunities in the field, philosophy, scientific foundation, and analyzes and evaluates individuals that have influenced these trends and issues in the 21st century. (CSU) (Degree Credit)

## PE 266 F Physical Fitness as a Lifelong Concept

54 hours lecture per term. This course provides the student an opportunity to survey and analyze the exercise components that make up our individual physical beings. Students will appraise the concepts of behavior that may result in an optimally fit and healthy life-style. Additionally, students will observe the effects that age has on specific body systems and how a reasonably conceived and defined program of activity and diet may result in improved fitness, wellness and quality of life with advancing years. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## PE 270 F Exercise Nutrition

3 Units
54 hours lecture per term. This course provides scientific information for sport nutrition that covers the principles, background and rationale for current nutrition guidelines for athletes. The goal is to learn to combine the good nutritional habits along with a quality exercise regime to meet weight control goals. This course will emphasize caloric planning, energy expenditure, metabolism, and eating disorders. Diet theories will be explained along with the evaluation of fad diets and supplements. (CSU) (Degree Credit)

## PE 271 F Beginning/Intermediate Reformer (formerly PE 225 F )

Prerequisite: PE 223 F with a grade of "C" or better.
108 hours lab per term. This course covers the alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The beginning level course will include exercises in matwork and on the reformer, and will emphasize beginning exercises for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 272 F Advanced Reformer 2 Units

Prerequisite: PE 223 F with a grade of " C " or better.
108 hours lab per term. This course covers the alignment and correctives work based on exercises and concepts developed by A. Joseph H. Pilates. This course will include advanced exercises on the reformer, and will emphasize advanced skill technique designed for improved body alignment, strength, flexibility, control, coordination and breathing. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 280 F Professional Activities - Theory of Baseball

18 hours lecture and 36 hours lab per term. This course is designed to prepare future physical education teachers or community youth coaches in the theory of coaching baseball. This course will include the mental and physical preparation of becoming a complete baseball player; the theory and practical experience of offensive and defensive phases of the game; individual technique drills for each of the nine positions; coach and umpire relationships; the planning and execution of practice sessions; and the strategies involved during a game. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 281 F Professional Activities: Theory of Basketball

18 hours lecture and 36 hours lab per term. The course deals with basketball from beginning to present day. The psychology of coaching basketball, player fundamentals, administration of a total basketball program, behavioral objectives for basketball, practical experience of teaching offense and defense will be covered. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 282 F Theory of Coaching Softball <br> 2 Units

18 hours lecture and 54 hours lab per term. This course is designed to give students the skills, proper knowledge, and mental preparation necessary to play or coach collegiate softball. Emphasis is placed on acquiring specific positions skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set forth by the NCAA and California Community College Athletic Association (CCCAA). (CSU) (UC Credit Limitation) (Degree Credit)

## PE 283 F Professional Activities/Theory of Football

36 hours lecture per term. This is a course which will better prepare those students going into physical education, coaching or recreation with basic fundamentals, strategy and history of football. Students will gain an awareness of techniques and concepts relating to better performance and learning experiences. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 284 F Theory of Coaching Soccer 2 Units

36 hours lecture per term. This course provides preparation for future physical education and recreation teachers or community coaches in the theory of coaching soccer. It includes the mental and physical preparation of becoming an instructor of, or participant in, the sport of soccer and the theory and practical experience of offensive and defensive phases of the game. Technique, tactics, fitness, and psychology will be covered in detail. Rules and regulations of the game, along with equipment and safety, will be discussed. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 285 F Professional Activities - Theory of 2 Units Volleyball

18 hours lecture and 36 hours lab per term. This course is designed to prepare present and future players, physical education teachers and coaches in the theory of coaching volleyball. The course includes the mental and physical preparation of becoming a volleyball player, the theory and practical experience pertaining to the offense and defense strategies of volleyball, individual technique drills to perfect the skills of volleyball. (CSU) (UC Credit Limitation) (Degree Credit)

PE 296 F Off Season Athletes - Softball . 5 to $\mathbf{3}$ Units 27-162 hours lab per term. This course is designed to give students the specific preparation necessary to play college softball. It will include position specific training and advanced strategies within a team environment. The students will be instructed on charting using technology to determine individual and team tendencies. Try-outs will be conducted for the purposes of assigning positions. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## Physics (PHYS)

## Natural Sciences Division

Office: Bldg 400, Room 411-714.992.7043
Dean: Richard Hartmann
Website: natsci.fullcoll.edu

## Physics Courses

## PHYS 120 F Relativity for Poets 3 Units

Prerequisite: MATH 040 F or MATH 041 F or MATH 043 F, with a grade of "C" or better or math skills clearance.
54 hours lecture per term. This course is intended for non-science students seeking general education credit in a physical science course without a lab. It presents Einstein's bizarre universe, from black holes to the Big Bang. Relativity's role in everyday life is discussed, including GPS and the magnet stuck to your fridge. Emphasis is placed on concepts rather than manipulating equations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 130 F Elementary Physics 4 Units

## (C-ID PHYS 140)

Prerequisite: MATH 020 F with a grade of " C " or better or math skills clearance.
54 hours lecture and 54 hours lab per term. This course is a survey of some of the more important principles, philosophy, and phenomena of physics. Topics include mechanics, electricity and magnetism, wave phenomena, and modern physics. The course is intended for those with no previous experience in physics. It is not open to anyone who has taken a college-level physics course. The lab includes experiments in measurement, mechanics, electricity, wave phenomena, and radioactivity. (CSU) (UC Credit Limitation; no credit if taken after PHYS 205 F, PHYS 210 F or PHYS 221 F.) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 205 F Physics for the Life Sciences I

## (C-ID PHYS 105)

## (formerly known as College Physics)

Letter Grade or Pass/No Pass option.
Prerequisite: MATH 141 F and MATH 142 F with a grade of "C"" or better.
54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The lab portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 206 F Physics for the Life Sciences II 4 Units (formerly known as College Physics) <br> Letter Grade or Pass/No Pass option.

Prerequisite: PHYS 205 F with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The lab portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of an algebra-based two-semester sequence (PHYS 205 F and 206 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the CSU system, but not the UC system. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 210 F Physics with Calculus for the Life Sciences I

(C-ID PHYS 105)
Corequisite: MATH $150 A F$ or MATH $150 H F$, with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course covers Newtonian mechanics, conservation laws, heat, and waves. The lab portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the first half of a calculus-based two-semester sequence (PHYS 210 F and 211 F) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and PHYS 206 F. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 211 F Physics with Calculus for the Life Sciences II

(C-ID PHYS 110)
Prerequisite: PHYS 210 F with a grade of " $C$ " or better.
Corequisite: MATH 150BF with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course covers electricity and magnetism, optics, special relativity, and quantum physics. The lab portion of the course investigates these topics both qualitatively and quantitatively, and includes the use of graphing and statistics, and propagation of errors. This is the second half of a calculus-based two-semester sequence (PHYS 210 F and 211 F ) for students majoring in the life sciences. This course satisfies a requirement for biology majors in the UC system; the CSU system will accept either this sequence or PHYS 205 F and 206 F. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 221 F General Physics I <br> 4 Units

## (C-ID PHYS 205)

Prerequisite: MATH 150AF with a grade of "C" or better or math skills clearance.
Corequisite: MATH 150BF with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course covers mechanics, vibrations, properties of matter. The lab provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. PHYS 221 F, 222 F, and 223 F are a calculus-based, three-semester survey of introductory physics. High school physics or PHYS 130 F is strongly recommended, and students must complete one semester of calculus before beginning the sequence. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 221HF Honors General Physics I 4 Units

Prerequisite: MATH 150AF with a grade of "C" or better. Corequisite: MATH 150BF with a grade of "C" or better. 54 hours lecture and 54 hours lab per term. This Honors-enhanced course covers mechanics, vibrations, properties of matter. The lab portion provides students with hands-on experience working with the subject material. Required for majors in physics and engineering and recommended for majors in all the other physical sciences. PHYS 221 F, 222 F, and 223 F are a calculus-based, three-semester survey of introductory physics. As an Honors section, this class will employ teaching methods such as more lab experiments that go beyond verifying textbook material, more research-based writing assignments, and assignments calling for a higher level of critical thinking. High school physics or PHYS 130 F is strongly recommended, and students must complete one semester of calculus before beginning the sequence. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 222 F General Physics II

(C-ID PHYS 210)
Prerequisite: PHYS 221 F with a grade of " C " or better and MATH 150BF with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. Electrostatics, electric and magnetic fields, simple DC and AC circuits, Maxwell's equations in integral form. The lab provides students with hands-on experience working with the subject material. Required for majors in physics and engineering. Recommended for majors in all the other physical sciences. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHYS 223 F General Physics III

## 4 Units

 (C-ID PHYS 215)Prerequisite: PHYS 222 F with a grade of " C " or better. 54 hours lecture and 54 hours lab per term. This course covers the topics of thermodynamics, mechanical and electromagnetic waves, geometrical and physical optics, special relativity, and an introduction to quantum mechanics including wave-particle duality, the uncertainty principle, the atom, and the nucleus. The lab provides students with hands-on experience working with the subject material. PHYS 221 F, 222 F, and 223 F are a calculus-based three-semester survey of introductory physics. Required of majors in physics and most majors in engineering. Recommended for majors in all the other physical sciences. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## Political Sciences (POSC)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Political Sciences Courses

## POSC 100 F American Government

3 Units (C-ID POLS 110)
54 hours lecture per term. This course is an introductory survey of American governing institutions which include the federal, state, and local governments. The role of political parties, elections, public bureaucracies, public and private interest groups and complimentary institutions and individuals who interact with the political system will also be examined. The course is issue-oriented, inviting students to analyze and appraise critically such areas as competing theories and arguments relating to the founding of the Republic (especially the development of the Constitution), federalism, individual rights and liberties, interest groups, political parties, voting behavior and elections, campaign finance reform, public policy options, and the operational relations among governmental bodies. Course curriculum recognizes the roles and contributions of racial and ethnic groups, women and other groups and forces that impact American politics. Comparisons will be made among governing units (federal, state, and local, including California) that ultimately affect and influence society. (CSU) (UC Credit Limitation) (Degree Credit) AA, GE, CSU GE, IGETC

## POSC 100HF Honors American Government 3 Units

 (C-ID POLS 110)54 hours lecture per term. This Honors-enhanced course is an introductory survey of American governing institutions which include the federal, state, and local governments. The role of political parties, elections, public bureaucracies, public and private interest groups and complimentary institutions and individuals who interact with the political system will also be examined. The course is issue-oriented, inviting arguments relating to the founding of the Republic (especially the development of the Constitution), federalism, individual rights and liberties, interest groups, political parties, voting behavior and elections, campaign finance reform, public policy options, and the operational relations among government bodies. This course curriculum recognizes the roles and contributions of racial and ethnic groups, women and other groups and forces that impact American politics. Comparisons will be made among governing units (federal, state, and local, including California) that ultimately affect and influence society. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

POSC 110 F Contemporary American Politics 3 Units 54 hours lecture per term. This course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. Alternately, this course is designed to provide structured opportunities for students to participate actively in the processes of government and politics as interns. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 110HF Honors Contemporary American 3 Units Politics

54 hours lecture per term. This Honors-enhanced course emphasizes the political problems that are current in the American political scene and provides an opportunity for the student to investigate and evaluate contending response to those problems. Alternately, this course is designed to provide structured opportunities for students to participate actively in the processes of government and politics as interns. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 120 F Introduction to Political Theory <br> 3 Units (C-ID POLS 120)

54 hours lecture per term. The course is a survey of Western political theory. It is intended to introduce students to political theory from Greek times to the Enlightenment and beyond. It is intended to show students how political theory shapes current institutions and ideologies in the United States, Europe, and other countries around the world. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

POSC 150 F California Government and Politics
54 hours lecture per term. This course is an introduction to the study of state and local politics, exploring the political culture, processes, behavior, institutions, public policy, and distribution of power in California. Policies in other states are examined to aid understanding of California politics. Topics include the political culture of the state, the process of change, policy agendas, budgeting, and the current status of states within the federal system. (CSU) (Degree Credit) AA GE, CSU GE

## POSC 180 F Capital Field Trip: Sacramento Seminar

36 hours lecture and 54 hours lab per term. This seminar class joins with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. The class will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. (CSU) (Degree Credit)

## POSC 180HF Honors Capital Field Trip: Sacramento Seminar

26 hours lecture and 54 hours lab per term. This Honorsenhanced course joins with student delegations from other California colleges and universities that meet in the state capitol for a policy conference each Spring. Includes presentations and panel discussions by legislators, lobbyists, public administrators, and journalists. This class will meet regularly before the practicum to prepare students for the conference and an independent research paper will be assigned. (CSU) (Degree Credit)

## POSC 198 F Political Campaign Internship 1 Unit

 54 hours internship per term. This course allows students to increase their knowledge of political science through campaign work for a candidate for elected office. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)
## POSC 199 F Public Policy Internship 1 Unit

54 hours internship per term. This course allows students to increase their knowledge of public policy through an internship with an elected official, government office, or non-profit agency. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)

## POSC 200 F Introduction to the Study of <br> 3 Units Politics

## (C-ID POLS 150)

54 hours lecture per term. This course is an introduction to the study of politics in general, not simply American politics. Explores the many faces of politics all over the world, examining its relationship to morality, culture, economics, justice and international affairs both theoretically and practically. As an introductory course, it includes elements from the major sub-disciplines of political science, i.e., American politics, comparative politics, and international relations. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit), AA GE, CSU GE, IGETC, MULT CULT REQ

## POSC 215 F Comparative Politics

3 Units

## (C-ID POLS 130)

54 hours lecture per term. This course emphasizes various methodologies necessary to compare political systems representing Eurasia, the Western Hemisphere, and the developing nations. It explores the differences and similarities in the operation of the major branches of government, political party and electoral systems, types and activities of interest groups, individual rights and liberties, leadership patterns, the power relations among local, provincial, national and supra-national regional governments such as the European Community, and the challenges facing transitional democracies throughout the world. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 216 F Government and Politics of the 3 Units Middle East

54 hours lecture per term. This course is an introduction to the historical, social, economic and ideological foundations of the Middle East in general and major states in the region in particular. Emphasis is placed on the political and economic developments in Egypt, Iraq, Iran, Israel and Saudi Arabia. Topics covered include: introduction to the land, peoples, cultures and religions; colonialism and the emergence of modern states following World War I; Western influence and Islamic revivalism; regional conflicts (Arab-Israeli, Iran-Iraq, Gulf War); the politics and economics of oil; U.S. based ethnic interest groups and their influence on U.S. foreign policy; patrimonialism and militarism; liberalization and democratization. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 220 F Introduction to Public Administration

54 hours lecture per term. This course covers the role of government in American society, the historic development of the public service, management issues related to modern governmental enterprises, problems of personnel, public budgeting and alternative strategies for securing administrative responsibility. This course focuses on readings and cases pertaining to local and state administration, although issues involving the federal level are discussed where appropriate. This course examines, from a multidisciplinary perspective, those essential competencies, values and issues important to public service organizations and the importance of public policy at the local, state, national and international levels. (CSU) (UC) (Degree Credit) CSU GE, AA GE

## POSC 230 F Introduction to International 3 Units Relations <br> (C-ID POLS 140)

54 hours lecture per term. This course is a study of the basic dynamics and structure of the nation-state system as emerged historically with the peace of Westphalia and the introduction of the balance-of-power system, the rise of nationalism, the bipolar world characterized by the post-World War II context, and the aftermath of the collapse of the Soviet Bloc and its consequences. Students will examine major issues of U.S. foreign policy. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 275 F Introduction to Public Law <br> 3 Units

54 hours lecture per term. This course explores the interactive dynamic among the judicial, legislative, and executive branches in the creation and implementation of public law. It involves an extensive analysis of cases relating to the separation of powers, federal-state relations, and rights of property, free expression, privacy, criminal due process, political participation, and equality under the law. Corollary topics include orientation to legal research, case briefing, development of judicial review, judicial organization and decision-making, sources and limits of judicial power, and the political impact of Supreme Court decisions. Students will participate in various simulations of court decisions. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## POSC 299 F Political Science Independent Study

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of political science through individual study and small group conferences. Students successfully completing this course will be awarded elective credit in the Social Science area. (CSU) (UC review required) (Degree Credit)

## Portuguese (PORT)

## Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Portuguese Courses

## PORT 101 F Elementary Portuguese I 5 Units

Letter Grade or Pass/No Pass option.
90 hours lecture per term. The course focuses on the four major skills of language learning--listening comprehension, speaking, reading and writing--and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Brazil and other Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese. (CSU) (UC) (Degree Credit) AA GE, CSU GE.

## PORT 102 F Elementary Portuguese II <br> 5 Units <br> Letter Grade or Pass/No Pass option.

Prerequisite: PORT 101 F with a grade of " C " or better or "Pass" or one year of high school Portuguese with a grade of "C" or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture, and civilization of Portuguese-speaking countries. This course is conducted primarily in Brazilian Portuguese and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Printing Technology (PRNT)

Technology and Engineering Division<br>Office: Bldg 700, Room 700-714.992.7115<br>Dean: Ken Starkman<br>Website: techneng.fullcoll.edu

## Printing Technology Courses

## PRNT 070 F Quick Print and In-Plant Graphics 2 Units

 18 hours lecture and 54 hours lab per term. This course covers the theory and practical experience in quick print and in-plant printing. Areas covered are: small press operation, bindery, and related subjects necessary for day to day production. (Degree Credit)
## PRNT 072AF Screen Printing I

2 Units
18 hours lecture and 54 hours lab per term. This is a basic course which introduces the principle, basic methods and techniques of preparing designs and placing stencils on a screen printing frame. Topics include establishing register systems and printing on various substrates as per industrial procedures, as well as the care, use, and safety precautions in operating and cleaning of the screen printing frames, equipment, and supplies. (Degree Credit)

## PRNT 072BF Screen Printing II <br> 2 Units

Prerequisite: PRNT O72AF with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This is an Intermediate course which covers vocational copy preparation techniques for multi-color reproduction, register and color matching. Instruction to include ink composition, modifiers, and proper ink for production. Emphasis on new inks and curing procedures. (Degree Credit)

## PRNT 072CF Screen Printing III 2 Units

Prerequisite: PRNT 072BF with a grade of "C" or better. 18 hours lecture and 54 hours lab per term. This course prepares students to print multi-color projects with tight register printing on various substrates. Heat transfer and gray scale printing will be taught. (Degree Credit)

## PRNT 075 F Electronic Prepress I <br> 6 Units

Advisory: PRNT 101 F with a grade of "C" or better.
72 hours lecture and 144 hours lab per term. This course has preflighting, export of files, imposition, file formats, and com-puter-to-plate imaging for sheetfed offset presswork. This course presents the theory of color and how it applies to the lithographic process and digital imaging. Typesetting, proof reading and image manipulation via digital files, to merge copy and graphics, is an integral part of this course. Design and creativity is not the intent of this course. Curriculum includes the Printing Industries of America Prepress Skills Training Program. Software applications including Adobe Creative Suites (Acrobat, InDesign, Bridge, Photoshop and Illustrator), Rampage RIP, Preps imposition, XMPie variable data, and Suitcase Fusion will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress). (Degree Credit)

## PRNT 077 F Advanced Electronic Prepress <br> 6 Units

Advisory: PRNT 075 F.
72 hours lecture and 144 hours lab per term. This course presents the advanced theory of color management and how it applies to the lithographic process and digital imaging. This course has instruction in electronic page layout, preflighting, exporting of files, imposition, file formats, and plate imaging for sheetfed offset press. Curriculum includes the Printing Industries of America Prepress Skills Training Program Tasks 4, 5, and 6. Software application including Adobe Creative Suites (Acrobat, InDesign, Photoshop, and Illustrator), Rampage RIP, Preps imposition, Fiery Color Profiler Suite, and XMPie variable data will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress.) (Degree Credit)

## PRNT 085 F Introduction to Flexography 4 Units

54 hours lecture and 54 hours lab per term. This introductory course will provide the student with a technical understanding of flexographic press operation for one, two and three color printing. Students will practice the set-up, operation, and clean-up of a narrow web flexographic press. Topics for discussion will include history of flexography, flexographic plates, plate mounting, ink systems and nomenclature, types of cylinders, substrates, die cutting, stripping, slitting, environmental concerns, and related safety. (Degree Credit)

## PRNT 086 F Advanced Flexography

## 4 Units

Advisory: PRNT 085 F.
54 hours lecture and 54 hours lab per term. This advanced course will provide the student with advanced technical aspects of flexographic press operation for multiple color printing. Students will practice pre-press techniques and develop advanced flexographic press skills on a narrow web label press. Advanced applications of flexographic processes, design, multi-color prints, plate materials, bar codes, inks, substrates, presses and press equipment, pressroom practices, environmental concerns, and related safety will be discussed. (Degree Credit)

## PRNT 090 F Printing Skills Lab <br> Open Entry/Open Exit.

Advisory: Any printing technology class, except screen printing classes.
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)

PRNT 091 F Advanced Topics in Printing . 5 to 6 Units 27-324 hours lab per term. This course will provide the student the opportunity to study new and emerging skills and field of studies in the printing industry. This course will be offered in modules for advanced topics. Unit credit may range from .5-3 units per module. Consult class schedule to verify specific topic area and credit offered in a particular module. (Degree Credit)

## PRNT 101 F Introduction to Printing

3 Units
36 hours lecture and 72 hours lab per term. This is a basic course which covers the technical aspects of the various printing processes and related areas. This course includes instruction in copy generation and page design using various computer applications including QuarkXPress, InDesign, and Photoshop. Computerized pre-press instruction includes preflighting of files and output on film using an image setter. This course also includes basic instruction in small offset press, flexography, screen printing and prepares the student to enter other more advanced printing classes. (CSU) (Degree Credit)

## PRNT 140 F Color Management

 Advisory: PRNT 101 F.36 hours lecture and 72 hours lab per term. This course explores Color Management using G7 Process Control to standardize workflow processes and achieve consistent color reproduction, reduce costs and expand efficiencies in a print environment. This course addresses the challenges of managing color across devices and workflows, defining how to integrate and maintain proven industry practices and standards. This course is workflow training from the creative process through final print output. (CSU) (Degree Credit)

## PRNT 142 F Prepress for Print using Adobe Creative Suite



3 Units Advisory: PRNT 101 F.
36 hours lecture and 72 hours lab per term. This course is prepress workflow training using Adobe InDesign, Illustrator, Photoshop and Acrobat. Students learn proper file creation and the preflight of client-supplied files through final print output. This course teaches the basics of font management, color spaces, image correction, resolution, discovery of errors through preflight, file repair, proofing, and final output. Design is not the intent of this course. (CSU) (Degree Credit)

PRNT 151 F Introduction to Pre-Press 4 Units Advisory: PRNT 101 F or one year of industrial experience-or two years of high school graphic arts.
This basic course covers the technical aspects of conventionat pre-press. The use of a horizontal process camera, including units of litho chemistry, quality control of line and halftone negatives, contacting techniques, film assembly for large offset presses using pin registration, photo mechanical proofing and making of effset plates are taught. $\$ 10$ materials fee required at registration. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 152 F Introduction to Electronic Prepress

## Advisory: PRNT 101 F.

54 hours lecture and 54 hours lab per term. This course covers the technical aspects of electronic prepress. The use of both Macs and PC based computers, using current software in page layout, scanning, design, typography, file management for printers will be taught. This class is part of the new industrial image skills training program. (CSU) (Degree Credit)

## PRNT 161 F Sheetfed Offset Presswork

4 Units
Advisory: PRNT 070 F and PRNT 101 F.
54 hours lecture and 54 hours lab per term. This course is designed to introduce the technical aspects of lithographic sheetfed offset presswork for students who are currently working in the printing industry. Lithographic theory and its application to knowledge and performance of pressroom safety, the feeder system, the printing units, press feeders, single-color register, paper properties, delivery systems, and exposure to make-ready and production techniques. (Graphic Arts Technical Foundation GATF - Certification) (CSU) (Degree Credit)

## PRNT 162 F Intermediate Sheetfed Offset 4 Units Presswork

Prerequisite: PRNT 161 F with a grade of " $C$ " or better.
54 hours lecture and 54 hours lab per term. An intermediate course designed for students working in the printing industry. This course covers the technical aspects of lithographic theory, the application of knowledge and performance of pressroom safety, the printing units, inking and dampening systems, multicolor register, make-ready, and intermediate exposure to production techniques, and "Tricks of the Trade" are covered. Emphasis is on completion of the "Knowledge and Performance" Certificate by passing the GATF/PIASC examination. This is the completion of the Sheetfed Offset Press Certification initiated in the PRNT 161 F prerequisite. $\$ 10$ materials fee required. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## 4 Units



## PRNT 171 F Offset Presswork

6 Units
Advisory: PRNT 070 F or PRNT 101 F with a grade of "C" or better or one year industrial experience or two semesters of articulated high school graphics.
81 hours lecture and 135 hours lab per term. This is a basic course which introduces the technical aspects of lithographic sheet-fed offset presswork for those seeking initial employment in the printing industry. The basic lithographic theory and its application to knowledge and performance of pressroom safety, the feeder, register, pre-production and an exposure to production techniques. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 172 F Intermediate Offset Presswork 6 Units Prerequisite: PRNT 171 F with a grade of "C" or better.

 72 hours lecture and 144 hours lab per term. This is an intermediate course which covers the technical aspects of lithographic, sheeted offset presswork and intermediate lithographic theory. This course is designed for those entering the printing field and are interested in training for large press operation. Course content includes the application to knowledge and performance of pressroom safety, the cylinder system, inking and dampening systems, press make-ready procedures, multicolor printing, press maintenance techniques, and an exposure to intermediate production techniques. Emphasis is on completion of the knowledge certificate by passing the GATF/PIA-SC, Fullerton College examination. This is the completion of the Sheeted Offset Press Certification initiated in the PRNT 171 F prerequisite. (Graphic Arts Technical Foundation GATF -Certification) (CSU) (Degree Credit)
## PRNT 963 F Advanced Sheetfed Offset Presswork

4 Units
Prerequisite: PRNT 162 F with a grade of " C " or better.
54 hours lecture and 54 hours lab per term. This course covers the intricate reproduction of process lithographic color that is designed for students with industrial experience. The advanced applications of press operation, pressroom safety, successive and stream feed systems, premake-ready, make-ready, inking and dampening components, four color register, and production techniques. Emphasis is on completion of the Performance Certificate by passing the GATF/PIA-SC, Fullerton college four color process practical examination. $\$ 10$ materials fee required at registration. (Graphic Arts Technical Foundation - GATF - Certification) (Degree Credit)

PRNT 973 F Advanced Offset Presswork 6 Units Prerequisite: PRNT 172 F with a grade of " C " or better. 72 hours lecture and 144 hours lab per term. This is an advanced course designed for students entering the printing field seeking employment. This printing production course covers the intricate reproduction of process lithographic color. The advanced application of press performance, pressroom safety, press feeder systems, the printing units, the inking and dampening systems, four color register, make-ready and advanced production techniques. Emphasis is on completion of the Performance Certificate by passing the GATF/PIA-SC, Fullerton College four color process practical examination and gaining employment. (Graphic Arts Technical Foundation -- GATF -- Certification) (CSU) (Degree Credit)

## Psychology (PSY)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Psychology Courses

## PSY 101 F General Psychology 3 Units (C-ID PSY 110)

54 hours lecture per term. This course is a scientific introduction to the major fields of psychology. These fields include research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, and developmental, social, personality, abnormal, and physiological psychology. Students will learn the principles, theories, and research on human actions, emotions, and cognition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 101HF Honors General Psychology 3 Units

 (C-ID PSY 110)54 hours lecture per term. This Honors-enhanced course is a scientific introduction to the major fields of psychology including research methodology, cognition, memory, perception, sensation, motivation, emotion, learning, developmental, social, personality, abnormal, and physiological psychology. Students will learn the principles, theories, and research on human actions, emotions, and cognition. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 110 F Introduction to Applied Psychology

54 hours lecture per term. In this course, students apply psychological principles, theories and research to specific situations and phenomena. Psychological principles will be applied to situations that might occur during college life, during personal familial and social experiences, in one's career or at school, or in the context of mental health and well-being. This course is not the same as PSY 101 F and cannot be taken in place of it. (CSU) (Degree Credit) AA GE

## PSY 120 F Human Sexuality <br> 3 Units

 (C-ID PSY 130)54 hours lecture per term. This course covers a broad field in which many cultural, psychological and physiological variables interact in relation to sexual development, attitudes and behaviors. The methods of scientific psychology are utilized to improve understanding of a broad range of behaviors ranging from healthy to dysfunctional within mainstream modern American culture and American minority groups as well as peoples of other cultures and historical eras. Discussion of differing cultural and moral perspectives is utilized to assist students in making a critical assessment of the nature of the sexual self as well as intimate human relationships within their own community and the world. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PSY 131 F Cross Cultural Psychology

3 Units
54 hours lecture per term. This course is an introduction to culture's influence on human behavior and mental processes. Beginning with an examination of theoretical definitions of culture, the course covers a broad range of theories and research findings regarding cultural influences on human behavior and cognitive processes (life-span development, abnormal behavior and mental health, self-concept, emotion, motivation, learning, intelligence, perception, memory, communication, social cognition, and social behavior). The diversity of human expression is examined in contexts ranging from everyday modes of functioning to family and work relationships. By providing students with a non-judgmental understanding of how culture influences human behavior, this course will make them more equipped to interact in a world where there is increasing contact among different cultures. In addition, students will gain knowledge in cross-cultural research methodology. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## PSY 139 F Developmental Psychology: Life Cycle

## (C-ID PSY 180)

Prerequisite: PSY 101 F or PSY 101HF, with a grade of "C" or better.
54 hours lecture per term. This course explores the entire lifespan, including infancy, childhood, adolescence, adulthood, old age, and death. Students will study and evaluate psychological, sociological, and biological theories and facts related to human development. Physical, social, emotional, intellectual, cognitive and moral developments are among the topics covered. Students will study and evaluate research methodologies and the many factors thought to influence healthy development. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 145 F Child Psychology 3 Units

54 hours lecture per term. In this course, the psychology of development will be studied from the prenatal stage through adolescence across the domains of physical, cognitive and psychosocial changes. Theoretical viewpoints and research findings will be applied to real-life situations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 161 F Elementary Statistics for Behavioral Science <br> (C-ID MATH 110) <br> Prerequisite: MATH 040 F with a grade of " C " or better or math

 skills clearance.72 hours lecture per term. This course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (CSU) (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120 HF and SOSC 120 F , combined; maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 161HF Honors Elementary Statistics for Behavioral Science

## (C-ID MATH 110)

Prerequisite: MATH 040 F with a grade of " C " or better or math skills clearance.
72 hours lecture per term. This Honors-enhanced course introduces students to descriptive and inferential statistical methods. These methods are essential to the understanding, interpretation, and performance of scientific research. Topics covered include presentation of graphic data, probability theory, hypothesis testing, correlation analysis, analysis of variance, and basic research design. Experience with calculators and computers is provided. (UC Credit Limitation; PSY 161 F, PSY 161HF, MATH 120 F, MATH 120HF and SOSC 120 F combined, maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 199 F Psychology Independent Study

1 Unit
54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC review required) (Degree Credit)

## PSY 202 F Research Methods in Psychology

## 4 Units

 (C-ID PSY 205B)Prerequisite: PSY 101 F or PSY 101HF, with a grade of "C" or better and PSY 161 F or PSY 161HF, with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences are available. Consideration of research in multicultural contexts is addressed. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 202HF Honors Research Methods in Psychology

(C-ID PSY 205B)
Prerequisite: PSY 101 F or PSY 101HF, with a grade of "C" or better and PSY 161 F or PSY 161HF, with a grade of "C" or better.
54 hours lecture and 54 hours lab per term. This Honors-enhanced course is designed for students who wish to explore in greater depth the theories, concepts, and research areas of methods of modern day psychology. Emphasis is on the scientific study of human behavior and mental processes using experimental and other research strategies. Skills in designing, implementing, analyzing, and writing scientific research studies will be included. Opportunities for field experiences in various psychological settings, such as research centers and regional psychological conferences, are available. Consideration of research in multicultural contexts is addressed. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 219 F The Human Services

3 Units
54 hours lecture per term. This course covers the history and philosophy of the human services, the needs of various client groups, and differences between practice settings. Goals and services of various human service agencies will be explored through field visits, case studies, service learning, and guest speakers. Career preparation for various human service positions will be covered. (CSU) (Degree Credit)

## PSY 221 F The Brain and Behavior 3 Units

Prerequisite: PSY 101 F or PSY 101HF, with a grade of " $C$ " or better.
54 hours lecture per term. This course examines the neurophysiological and biological processes associated with behavior and mental processes. Emphasis is placed on the structure and function of the brain and other central nervous system structures. Related processes such as the autonomic nervous system, the endocrine system and the immune system also are addressed. Some of the specific topics studied in the context of the brain include learning, sensation, perception, emotion, motivation, cognition, relationships, memory, stress, psychological disorders and brain dysfunction. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 222 F Abnormal Psychology <br> 3 Units <br> (C-ID PSY 120)

Prerequisite: PSY 101 F or PSY 101HF with a grade of "C" or better.
54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology interested in researching the nature and causes of deviant or unusual human behavior both within and across cultures. This course surveys types of abnormal behavior, the process of assessing and diagnosing abnormal behavior, the therapeutic modalities used to treat abnormal behavior, and the scientific methods used to conduct research on abnormal behavior. This course draws upon DSM diagnostic criteria to classify abnormal behavior, and humanistic, cognitive, behavioral, cross-cultural, psychodynamic, and biologically-based models and theories to frame an understanding of abnormal behavior. Issues relating to research, treatment and forensic psychology are considered. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 233 F The Psychology of Adjustment (C-ID PSY 115)

54 hours lecture per term. In this course, students will study a variety of types of adjustment, both functional and dysfunctional. For example, students might study emotional, behavioral or cognitive adjustment in the family or work setting. Students also will study the factors that seem to produce functional and dysfunctional adjustment as well as common treatments for dysfunctional adjustment. Such treatments might include cognitive therapy, humanistic therapy, behavior modification, systems therapy, or stress management. (CSU) (Degree Credit) AA GE

## PSY 251 F Social Psychology

## 3 Units

(C-ID PSY 170)
54 hours lecture per term. This course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes, and influences of the social context upon the individual and of the individual upon the social context. In this survey course, students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, bystander effects, social aggression, group dynamics, attribution theory and development of self in the social setting. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 251HF Honors Social Psychology <br> 3 Units (C-ID PSY 170)

54 hours lecture per term. This Honors-enhanced course presents a scientific survey of the sub-field of psychology that seeks to understand the nature, causes and influences of the social context. Students will be exposed to basic theories, concepts, and empirical findings in such areas as social perception, social cognition, prejudice, discrimination, interpersonal attraction, conformity and obedience, bystander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 299 F Psychology Independent Study - <br> 1 Unit Advanced

54 hours independent study per term. This course is offered for students who wish to increase their knowledge of the research process and literature reviews through individual study and small group conferences. Students successfully completing this course will be awarded elective units in the Social Sciences area. Approval of the instructor is required. (CSU) (Degree Credit)

## Reading (READ)

Humanities Division
Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Reading Courses

## READ 027 F Basic Study Skills 3 Units Pass/No Pass only.

54 hours lecture per term. This course is designed to help students with limited academic backgrounds experience college success by overcoming college anxiety and by taking responsibility for their college experience. Intensive practice and guidance in campus orientation, organizing, note taking, textbook mastery and test-taking.

## READ 036 F Basic Reading

3 Units
Pass/No Pass only.
54 hours lecture and 36 hours lab per term. This course includes instruction in basic reading fundamentals. Paragraphs, short essays, and longer texts will be read with an emphasis on comprehension, vocabulary development, and study techniques.

## READ 056 F Developmental Reading

3 Units

## Letter Grade or Pass/No Pass.

Prerequisite: READ 036 F with a grade of "Pass" or recommended score on the placement test.
54 hours lecture and 36 hours lab per term. This course is recommended for students whose reading placement test scores indicate a substantial need for reading improvement. This course introduces students to several skills in reading such as main idea, relevance of detail, vocabulary in context, and inference building to enable greater success in college courses.

READ 096 F Preparation for College Reading 3 Units Letter Grade or Pass/No Pass option.
Prerequisite: READ 056 F with a grade of "Pass" or a grade of "Pass" on the placement test.
54 hours lecture and 18 hours lab per term. This course will prepare students for the demands of college reading in academic subjects. Content area reading, essays, and journal articles will be analyzed with an emphasis on comprehension and academic vocabulary enhancement, study skills techniques, critical thinking, organizational structure, and reading within various disciplines. This course fulfills the reading requirement for graduation.

## READ 127 F College Study Skills

Letter Grade or Pass/No Pass option.
Prerequisite: READ 096 F with a grade of " C " or better or "Pass" or recommended score on the reading placement test. 36 hours lecture per term. The goal of the course is to learn strategies needed to succeed in college and in life. Topics include evaluation of goals, motivation, learning styles, diet, nutrition and exercise, stress management and time management. Strategies for success will include campus and community resources, techniques for active learning, concentration, memory, peak hours of learning and collaborative learning. Listening, note-taking, effective textbook reading, test preparation and test-taking skills are developed. (CSU) (Degree Credit)

## READ 133 F Rapid Reading <br> 3 Units <br> Letter Grade or Pass/No Pass option.

Prerequisite: READ 096 F with a grade of "C" or "Pass" or recommended score on the reading placement test.
54 hours lecture per term. Group and individual instruction is designed to improve reading rate and flexibility for students reading at college level. Instruction will focus on purposeful, active, efficient comprehension at higher reading speeds, and vocabulary development. (CSU) (Degree Credit)

## READ 142 F College Reading: Logical Analysis 3 Units and Evaluation

Letter Grade or Pass/No Pass option.
Prerequisite: READ 096 F with a grade of " C " or "Pass" or a grade of "Pass" in placement test.
54 hours lecture and 18 arranged hours lab per term. This course offers the student the opportunity to develop critical reading skills as it relates to a critical thinking disposition. Emphasis is placed on learning the strategies necessary to analyze and evaluate the validity and logic encountered in academic readings. This course fulfills the reading requirement for graduation. (CSU) (Degree Credit) AA GE, CSU GE

## READ 165 F Advanced Vocabulary/Power <br> Reading

3 Units
Letter Grade or Pass/No Pass option.
Prerequisite: READ 096 F with a grade of "C" or better or "Pass" or recommended score on the reading placement test.
54 hours lecture per term. The course improves reading comprehension and communication skills through the acquisition of advanced vocabulary. The emphasis will be on receptive and expressive language, critical/analytical college reading, etymology, roots, affixes, denotative and connotative meanings, appropriate usage and the development of language awareness and appreciation to ensure lifelong vocabulary growth. (CSU) (Degree Credit)

## Real Estate (RE)

Business and Computer Information Systems Division Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Real Estate Courses

## RE 090 F Current Issues in Real Estate . 5 to 3 Units

$0-54$ hours lecture and 0-162 hours lab per term. This course offers timely real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. Consult the class schedule to verify specific topic area and credit for a particular semester. Course may be taken four times for credit. (Degree Credit)

## RE 101 F Principles of Real Estate

3 Units
54 hours lecture per term. This course covers the fundamentals of California real estate. The development of real estate in California and an introductory study of ownership, appraisal, law, practices, financing, land and location values, transfers, trends, regulations, and economic effects are stressed. This course fulfills the educational prerequisite for California state licensing requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 102 F Legal Aspects of Real Estate 3 Units

54 hours lecture per term. This course covers California real estate property law. Topics include acquisitions and transfers, methods and incidents of ownership, easements, fixtures, land descriptions, recording, covenants, conditions and restrictions, zoning ordinances, leases, brokers, escrow, title insurance and probate proceedings. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 201 F Real Estate Practice 3 Units

54 hours lecture per term. This course covers professional aspects of the real estate business. Topics include an overview of the real estate industry, ethics and licensing requirements; hands-on completion of contracts, forms, and disclosure documents; prospecting strategies for obtaining clients; listing properties and servicing those listings; marketing techniques; strategies for showing property; obtaining and handling offers; closing sales transactions; financing, escrow, title and taxation issues; and 1031 exchange requirements for investment property. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 202 F Real Estate Finance

3 Units
54 hours lecture per term. This course covers various financing options for California real estate transactions. Topics include government loan programs, creative financing, loan sources, types of lenders, financing investment property, foreclosures, first-time buyer programs, solving financing challenges for low-to-moderate income purchasers, the problems, policies, and risks involved in financing a variety of real estate properties. Techniques of using security devices, legal aspects of mortgages and related instruments, return of mortgage and equity capital, where and how to best obtain funds, procedures in financing real estate sales and exchanges, governmental impact, junior financing and mathematics of real estate finance are also included. This course fulfills education prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 203 F Appraisal: Residential

3 Units
54 hours lecture per term. This course is designed to interpret real estate valuation procedures, examine real estate appraisal used in establishing real estate market values, and develop the knowledge and skills necessary for application or interpretation of appraisal information. Topics include the uniform standards of professional appraisal practice, location analysis and site evaluation, the appraisal process, reproduction cost estimating, depreciation, market data and interpretation, cost, income approaches to value, and the appraisal report. NOTE: Course qualifies for continuing education for real estate licensees. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

## RE 204 F Appraisal: Income

3 Units
54 hours lecture per term. This course covers property other than the single-family residence. The income approach and capitalization techniques are emphasized. Also included is an in-depth study of the following: discounted cash flow, valuation of partial and leasehold interests, and uniform standards of professional appraisal practice, interpretation, cost and income approaches to value, and the appraisal report. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

## RE 205 F Property Management

3 Units
54 hours lecture per term. This course covers the management, maintenance, rehabilitation, purchase, and sale of income property. It is intended for property owners and those wishing to become property managers. Topics covered in the course include management of residential, commercial, and industrial properties. Discussions for these various types of properties will revolve around examinations of leases and lease negotiation, tenant relations, maintenance, modernization and decoration, rehabilitation, insurance, tax aspects, office management, public relations, and advertising. This course fulfills the educational prerequisite for California state licensing requirements and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 206 F Real Estate Economics

3 Units
54 hours lecture per term. This course covers the economic principles used to analyze the impact that national, regional, community, and neighborhood trends have on real estate values. General economic theory and applied real estate practices are linked. Students will apply these principles in order to analyze an investment on an actual multi-unit apartment building. This course fulfills the educational prerequisite for California state licensing requirement and meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 207 F Mortgage Loan Brokering in California

54 hours lecture per term. This course covers the aspects of mortgage brokering operations. Topics include understanding the history of the mortgage loan brokerage business; developing and marketing your own mortgage loan brokerage business; developing a business plan; selecting the proper loan for a prospective borrower; understanding and completing Federal Truth in Lending compliance and disclosure reports; pre-qualifying prospective borrowers; completing a loan application package; calculating an underwriting worksheet, and identifying potential "Red Flag" lending problems. NOTE: Course meets Department of Real Estate Requirements for Broker and Salesperson licenses. (CSU) (Degree Credit)

## RE 208 F Basic Appraisal Principles and Procedures

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board from the Appraisal Foundation. The emphasis of this course is on residential real estate. This course covers the basic real estate appraisal principles, basic real estate appraisal procedures, and meets the license requirements for all levels of appraisal licenses. It is required for the trainee licensee, residential license, certified residential license, and certified general license. This course qualifies with the California Department of Real Estate as a statutory/pre-license real estate course for both the salesperson and broker education requirements. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 209 F Residential Real Estate Appraisal 3.5 Units

 63 hours lecture per term. This course focuses on developing an understanding of residential real estate appraisal. Course meets the license requirements for all appraisal licenses, for broker and salesperson licenses, as well as Fullerton College certificate requirements. (CSU) (Degree Credit)
## RE 210 F Advanced Residential Appraisal <br> 3.5 Units Applications and Residential Report Writing

63 hours lecture per term. This course meets the requirements of the Appraisal Qualifications Board of the Appraisal Foundation. This course covers advanced residential applications and case studies, as well as residential report writing and case studies. This course meets the license requirements for all levels of appraisal licenses. It is required for the trainee license, residential license, certified residential license, and the certified general license. This course meets the Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 212 F Uniform Standards of Professional Appraisal Practice (USPAP)

18 hours lecture per term. This course is designed to meet the requirements of the Appraisal Qualifications Board (AQB) of the Appraisal Foundation for state licensing and certification. This course includes the national exam as required by the AQB. Completion of this course and successful completion of the three-hour national exam (the course final exam) are required by the California Office of Real Estate Appraisers (OREA) for initial trainee licensure. (CSU) (Degree Credit)

## RE 298 F Advanced Topics in Real Estate . 5 to 3 Units (Commercial Real Estate)

$0-54$ hours lecture and 0-54 hours lab per term. This course offers advanced real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. Consult the class schedule to verify specific topic area and credit for a particular semester. (CSU) (Degree Credit)

## Recreation (REC)

Physical Education Division
Office: Bldg 1200, Room 1206-714.992.7045
Dean: David Grossman

## Recreation Courses

## REC 105 F Survival Arts

1 Unit
9 hours lecture and 36 hours lab per term. This course teaches students long-term survival skills and arts used by primitive peoples to live in harmony with the environment and a new perspective of the word "primitive," meaning "first people." Students develop a new appreciation of nature, as opposed to being a visitor. Students also gain an appreciation of the values inherent to other cultures. Includes one field trip. (CSU) (Degree Credit)

## REC 107 F Wilderness Survival

1 Unit
9 hours lecture and 36 hours lab per term. This course offers instruction in the skills and attitudes necessary to survive in a variety of environments, including alpine, mountain, desert, sea and urban survival. Investigates the nature of survival experiences and the use of such experiences for challenge and personal growth. Includes one survival trip. (CSU) (Degree Credit) CSU GE

## REC 108 F Backpacking

1 Unit
9 hours lecture and 36 hours lab per term. This course covers instruction in the skills, techniques and enjoyment of backpacking. Students learn how to plan a trip to maximize personal experiences in the wilderness for both personal fulfillment and self-discovery. This course includes one backpacking trip. (CSU) (Degree Credit)

## REC 111 F Camping and Our Bodyboarding Environment

1 Unit
36 hours lab per term. This course combines bodyboard travel and environmental issues concerning our surf culture. The class will emphasize safe camping and safe bodyboarding, while incorporating units on water safety, ocean currents, bodyboarding technique, camping planning and organization, intra- and international travel, water pollution, water treatment, and beach protection and beach erosion. $\$ 100$ facility fee required. (CSU) (Degree Credit)

## Social Sciences (SOSC)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Social Sciences Courses

## SOSC 120 F Introduction to Probability and Statistics

## (C-ID SOCI 125)

Prerequisite: MATH 040 F with a grade of " $C$ " or better or math clearance.
72 hours lecture per term. This course is an introduction to probability and statistics. This course covers descriptive and inferential statistics as well as the probabilistic basis of statistical inference. Computers and calculators will be utilized. Data sets and problems will be from anthropology, economics, geography, political science, psychology and sociology. This course is open to all students who meet the prerequisite, but is required for anthropology and sociology majors. This course is strongly recommended for economics, ethnic studies, geography and political science majors. Psychology majors should seek the advice of a counselor before choosing between PSY 161 F and SOSC 120 F. Students who receive credit for SOSC 120 F may not receive credit for MATH 120 F. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

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## Sociology (SOC)

## Social Sciences Division

Office: Bldg 1400, Room 1415-714.992.7047
Dean: Kathy Bakhit
Website: http://socsci.fullcoll.edu/

## Sociology Courses

## SOC 101 F Introduction to Sociology (C-ID SOC 110)

54 hours lecture per term. This course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

SOC 101HF Honors Introduction to Sociology 3 Units (C-ID SOCI 110)
54 hours lecture per term. This Honors-enhanced course introduces concepts, theories and vocabulary associated with the field of sociology. The major sociological perspectives are explored surrounding: social control, social interaction, social differentiation, and social institutions. The processes of social change are understood in the context of collective human behavior. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## SOC 102 F Social Problems

## 3 Units

## (C-ID SOCI 115)

54 hours lecture per term. This course includes identification and analysis of selected contemporary social problems in American society and around the world, including problems of overpopulation, environmental destruction, war, race, poverty, sex inequality, aging, drug abuse, health, crime and violence. Alternative approaches to the resolution of these problems and identification of institutions and organizations involved in the resolution of these problems are emphasized. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## SOC 198 F Sociology Internship <br> 1 Unit

54 hours internship per term. This course allows students to increase their knowledge of sociology through work with a social service agency or organization. (CSU) (UC Credit Limitation; UC review required) (Degree Credit)

## SOC 199 F Sociology Independent Study

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC review required) (Degree Credit)

## SOC 201 F Dying and Death

3 Units
54 hours lecture per term. This course includes various perspectives on death, both cross-cultural and historical. Examines beliefs, traditions, rituals and practices surrounding death in American society; health care systems (the hospital and the dying patient, hospice, etc.); death and the process of dying; bioethics - dying in the technology age; euthanasia suicide, funerals, grief and bereavement; the law and death, including living wills, organ donation, and autopsies; also life after death - old and new meanings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 225 F Sociology of Women

3 Units
54 hours lecture per term. This course is a woman-centered introduction to the study of gender in the United States. It emphasizes knowledge gained from research in the various social sciences and the discussions of issues are both theoretical and practical. Topics are issues that impact the lives of women today including women's health, sexuality, relationships, employment, and familial roles. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 225HF Honors Sociology of Women 3 Units

54 hours lecture per term. This Honors-enhanced course is a woman-centered introduction to the study of gender. This course emphasizes knowledge gained from research in the various social sciences, and the discussions of issues are both theoretical and practical. Topics are issues that impact the lives of women today, including women's health, sexuality, relationships, employment, and familial roles. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 230 F Sociology of Gender

3 Units

## (C-ID SOCI 140)

54 hours lecture per term. This course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. Examines the debates on sex and gender, and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and microanalyses of how individuals are socialized and how they practice gender. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

SOC 230HF Honors Sociology of Gender
3 Units (C-ID SOCI 140)
54 hours lecture per term. This Honors-enhanced course focuses on a sociological analysis of the social construction of masculinity and femininity, historically and cross-culturally. It examines the debates on sex and gender and analyzes the impact of economic and political changes on gender expectations and practices. This course focuses on macro-analyses of how institutions shape gender and micro-analyses of how individuals are socialized and how they practice gender. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 250 F Sociology of Aging

## 3 Units

 (formerly soc 133 F )54 hours lecture per term. This course is an introduction of the study of aging. It is a sociological review of the characteristics, strengths and problems of older persons. Exploration includes basic theories, terminology and concepts related to aging. Health, sexuality, social supports, caregiving, living arrangements, economics and end-of-life issues will also be discussed. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 275 F Marriage and Family

## 3 Units

## (C-ID SOCI 130)

54 hours lecture per term. This course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

SOC 275HF Honors Marriage and Family 3 Units (C-ID SOCI 130)
54 hours lecture per term. This Honors-enhanced course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, singlehood, courtship, marriage, domestic partnerships, communication, sexuality, parenting, conflict, domestic violence, economics, divorce, step-families, diversity in families (historically and cross-culturally) and future family trends. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE, AA GE, IGETC, MULT CULT REQ

## SOC 277 F Sociology of Religion

3 Units
54 hours lecture per term. This course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on American society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ


SOC 277HF Honors Sociology of Religion 3 Units
54 hours lecture per term. This Honors-enhanced course is an analysis of religion as a social institution. Emphasis will be placed on the influence that religion has on American society by examining the role religion plays in people's lives, and legitimates some existing social and economic arrangements. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## SOC 285 F Drugs and Society

3 Units
54 hours lecture per term. This course introduces concepts, theories and perspectives associated with the sociological analysis of drugs and alcohol. The definitions of various types of drug use, as well as drug abuse, and drug dependence will be addressed. The pharmacological perspective will also be explained, including the factors that influence drug action and the classification of psychoactive drugs and their effects. Legal drugs, such as alcohol, tobacco, and psychotherapeutic drugs will be discussed and analyzed using the sociological perspective. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 290 F Sociology of Race and Ethnicity

3 Units

## (C-ID SOCI 150)

54 hours lecture per term. This course is a sociological analysis of race, ethnicity and racism. Coursework includes an examination of cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as patterns of interaction between various racial and ethnic groups. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## SOC 292 F Introduction to Criminology <br> (C-ID SOCI 160)

3 Units
54 hours lecture per term. This course is a study of theories of crimes and criminal behavior, including an explanation of crime, its causes, and how crime is measured. Major sociological and social science theories will be explored surrounding the issues of crime and criminal behavior. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 299 F Sociology Independent Study: Advanced

54 hours independent study per term. This course is for students who wish to extend their knowledge of a particular area through individual research and study. Topics might develop out of a curiosity stimulated in a regular class. Students will then contact the supervising instructor to develop a learning contract for their particular interest so that they can learn more regarding their chosen specific topic. Students successfully completing this course will be awarded elective credit in the Social Sciences area. (CSU) (UC review required) (Degree Credit)

## Spanish (SPAN)

Humanities Division

Office: Bldg 500, Room 522-O - 714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Spanish Courses

## SPAN 101 F Elementary Spanish I

5 Units (C-ID SPAN 100)
Letter Grade or Pass/No Pass option.
90 hours lecture per term. This course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## SPAN 101HF Honors Elementary Spanish I 5 Units (C-ID SPAN 100)

90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. The course focuses on the four major skills of language learning, listening comprehension, speaking, reading and writing, and the grammar and vocabulary necessary to acquire these skills. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## SPAN 102 F Elementary Spanish II

## 5 Units

 (C-ID SPAN 110)Letter Grade or Pass/No Pass option.
Prerequisite: SPAN 101 F with a grade of " C " or better or "Pass" or SPAN 101HF with a grade of " C " or better or "Pass" or one year of high school Spanish with a grade of " C " or better.
90 hours lecture per term. This course continues to 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. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 102HF Honors Elementary Spanish II 5 Units (C-ID SPAN 110)

Prerequisite: SPAN 101 F with a grade of "C" or better or "Pass" or SPAN 101HF with a grade of "C" or better or "Pass" or one year of high school Spanish with a grade of "C" or better.
90 hours lecture per term. This Honors-enhanced course requires significant individual projects and study plans on the part of the student. This course continues to 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. Included is an introduction to customs, culture, and civilization of Spanish-speaking countries. This course is conducted primarily in Spanish and requires completion of weekly lab assignments. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 200 F Conversational Spanish (C-ID SPAN 200)

Prerequisite: SPAN 102 F with a grade of "C" or better or "Pass" or two years of high school Spanish with a grade of "C" or better.
32 hours lecture per term. This course focuses on improving listening comprehension and speaking skills in simulated real-life situations. Reading, writing and cultural components are included. This course may be taken concurrently with Spanish 203 F, 204 F, 205 F, and 206 F. Instruction will be in Spanish. (CSU) (Degree Credit)

## SPAN 201 F Spanish for the Spanish Speaker 5 Units

 (C-ID SPAN 220)Letter Grade or Pass/No Pass option.
Prerequisite: Heritage speaker proficiency in Spanish equivalent to two semesters of Spanish at a college or university or two years of high school Spanish.
90 hours lecture per term. This course is designed to improve the communicative skills in Spanish for bilingual students. Although the course addresses all four skills of language learning, listening comprehensive, speaking, reading and writing, the emphasis of the course is to improve reading and writing skills in Spanish through the study of grammar, spelling, vocabulary and composition. Selective readings of Hispanic writers will be used to enhance knowledge of literature and culture. The class is conducted primarily in Spanish. Students may not receive credit for both SPAN 101 F and SPAN 102 F and SPAN 201 F. (CSU, UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit one course.) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 203 F Intermediate Spanish III

4 Units
(C-ID SPAN 200)
Letter Grade or Pass/No Pass option.
Prerequisite: SPAN 102 F with a grade of "C" or better or "Pass" or SPAN 102HF with a grade of "C" or better or "Pass" or two years of high school Spanish with a grade of "C" or better. 72 hours lecture per term. This course includes development of listening and reading comprehension, speaking and writing Span-ish-based on cultural and literary materials. This course emphasizes oral communication and provides an expanded review of key grammatical concepts. (CSU) (UC Credit Limitation: SPAN 201 F and SPAN 203 F combined; maximum credit one course) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 204 F Intermediate Spanish IV

(C-ID SPAN 210)
Letter Grade or Pass/No Pass option.
Prerequisite: SPAN 201 F with a grade of "C" or better or "Pass" or SPAN 203 F with a grade of "C" or better or "Pass" or three years of high school Spanish with a grade of "C" or better.
72 hours lecture per term. This course continues the development of listening and reading comprehension, speaking and writing Spanish based on cultural and literary materials. This course emphasizes intermediate-advanced oral communication, provides an extended review of key grammatical concepts and vocabulary, and fosters understanding and appreciation of Spanish and Latin American culture by introducing literary readings. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 205 F Introduction to Spanish Literature

3 Units

Letter Grade or Pass/No Pass option.
Prerequisite: SPAN 204 F with a grade of " C " or better or "Pass" or four years of high school Spanish with a grade of "C" or better.
54 hours lecture per term. This survey course begins with the Middle Ages to the present covering history, culture and literary writings from Spain. The instruction is in Spanish. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 206 F Introduction to Latin American Literature

Letter Grade or Pass/No Pass option.
Prerequisite: SPAN 204 F with a grade of "C" or better or "Pass" or four years of high school Spanish with a grade of "C" or better.
54 hours lecture per term. This survey course begins with pre-Columbian literature to the present covering history, culture and literary writings from Latin American countries. The instruction is in Spanish. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## SPAN 207 F Children's Literature/Spanish <br> 3 Units Letter Grade or Pass/No Pass option.

Prerequisite: SPAN 203 F with a grade of " C " or better or "Pass".
54 hours lecture per term. This is an introductory course in Spanish children's literature. Emphasis is placed on the development of oral interpretation skills. Practical skills are given in locating appropriate literature for Spanish-speaking children and adolescents. The focus will be on Latin American and/or Spanish mythology, folklore, contemporary short stories, poetry, drama, games and songs for children. This course is recommended for the bilingual instructor. Instruction is almost entirely in Spanish (Not currently being offered -- if interested, contact Division Office.) (CSU) (UC) (Degree Credit) AA GE, CSU GE

## Speech (SPCH)

## Humanities Division

Office: Bldg 500, Room 522-O-714.992.7036
Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Speech Courses

## SPCH 100 F Public Speaking

4 Units

## (C-ID COMM 110)

72 hours lecture per term. This course is to give speakers more concentrated opportunities to communicate their ideas. Emphasis is on developing the speaker's ability to present original subject matter. This is accomplished by the preparation and presentation of four to six informative and persuasive speeches as well as various in-class assignments and exercises designed to develop speaking proficiency by skillfully using logic and reasoning. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPCH 105 F Interpersonal Communication 3 Units

 (C-ID COMM 130)54 hours lecture per term. This course explores the variables of the human symbolic interaction as they occur in day-to-day, face-to-face interaction. Topics include self-concept, perception, listening, verbal and nonverbal communication, assertive communication, and conflict resolution. Material is presented through lecture, experiential activities, and group discussion. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## SPCH 120 F Intercultural Communication (C-ID COMM 150)

54 hours lecture per term. This course explores the variables of human symbolic interaction as they occur between persons of differing cultural orientations. The course is theoretical in nature, but will also deal with applied concepts for more successful interaction with other cultures. The scope of the content will encompass the basic areas necessary to involve the student in a critical assessment of how cultures differ in both verbal and nonverbal behaviors; how needs, values, and goals are dictated by cultural influences; how interactions can be improved between cultures through a perceptual awareness of these differences. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## SPCH 124 F Small Group Communication

3 Units

## (C-ID COM 140)

54 hours lecture per term. This course is an introduction to theoretical and applied concepts in small group communication through participation, observation, analysis, and evaluation of group processes. Elements of small group behavior to be studied include leadership, roles, norms, networks, message systems, interpersonal needs, and decision making. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPCH 135 F Essentials of Argumentation

(C-ID COMM 120)
72 hours lecture per term. The purpose of the course is to help an individual develop critical thinking abilities and effective logical support for oral advocacy. The course serves as an introduction to theoretical and applied concepts of argumentation. In-class student presentations will be used to evaluate course areas of research, reasoning, organization, refutation, and issue analysis. This course fulfills the reading requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPCH 138 F Forensics

1 to 1.5 Units

## (C-ID COMM 160B)

18-27 hours lecture per term. This course trains students to participate in intercollegiate speech tournaments and public community programs. Areas to be covered include expository speaking, persuasive speaking, impromptu and extemporaneous speaking, oral interpretations, and debate. Field trips and involvement in student activities will be required. Course may be taken four times for credit. (CSU) (Degree Credit)

## Student Support Services (STSV)

Student Support Services
Office: Bldg 2000, Room 2020-04-714.992.7090
Dean: Derek Vergara

## Student Support Services Courses

## STSV 135 F Introduction to Leadership Development <br> (same as COUN 135 F)

54 hours lecture per term. This course is designed to provide emerging and existing student leaders the opportunity to explore the concept of leadership and to develop and improve their leadership skills. Students will learn the role that communication, motivation, delegation, self-assessment, planning, time management, evaluation and governance play in enabling a successful organization. Focus will include: parliamentary procedure, program development, stress reduction and time management. Students who receive credit in this course will not receive credit in COUN 135 F. (CSU) (Degree Credit)

## STSV 136 F Applied Leadership

1 Unit
(same as COUN 136 F)
18 hours lecture and 36 hours lab per term. The course is designed to give students the skills and proper knowledge to participate in student government. Students critically reflect on their goals, objectives and action plans and review their own performance along with assessing the organizational environment. (This course and COUN 136 F are equivalent courses, only 3 units maximum can be earned for any combination.) (CSU) (Degree Credit)

STSV 223 F Helping Skills in Human Services 3 Units
54 hours lecture per term. This course is an introductory course for students interested in pursuing a career in a human service area (i.e., counseling, probation work, social work, nursing, etc.). It provides students with an opportunity to develop beginning counseling and human relations skills. Students will learn basic listening/communication skills, crisis-intervention techniques, as well as a theoretical understanding of the principles used in providing services in a helping relationship. (CSU) (Degree Credit)

## STSV 299 F EOPS: Independent Study

1 Unit
18 hours lecture per term. This course is designed for students who wish to increase their knowledge of human services related topics through individual study. Outside reading with written report is required. (CSU) (UC review required) (Degree Credit)

## Technology-Related Courses (TECH)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Technology-Related Courses

## TECH 081 F Technical Mathematics I

3 Units
Prerequisite: MATH 010 F with a grade of " C " or better or math clearance.
54 hours lecture per term. This course covers the use of elementary algebra, geometry, and right triangle trigonometry in the solution of practical problems related to trade and technical areas. Emphasizes the use of electronic calculators to do the computation. (Degree Credit)

## TECH 082 F Technical Mathematics II <br> 3 Units

Prerequisite: TECH 081 F with a grade of " $C$ " or better.
54 hours lecture per term. This course covers the study of more advanced algebra, trigonometry, and elementary statistics in the solution of technical problems. This course does not transfer to CSU. (Degree Credit)

## TECH 088 F Technical Science

3 Units
54 hours lecture per term. This is a course in the fundamental principles of physics, mechanics, heat, light, and strength of materials as applied to practical shop problems. (Degree Credit)

## TECH 108 F Manufacturing Processes

3 Units
54 hours lecture per term. The objective of this course is to give an insight into and develop an appreciation of the latest manufacturing techniques, materials, and skills used in the metal processing, plastic, and powder metallurgy industries. (CSU) (Degree Credit)

## TECH 127 F Industrial Safety

1 Unit
18 hours lecture per term. This course applies to all majors in Technology and Engineering, it will include scope, history, objectives, responsibility, and organization of safety as it relates to common industrial equipment. (CSU) (Degree Credit)

## TECH 131 F Basic Electricity and Basic Electronics

18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electricity and electronics to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

## TECH 132 F Basics of Electric Motor Controls <br> Advisory: TECH 131 F.

## 2 Units

18 hours lecture and 54 hours lab per term. This course provides the student with introductory knowledge of electric motor controls and systems to prepare for further studies in entertainment technology. This course involves lecture, discussion, and project-based learning projects. This course is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

## TECH 135 F Introduction to Programmable Logic Controllers <br> Advisory: TECH 131 F.



2 Units

18 hours lecture and 54 hours lab per term. This course introduces the technical theatre student to PLC technology utilized in the entertainment industry in both theatre and theme parks. This career technical education course involves lecture, discussion, and project-based learning and is required of all Theme Park Technician Certificate students. (CSU) (Degree Credit)

TECH 136 F Computer Integrated


## 2 Units

 Manufacturing and Advanced PLCPrerequisite: TECH 135 F with a grade of "C" or better. Advisory: TECH 131 F.
18 hours lecture and 54 hours lab per term. This course explores advanced technologies in programmable logic controllers for the entertainment industry with focus on theatre show control systems and theme park ride technology. This career technical education course involves, lecture, discussion, and project based learning and is required of all theme park technician certificate students. (CSU) (Degree Credit)

TECH 137 F Electronic Instrumentation
2 Units and Networking I
Advisory: TECH 131 F.
18 hours lecture and 54 hours lab per term. This entertainment industry technology course explores process control, measurements, and data transmission. It includes hands-on project work, troubleshooting, and applied theme park and entertainment workplace situations. This course is required of all Theme Park Technician students. (CSU) (Degree Credit)

## TECH 138 F Electronic Instrumentation and Networking II

Prerequisite: TECH 137 F with a grade of "C" or better. Advisory: TECH 131 F.
18 hours lecture and 54 hours lab per term. This capstone course builds on the knowledge acquired in TECH 137 F to develop advanced competencies in electronic show control, instrumentation, networking for the entertainment industry and theme parks. This course is required of Theme Park CTE certificate students. (CSU) (Degree Credit)

## TECH 199 F Technology and Engineering: 1 to 3 Units Independent Study

Prerequisite: Introductory course in appropriate subject area. 54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC review required.) (Degree Credit)

## TECH 299 F Technology and Engineering 1 to 3 Units Independent Study

Prerequisite: Introductory course in appropriate subject area. 54-162 hours lab per term. This course is designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent lab research problems with staff supervision may be approved. Project with written report or outside reading with written report is required. (CSU) (UC review required.) (Degree Credit)

## Theatre Arts (THEA)

## Fine Arts Division

Office: Bldg 1000, Room 1021-714.992.7034
Dean: John Tebay
Website: finearts.fullcoll.edu

## Theatre Arts Courses

## THEA 072 F Introduction to Movement and 1 Unit Performance Skills for Musical Theatre

18 hours lecture and 18 hours lab per term. This course provides an introduction to the techniques and skills necessary for the creation and execution of dance for musical theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

2 Units

THEA 073 F Beginning Movement and Performance Skills for Musical Theatre
Prerequisite: THEA 072 F with a grade of " C " or better.
18 hours lecture and 18 hours lab per term. Students will learn beginning level techniques and skills for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

## THEA 074 F Intermediate Movement and Performance Skills for Musical Theatre

1 Unit
Prerequisite: THEA 073 F with a grade of "C" or better.
18 hours lecture and 18 hours lab per term. In this course, students will learn intermediate techniques and skills necessary for the creation and execution of dance for Musical Theatre. An audition or interview will be conducted for the purposes of assigning solos and group performance roles.

THEA 075 F Theatrical City Tours: New York 2 Units 18 hours lecture and 54 hours lab per term. This course features theatrical city tours to New York City and offers a study of current, classical, and musical plays at Broadway and offBroadway theaters. Students will travel from Orange County to New York City and spend a week experiencing the New York theatre scene and the "Big Apple". Approximate cost for travel, accommodations and theatre tickets is $\$ 1800$.

## THEA 076 F Theatrical City Tours: London 2 Units

18 hours lecture and 54 hours lab per term. This course features theatrical city tours to London, England and Stratford-upon-Avon and offers a study of current, classical, and musical plays. In this course, students will travel from Orange County to London, England and spend a week experiencing the London theatre scene and the English countryside. Approximate cost for travel, accommodations and theatre tickets is $\$ 2250$.

## THEA 080 F Preparation and Performance <br> . 5 Units for Theatre Competition

4.5 hours lecture and 13.5 hours lab per term. This course is designed for students who prepare, participate and compete in the Fullerton College Theatre Festival. Students enrolled in this course will participate in the bringing together of theatre students for two days of competition and instruction.

## THEA 090 F Introduction to Advanced 2 to 6 Units Topics in Theatre Technology

18-54 hours lecture and 54-162 hours lab per term. This course is designed to meet the various needs of technical theatre areas that require advanced training and provide professional growth for persons employed in Technical Theatre. This course will be offered in modules of advanced topics. (Degree Credit)

## THEA 091 F Video and Scenic Projection for the Theatre

18 hours lecture and 54 hours lab per term. This course provides an overview of the use of video and projections and their practical applications for use in the theatre. (Degree Credit)

## THEA 092 F Automated Scenery for the Theatre

18 hours lecture and 54 hours lab per term. This course provides an overview of the use of automated scenery systems and their practical applications for use in the theatre. (Degree Credit)

## THEA 093 F Rigging for the Theatre

1 Unit 54 hours lab per term. This course provides an overview of rigging systems and their practical applications for use in the theatre. (Degree Credit)

## THEA 094 F Systems Maintenance and Troubleshooting for Theatre

54 hours lab per term. This course provides an overview of the maintenance and troubleshooting for theatrical systems. (Degree Credit)

## THEA 100 F Introduction to the Theatre 3 Units (C-ID THTR 111)

54 hours lecture per term. This course is designed for those students who wish to explore more thoroughly the art of theatrical performance with special attention given to all the contributing elements. This course examines all areas of theatre production through lecture, demonstration, lab participation, small-group discussion, guest performers, and speakers. This course prepares the student for other course offerings in the theatre curriculum. Enrollment in THEA 149 F is strongly recommended. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 104 F Introduction to Theatre Appreciation

3 Units
Letter Grade or Pass/No Pass option.
36 hours lecture and 54 hours lab per term. This course is a study of the combined elements of contemporary theatre through examination of audience/performer relationships and the organization of theatrical production personnel. A study of current and classical plays, with special emphasis on dramatic analysis and cultural significance. Mandatory attendance at selected group of live theatrical productions is required. Approximate cost of theatre tickets is $\$ 150-225$. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 105 F Musical Theatre History

3 Units
54 hours lecture per term. This course explores the uniquely American art form that is Musical Theatre. From its early development in the colonial period to the present time, emphasis will be placed on the chronological examination of various musical theatre productions. Students will learn how the composers, librettists, lyricists, choreographers, directors and designers contributed to the formation and the popularity of musical theatre, as it exists today. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 106 F Beginning Principles of Playwriting

54 hours lecture per term. This class introduces students to the elements of writing a play for the stage. Topics include dramatic structure, dramatic action, the relationship between dialogue and action, characterization, setting, theme, and point of view. Students will be assigned writing exercises culminating in a one-act play. Students will be expected to act in and direct other students' scenes. (CSU) (Degree Credit) AA GE

## THEA 108 F Multicultural Perspectives in American Theatre

54 hours lecture per term. This course provides students with an appreciation for the historical contributions of Native Americans, Chicanos/Latinos, African-Americans, Asian-Americans and gays and lesbians to American theatre. In this introductory class, students read and discuss contemporary plays that represent the rich variety of American multi-ethnic and multi-cultural society. This course will explore traditional and cultural backgrounds from which theatre springs, the genre or movement to which a particular play belongs, and the cultural, sociological and political climate in which these plays were created. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) MULT CULT REQ

## THEA 109 F Modern Dramatic Literature 3 Units (C-ID THTR 114)

54 hours lecture per term. This course involves the analysis and research of contemporary dramatic literature. Through the examination of dramaturgical structure, thematic presentation, character development and production design requirements, students will explore how analysis and research can aid in the transforming of a script into a theatrical experience. This course includes play readings, lectures, discussions and student reports. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## THEA 121 F Movement for Actors

3 Units
36 hours lecture and 54 hours lab per term. This course explores movement as an actor's tool to aid in the acting process and to enhance the actor's physical ability to communicate on stage through the use of basic movement skills, focusing on physical awareness, movement improvisation and stage combat and concentrating on the structure, organization and control of time, space, energy and sound. Emphasis on the integration of verbal and non-verbal forms of communication. Focus on period movement and gesture as means to inform and illuminate text. The goal is to achieve the fullest range and clarity of physical and emotional expression of the body as it moves in relation to the surrounding space. (CSU) (UC) (Degree Credit)

## THEA 122 F Improvisation for Television, Film and Theatre

36 hours lecture and 54 hours lab per term. This course involves the principles and techniques of improvisational acting designed to increase the actor's creativity, problem solving, and performance skills. This course also develops student awareness of the importance of the cooperative dynamics of theatre, television and film and the value of the individual actor's creative process as well as emphasizing the individual performance, ensemble work and the development of the actor's physical, vocal, and emotional instrument as it relates to performance. (CSU) (Degree Credit)

## THEA 123 F Acting Techniques

3 Units
36 hours lecture and 72 hours lab per term. This course involves the study of contemporary acting techniques based on the Stanislavsky system of acting and is designed as an introductory course for students interested in acting. (CSU) (UC) (Degree Credit)

## THEA 127 F Oral Interpretation

3 Units

## (C-ID COMM 120)

54 hours lecture per term. This course explores the fundamentals of effective oral presentation before an audience. It includes voice study and diction for the purposes of developing effective reading and correct habits of speech and it develops an appreciation of literature through a literary genre-based approach to oral expression and dramatic analysis. This course is recommended for students interested in teaching, broadcasting, public speaking, and voiceover work. (CSU) (UC Credit Limitation - THEA 127 F and THEA 126 F [both semesters combined - maximum credit 6 units]) (Degree Credit) AA GE, CSU GE

## THEA 129 F Voice for the Actor

3 Units
54 hours lecture per term. This course includes the academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the unique demands of acting for the stage. Along with an introduction to the International Phonetic Alphabet, emphasis in physical relaxation, breathing techniques, vocal expression, and articulation of general American speech will be covered with attention placed on the individual needs of each student. Focus will be placed on exercises designed to identify and correct breathing problems, diction problems, and to create conscious control of speech function. The theories and principles of the course will be applied in written assignments, oral performances before the class, and through vocal exercises done in class and at home. (CSU) (UC) (Degree Credit)

## THEA 130 F Acting Workshop

3 Units
(C-ID THEA 191)
Advisory: An audition or interview will be conducted for the purpose of assigning performance roles and technical positions. 54 hours lecture and 108 hours lab per term. This course is a continuation of acting fundamentals with increased emphasis on the application of the principles and theories of creating acting. Additional performance and technical support work in production areas is required. (CSU) (UC) (Degree Credit)

THEA 131 F Theatre Workshop
1 to 3 Units
Advisory: An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.
54-162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course provides the lab exploration of student and faculty directing, acting, design, promotion, and technical support work for a live theatrical production. (CSU) (Degree Credit)

## THEA 134 F Beginning Theatre Practicum 1 to 2 Units (formerly THEA 133 F)

54-108 hours lab per term. This course provides the study and lab exploration of all aspects of theater production, culminating in a series of public performances in the large proscenium theater. Additional hours may be required for technical, dress rehearsals, and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

## THEA 135 F Resident Theatre Company . 5 to 3 Units

 27-162 hours lab per term. This course involves the study and practical development of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)
## THEA 136 F Touring Theatre Productions: 3 Units Rehearsal and Performance

Advisory: An audition or interview will be conducted for the purpose of assigning performance roles and technical positions.
162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course presents the rigorous requirements of a touring theatrical production. Students are given the opportunity to participate in one or more activities of the production company including acting, directing, stage managing, design, costuming, lighting, scenery, sound, properties and make up. The company will travel locally, nationally, and internationally depending on the year and circumstances. (CSU) (Degree Credit)

## THEA 137 F Introduction to Summer Theatre 3 Units Workshop

162 hours lab per term. This course involves the introduction to the study and lab exploration of all aspects of theatre production culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purpose of assigning performance roles and technical positions. This course is only offered during summer intersession. (CSU) (UC) (Degree Credit)

THEA 141 F Introduction to Technical Theatre 4 Units 54 hours lecture and 54 hours lab per term. This course involves the study and execution of technical theatre principles. Through project-based learning, students will learn the theatrical design and technical practices that apply to scenery, lighting, sound, costumes, make up, properties and scene painting. (CSU) (UC) (Degree Credit)

## THEA 143 F Stagecraft (C-ID THTR 171)

54 hours lecture and 54 hours lab per term. This course involves the study and execution of theatrical scenery with emphasis on construction, drafting, tools, materials, and their relationship to the design process. Students enrolling in this course will be given hands on practical experience in all the practical aspects of designing scenery for the theater. (CSU) (UC) (Degree Credit)

## THEA 146 F Scene Painting

3 Units
Concurrent Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course provides an introduction to, and continued development of, professional scenic artist techniques as they apply to the painting of scenery for the performing arts. This course will include use of brush, roller, spray gun, texturing, rock background, wood graining, wallpaper, masonry, scenic drops and other scene painting techniques. (CSU) (UC) (Degree Credit)

## THEA 148 F Introduction to Theatre Crafts Lab <br> (formerly THEA 142 F )

54-108 hours lab per term. This course is an introduction to the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop introductory level skills in technical theater. (CSU) (UC) (Degree Credit)

## THEA 151 F Properties: Design and Construction

Eonetrrent Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F , with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course introduces the student to the processes and skill-sets that are used on a daily basis in the world of stage properties. This course involves the study and execution of property construction, research methods, upholstery, molding and casting, as well as the creation of stage food, animals and stage weaponry. This course is also intended to orient students to the aspects of properties as they relate to a properties master and a properties artisan. (CSU) (Degree Credit)

## THEA 152 F Beginning Theatre Crafts Lab 1 to 2 Units

 Prerequisite: THEA 148 F with a grade of "C" or better. $54-108$ hours lab per term. This course covers beginning construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop beginning level skills in technical theater. (CSU) (UC) (Degree Credit)
## THEA 153 F Introduction to Stage Crew Activity

## (formerly THEA 149 F)

Open Entry/Open Exit.
27-162 hours lab per term. This course is an introduction to the practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. (CSU) (UC) (Degree Credit)

## THEA 155 F Beginning Summer Theatre Workshop

Prerequisite: THEA 137 F with a grade of "C" or better.
162 hours lab per term. This course involves the beginning study and lab exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit).

## THEA 156 F Intermediate Summer Theatre Workshop

Prerequisite: THEA 155 F with a grade of "C" or better.
162 hours lab per term. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. This course involves the intermediate study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

## THEA 157 F Advanced Summer Theatre 3 Units Workshop

Prerequisite: THEA 156 F with a grade of "C" or better.
162 hours lab per term. This course involves the advanced study and laboratory exploration of all aspects of theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. This course is only offered during the summer session. (CSU) (UC) (Degree Credit)

## THEA 159 F Beginning Stage Crew Activity

Prerequisite: THEA 153 F with a grade of " C " or better.
27-162 hours lab per term. This course involves the beginning practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. (CSU) (UC) (Degree Credit)


#### Abstract

THEA 160 F Introduction to Sound 3 Units Technology Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F , with a grade of "C" or better. 36 hours lecture and 54 hours lab per term. This course introduces the student to sound technology for the theatre with emphasis placed on the physical properties of sound and the audio equipment used to bring sound to the stage and the concert hall. (CSU) (Degree Credit) AA GE


THEA 161 F Sound Reinforcement Techniques 2 Units Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course is designed to give the student understanding and working knowledge of both the science of sound reinforcement and the practical application of audio equipment for theatrical events, concerts and other public events. (CSU) (Degree Credit) AA GE

## THEA 162 F Sound Design for the Theatre 2 Units

Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. This course develops the students' understanding and working knowledge of sound design principles and practices for the theatre. Project based learning provides the student with an introduction to audio equipment and an understanding of the craft and process of sound design. (CSU) (Degree Credit) AA GE

## THEA 170 F Beginning Theatrical Lighting 3 Units (formerly THEA 144 F)

Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course involves the beginning study and execution of stage lighting with emphasis on equipment, control, color and their relationship to lighting design for the theatre. (CSU) (UC) (Degree Credit)

## THEA 171 F Beginning Theatrical Costuming 3 Units and Design <br> (formerly THEA 145 F)

Concurrent Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course is an introduction to basic theatrical costuming. This course is designed to teach the student about costume design, costume history, costume construction, mask making, fabric modification and the working of a wardrobe crew as it applies to the entertainment industry. This course will culminate in a final project that reflects the student's creativity. (CSU) (UC) (Degree Credit)

THEA 172 F Stage Makeup
3 Units
(formerly THEA 147AF)
Concurrent Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course includes instruction and lab experience in all phases of theatrical makeup. Old age, character, fantasy, look-alike, stylized, historical period styles, facial hair, corrective as well as non-human styles of makeup and their color and application theory are covered in detail. (CSU) (UC) (Degree Credit)

## THEA 176 F Beginning Playwright's Practicum

Prerequisite: THEA 135 F with a grade of "C" or better. 27-162 hours lab per term. This course involves the study and practical development on a beginning level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview is required for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

## THEA 177 F Beginning Director's Practicum

.5 to 3 Units

27-162 hours lab per term. This course is the beginning study of the laboratory exploration of student or faculty directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning roles and technical positions. (CSU) (Degree Credit)

## THEA 178 F Beginning Musical Theatre Production

27-162 lab hours per term. This course involves the beginning study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours for technical rehearsals, dress rehearsals and performances may be required. (CSU) (Degree Credit)

## THEA 180 F Beginning Principles of Acting

3 Units

## (C-ID THTR 151)

(formerly THEA 120AF)
Coneurrent Corequisite: THEA 153 F or THEA 159 F or THEA 249 F or THEA 250 F, with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is for the beginning "Broadway hopefuls", offering an examination of the theatre elements that relate directly to performing onstage, including rehearsal and performance techniques, stage movement, vocal techniques, stage terminology and script analysis. (CSU) (UC) (Degree Credit)

## THEA 181 F Intermediate Principles of Acting 3 Units (C-ID THTR 152) <br> (formerly THEA 120BF)

Prerequisite: THEA 180 F with a grade of " C " or better.
Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course involves the intermediate level of study in the principles of contemporary acting techniques. Students will evaluate and execute the acting theories of the Stanislavsky system of acting, as assessed by the 20th century American acting leaders, Uta Hagen, Stella Adler, Robert Benedetti, Lee Strasberg and Boleslavsky. (CSU) (UC) (Degree Credit)

## THEA 182 F Advanced Principles of Acting I 3 Units (formerly THEA 120CF)

Prerequisite: THEA 181 F with a grade of "C" or better.
Concurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA $172 F$ or THEA $246 F$ or THEA $252 F$ or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F.
36 hours lecture and 72 hours lab per term. This course is a continuation of Intermediate Principles of Acting with emphasis on the applications of stylistic techniques for the classics. Individual exercises and scene work in Greek/Roman, Liturgical Drama, Elizabethan, Restoration, Farce, Comedia through the exploration of the modern era Chekov, Ibsen, Strindberg and Shaw. (CSU) (UC) (Degree Credit)

## THEA 183 F Advanced Principles of Acting II 3 Units (formerly THEA 120DF)

Prerequisite: THEA 181 F with a grade of " C " or better. Coneurrent Corequisite: THEA 141 F or THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA $244 F$ or THEA 246 F or THEA 251 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 or THEA 265 F or THEA 266 F.
36 hours lecture and 72 hours lab per term. This course features in-depth study and practice of acting skills with increased emphasis on the application of the principles and theory of creative acting. Public performance of dramatic literature is required. (CSU) (UC) (Degree Credit)

## THEA 184 F Beginning Musical Theatre I (formerly THEA 125 F and THEA 186 F )

36 hours lecture and 72 hours lab per term. This course explores the development of the beginning fundamentals of acting, singing and movement for musical theatre through exercises, auditions, solo and group performances. An audition or interview is required for the purposes of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

THEA 185 F Beginning Musical Theatre II (formerly THEA 138 F and THEA 187 F)
Prerequisite: THEA 184 F with a grade of " C " or better. 36 hours lecture and 72 hours lab per term. This course further develops and explores beginning musical theatre skills. Students will utilize exercise, audition and choreography techniques as well as solo and group performances in order to become more proficient as musical theatre artists. An audition or interview is required for the purposes assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

THEA 196HF Honors Creative Arts - Theatre 3 Units 54 hours lecture and 18 hours lab per term. This course explores the nature of creativity through exposure to the performing arts, dance, literature and the fine arts. Honors students will make independent investigation into the various art forms and apply aesthetic theory to discover interrelationships between genres. Students are required to attend museums, concerts, theatrical and dance performances. Students who receive credit in this course may not receive credit in MUS 196HF or ART 196HF. (CSU) (UC Credit limitation) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 222 F Acting for the Camera

3 Units 36 hours lecture and 72 hours lab per term. This course encompasses the study and exercise in the special techniques of acting for the motion picture and television cameras. Emphasis will be placed on the audition process for commercials and TV/film technique along with the understanding of the various camera angles, shots, positions and actor behaviors unique to acting before a camera. (CSU) (UC) (Degree Credit)

## THEA 225 F Stage Directing <br> 3 Units

Prerequisite: THEA 180 F with a grade of "C" or better.
Concurrent Corequisite: THEA 143 F or THEA 146 F or THEA 148 F or THEA 151 F or THEA 152 F or THEA 160 F or THEA 161 F or THEA 162 F or THEA 170 F or THEA 171 F or THEA 172 F or THEA 244 F or THEA 246 F or THEA 252 F or THEA 253 F or THEA 256 F or THEA 257 F or THEA 258 F or THEA 259 F or THEA 265 F or THEA 266 F.
36 hours lecture and 54 hours lab per term. This class is a study of the background and techniques of the director in theatre, with an emphasis on practical experience in directing through class projects. (CSU) (UC) (Degree Credit)

## THEA 233 F Intermediate Theatre Practicum

Prerequisite: THEA 134 F with a grade of " C " or better.
54-108 hours lab per term. This course provides the intermediate study and laboratory exploration of all aspects of theater production, culminating in a series of public performances in the large proscenium theater. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals, and performances. (CSU) (Degree Credit)

## THEA 235 F Experimental Theatre

Prerequisite: THEA 177 F with a grade of " $C$ " or better. 108 hours lab per term. This course involves the study and laboratory exploration of student or faculty directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

## THEA 244 F Intermediate Theatrical Lighting 3 Units

 Prerequisite: THEA 170 F with a grade of "C" or better. 36 hours lecture and 54 hours lab per term. This course involves the further study and execution of stage lighting with in-depth emphasis on equipment, control, color and their relationships to lighting design for the theatre. (CSU) (UC) (Degree Credit)
## THEA 246 F Intermediate Theatrical Costuming

Prerequisite: THEA 171 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course develops intermediate skills in theatrical costuming including costume design for multiple venues and styles, historical research methods, costume construction, fabric identification and fabric modifications as it applies to the entertainment industry. (CSU) (UC) (Degree Credit)

## THEA 249 F Intermediate Stage Crew . 5 to 3 Units Activity <br> Prerequisite: THEA 159 F with a grade of " C " or better.

 27-162 hours lab per term. This course covers intermediate practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. (CSU) (UC) (Degree Credit)
## THEA 250 F Advanced Stage Crew Activity

Prerequisite: THEA 249 F with a grade of " C " or better. 27-162 hours lab per term. This course covers advanced practical applications of the technical aspects of theatre including the mounting and running of productions. Students may select from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, stage management, audience development as well as working as a running crew member for a production. (CSU) (UC) (Degree Credit)

THEA 252 F Intermediate Theatre Crafts Lab
Prerequisite: THEA 152 F with a grade of " C " or better.
54-108 hours lab per term. This course is an intermediate experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop intermediate skills in technical theater. (CSU) (UC) (Degree Credit)

THEA 253 F Advanced Theatre Crafts Lab 1 to 2 Units Prerequisite: THEA 252 F with a grade of "C" or better.
54-108 hours lab per term. This course provides advanced students experience in the construction and implementation of scenery, scenic painting, lighting, sound, costumes and properties for theatrical productions. Students are given practical experience in each area of production and the opportunities to develop advanced skills in technical theater. (CSU) (UC) (Degree Credit)

## THEA 256 F 16-18th Century Theatrical <br> 3 Units Costume Construction

Prerequisite: THEA 171 F with a grade of "C" or better.
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 16th through 18th centuries and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)

## THEA 257 F 19th Century Theatrical Costume 3 Units Construction

Prerequisite: THEA 171 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the nineteenth century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)

## THEA 258 F 20th Century Theatrical Costume 3 Units Construction

Prerequisite: THEA 171 F with a grade of "C" or better. 36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to the 20th century and their application to present day costume construction and design. (CSU) (UC) (Degree Credit)

## THEA 259 F Pre-16th Century Theatrical 3 Units Costume Construction <br> (formerly THEA 255 F)

Prerequisite: THEA 171 F with a grade of " C " or better.
36 hours lecture and 54 hours lab per term. This course offers continued research and application of costume construction techniques and design elements unique to historical periods before the 16th century and their application to present-day costume construction and design. (CSU) (UC) (Degree Credit)

## THEA 265 F Theatre Management

36 hours lecture per term. This course is designed to teach the business of show business in educational, community, and professional theater. Emphasis is placed on the contributions of the producer, production manager, and artistic director and the impact they have on theatre operations. This course is required of all students who are interested in management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)

## THEA 266 F Stage Management

3 Units
54 hours lecture per term. 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 post-production. This course is required of all students who are interested in stage management positions for the Theatre Arts Department productions. (CSU) (Degree Credit)

## THEA 276 F Intermediate Playwright's . 5 to 3 Units Practicum

Prerequisite: THEA 176 F with a grade of "C" or better.
27-162 hours lab per term. This course involves the study and practical development on an intermediate level, of new and experimental plays. Students enrolling in this course will serve as playwrights, dramaturges, actors, directors, technicians and production assistants. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. Additional hours may be required for technical, dress rehearsals and performances. (CSU) (Degree Credit)

## THEA 277 F Intermediate Director's <br> Practicum

. 5 to 3 Units
Prerequisite: THEA 235 F with a grade of "C" or better.
27-162 hours lab per term. This course is an intermediate study of the laboratory exploration of student or faculty directed one-act productions culminating in a series of public performances. Additional hours may be required for technical, dress rehearsals and performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

## THEA 278 F Intermediate Musical . 5 to 3 Units Theatre Production

Prerequisite: THEA 178 F with a grade of " C " or better. 27-162 lab hours per term. Additional hours for technical rehearsals, dress rehearsals and performances may be required. This course involves the intermediate study and exploration of all aspects of musical theatre production, culminating in a series of public performances. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (Degree Credit)

THEA 284 F Intermediate Musical Theatre I 3 Units (formerly THEA 226 F and THEA 286 F)
Prerequisite: THEA 185 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is designed for the intermediate level student. This course explores the further development of acting, singing and choreography for the musical theatre stage. An audition or interview will be conducted for the purposes of assigning performance roles and technical positions. (CSU) (UC) (Degree Credit)

## THEA 285 F Intermediate Musical Theatre II (formerly THEA 238 F and THEA 287 F)

Prerequisite: THEA 284 F with a grade of "C" or better.
36 hours lecture and 72 hours lab per term. This course is an in-depth study and further exploration of intermediate musical theatre skills. Students will continue to develop skills utilizing exercise, audition and choreography techniques as well as solo and group performances in order to improve as musical theatre artists. An audition or interview will be conducted for the purpose of assigning solos and group performance roles. (CSU) (UC) (Degree Credit)

## THEA 290 F Theatrical Production Techniques

1 to 3 Units
Prerequisite: THEA 130 F or THEA 131 F or THEA 143 F or THEA 146 F or THEA 151 F or THEA 157 F or THEA 162 F or THEA $172 F$ or THEA $233 F$ or THEA $244 F$ or THEA $246 F$ or THEA 250 F or THEA $253 F$ or THEA $276 F$ or THEA $277 F$ or THEA 278 F with a grade of " $C$ " or better.
Advisory: Auditions or interviews will be conducted for the purposes of assigning performance roles and technical positions. 54-162 hours lab per term. This course involves the practical application of theatrical production techniques through the assignment of performance, technical theater, design, director or management positions. (CSU) (Degree Credit)

## THEA 298 F Theatre Arts Internship

## 1 to 3 Units

Advisory: Completion of 10-12 units, with a "C" or better, of any of the theatre courses listed in the technical theatre certificates.
54-162 hours lab per term. This course is designed to enable the Theatre Arts student to understand and demonstrate competence in a professional theatrical work environment through the combination of the application of extended classroom learning and the interaction of a professional theatrical supervisor. It is each student's responsibility to obtain their own internship opportunity. (CSU) (Degree Credit)

## THEA 299 F Theatre Arts Independent Study

$54-162$ hours lab per term. This course is designed for selfdirected students who wish to increase their knowledge and experience in theatre. The instructor and student create a learning contract and schedule of weekly conferences and projected completion dates. (CSU) (Degree Credit)

## Welding (WELD)

## Technology and Engineering Division

Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Welding Courses

## WELD 091AF Industrial Welding 5 Units Fundamentals

54 hours lecture and 108 hours lab per term. This course is designed to give students, with interest in welding as an occupation, a broad outlook in a high technology field that interfaces with areas of manufacturing, construction and repair. The course will include historical development of welding, the welding industry and its future, applied terms and definitions, methods of application, safety in the welding environment, welding positions, and joint types. Students will become occupationally proficient using Oxyfuel Welding (OFW), Brazing (TB), Oxyfuel Cutting (OFC), Air Carbon Arc Cutting (CAC-A), and Plasma Cutting (PAC). (Degree Credit)

## WELD 091BF Semi-Automatic Welding Applications

5 Units
Prerequisite: WELD 091AF or WELD 121AF and WELD 121BF, with a grade of "C" or better.
54 hours lecture and 108 hours lab per term. This course will cover, with in-depth study, the make-up of constant voltage power sources and semi-automatic wire feed systems. Various methods of metal transfer will be covered, such as spray, globular, short-circuiting, and pulsed spray. Applications will be applied to ferrous and non-ferrous metals of various thicknesses in all axes. Students will become occupationally proficient using Gas Metal Arc Welding (GMAW) on limited and unlimited thicknesses in all axis on plate, Flux Cored Arc Welding (FCAW) on intermediate and unlimited thicknesses in all axis on plate. (Degree Credit)

## WELD 091CF Manual Arc Welding <br> 5 Units Fundamentals

Prerequisite: WELD 091BF with a grade of " C " or better.
54 hours lecture and 108 hours lab per term. The areas covered in this course are the make-up and use of constant current power supplies as found in Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) with alternating current, direct current and pulsed current output variations. Elements of welding design, cost estimations, process selection and related welding symbols also will be covered. Students will gain entry level skills on Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) using ferrous and non-ferrous metals. (Degree Credit)

WELD 091DF Structural Welding Certification 5 Units Prerequisite: WELD 091CF with a grade of "C" or better.
54 hours lecture and 108 hours lab per term. This course covers the origination and applications of welding codes, welding procedure qualification, welder qualification tests, weldment evaluation and quality control, visual inspection and preparation for Los Angeles City welding examination. Students will take written and lab tests to qualify as licensed certified welders in compliance with the American Welding Society (AWS) and the Los Angeles Building Code, using Shielded Metal Arc Welding (SMAW) and Flux Core Arc Welding (FCAW) on light gage and heavy gage structural steel. (Degree Credit)

## WELD 095 F Welding Skills Lab

. 5 to 2 Units
Open Entry/Open Exit.
Advisory: Enrollment in any Fullerton College welding course. 27-108 hours lab per term. This course offers students the opportunity to further develop their welding skills. One-half unit of credit will be given for each twenty-four hours of class participation. Open entry, variable units. (Degree Credit)

## WELD 096 F Welding Inspection Technology 5 Units

90 hours lecture per term. This course will aid in preparation for the American Welding Society's AWS Certified Welding Inspector's CWI exam. Fundamentals of visual welding inspection per nationally-recognized code applications will be covered. Preparation and qualification of welding procedures and welder qualifications will be discussed. Building code compliance for welding applications will be assessed. Through the usage of weld gauge measurement tools and destructive and nondestructive testing equipment, the student will gain hands-on experience in welding inspection standards. This class is strongly recommended for those entering the fields of quality assurance, inspection, supervision and engineering of welded products. (Degree Credit)

WELD 098 F Welding Fabrication Technology 2 Units Prerequisite: WELD 091AF with a grade of " $C$ " or better.
18 hours lecture and 54 hours lab per term. This course will provide the student with a general understanding of the fundamental methods of welding fabrication used in industry. Fabrication case studies and philosophies will be examined and the net outcome discussed. Students will become familiar with standard mill shapes and materials, jigs and fixtures, methods of layout and fitting, preparation and qualification of welding procedures, cost analysis, and cutting and fastening techniques. This class is strongly recommended for those entering the fields of metal fabrication, quality assurance, inspection, supervision, and engineering of welded products. (Degree Credit)

## WELD 121AF Introduction to Welding

## 2 Units

18 hours lecture and 54 hours lab per term. This course emphasizes welding fundamentals and safety used in modern industry. Students in non-welding vocational and transfer areas will be able to gain welding skills needed as a support craft. Process identification, terms and definitions, safety guidelines, and practical applications are included. Students will gain entry level skills with Oxyacetylene Welding (OAW), Shielded Metal Arc Welding (SMAW), and Oxyacetylene Cutting (OFC). (CSU) (Degree Credit)

## WELD 121BF Fundamentals of Inert Gas Welding <br> Prerequisite: WELD 121AF with a grade of " $C^{\prime}$ or better. 18 hours lecture and 54 hours lab per term. This course enables students, who expect welding to be an integral part of their vocation, to master necessary manipulative skills in order to obtain job proficiency. Introduction to Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW) and Plasma Arc Cutting (PAC) are covered. Students will gain entry level skills on ferrous and non-ferrous metals using gas metal arc and gas tungsten arc welding. (CSU) (Degree Credit)

## Wellness (WELL)

## Physical Education Division

Office: Bldg 1200, Room 1206-714.992.7045
Dean: David Grossman

## Wellness Courses

## WELL 020 F Fitness Assessment . 5 Units

9 hours lecture and 18 hours lab per term. This course is designed to assess the physical fitness level of students. Measurements of body composition, cardiac profile, blood pressure, muscular endurance, muscular strength, flexibility and cardiorespiratory endurance will be included in the class. After testing, based on test results, students will be counseled and exercise recommendations will be given. A lab fee will be charged. (Degree Credit)

## WELL 040 F Training Principles for Fitness 1 Unit Assessment

18 hours lecture and 18 hours lab per term. This course is designed to train students to perform and interpret fitness tests based on the major components of physical fitness. (Degree Credit)

## WELL 110 F Pathology: The Massage 3 Units Connection

54 hours lecture per term. This course is designed to meet the specific needs of massage therapy students and professionals interested in pathology. This course includes topics such as pain, inflammation and healing, and pathology associated with each of the systems. This class is part of the Physical Education's Therapeutic and Sports Massage: Massage Therapist Program. (CSU) (Degree Credit)

## WELL 119 F Applied Biomechanics

2 Units
36 hours lecture per term. This interactive and informative course takes an in-depth look at the kinesiology and functional actions of the torso, legs, and upper body musculature as it applies to exercise. Students will learn the proper postural stabilization techniques, selective recruitment patterns and progressive resistance that influences overall body alignment along with practical implications of bones, joints, muscles, nerves, and muscle actions in developing structurally sound exercise programs. (CSU) (Degree Credit)

## WELL 200 F Applied Exercise Physiology 2 Units

36 hours lecture per term. This course examines how the body functions under conditions of exercise stress. Students will study the practical implications of muscle function, cardiorespiratory function, training techniques, and the environment on exercise. (CSU) (UC) (Degree Credit) CSU GE

WELL 220 F Exercise and Aging 2 Units 36 hours lecture per term. Three field trips are required. This course examines the scientific evidence concerning the relationship between physical activity level and physical, mental, and social-psychological well-being during aging, changes related to inactive lifestyles (functional mobility and health declines), and the positive effects on an active lifestyle on successful aging and prevention of disease and disability. (CSU) (Degree Credit) CSU GE

## WELL 221 F Personal Training Internship

2 Units
Prerequisite: Completion of all courses in the Personal Trainer Certificate. ANAT 231 F, NUTR 210 F, PE 154 F, PE 235 F, WELL 040 F, WELL 119 F, and WELL 200 F with a grade of "C" or better.
36 hours lecture, 36 hours lab per term. This course is designed to provide our Personal Training certificate students an opportunity to train clients (current FC students) under the supervision of our Physical Education faculty. The trainer gains practical hands-on experience working with clients. Course may be taken one time for credit. (CSU) (PE 199 F UC review required.) (Degree Credit)

WELL 230 F The Body-Mind Connection 3 Units 54 hours lecture per term. In this course, body-mind health refers to the integration of the mind (our thoughts, attitudes and emotions) and the body, and to their impact on our overall health and well-being. Body-mind health encompasses all aspects of out lives; physical, mental, emotional, and spiritual. (CSU) (Degree Credit) AA GE, CSU GE

## WELL 232 F Basic Introduction to Massage 4 Units

72 hours lecture per term. This course is the foundation for the entire Therapeutic and Sports Massage Program. It gives the students theoretical, practical and professional experience in massage therapy. The student will master a solid core of skills, body mechanics, client assessment and centering skills. The students will learn to give and receive a full body relaxation massage. (CSU) (Degree Credit)

## WELL 233 F Intermediate Massage

3 Units
54 hours lecture per term. This course focuses on massage applications with therapeutic and rehabilitative techniques. Students will learn therapeutic techniques that can maximize the efficiency of their work. Applications introduced include deep tissue, postural realignment, cranio-sacral motion and aromatherapy. Special attention is given to palpatory skills. (CSU) (Degree Credit)

## WELL 234 F Advanced Massage

3 Units
Advisory: WELL 240 F.
54 hours lecture per term. This hands-on course explores a variety of techniques appropriate to the spa setting. This course is designed to enhance the skills of massage students who have already completed the basic and intermediate massage courses. Methods and procedures of advanced soft tissue techniques and related topics; an integration of techniques practiced in intermediate massage. (CSU) (Degree Credit)

## WELL 236 F Sports Massage 3 Units

54 hours lecture per term. This course will offer the basic principles of sports massage. The class will give the student working knowledge of athletes needs and emphasizes preventive and post-event massage. (CSU) (Degree Credit)

## WELL 240 F Massage and Bodywork Skills Lab 2 Units (formerly WELL 238 F)

Prerequisite: WELL 232 F with a grade of " C " or better and WELL 236 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course offers students the practical experience of giving a professional massage. This lab experience develops student confidence and professional massage skills while working with the public under supervision of instructor. Student will massage each other and paying clients in a supervised setting. (CSU) (Degree Credit)

## WELL 242 F Stress Management and Relaxation Training

27 hours lecture per term and 27 hours lab per term. In this course, the physiology of the stress response as well as specific physical changes, which indicate the onset of stress, will be covered. There will be discussion of the nature of various stressors, stress induced emotions as well as the role of thought process in the development and prevention of stress. Emphasis will be placed on the difference between "disputing" and "distracting" in managing stresses including the techniques used for each. Emphasis will also be placed on the analysis of stressful events and the application of the appropriate techniques. The place of diet and exercise will be covered as well as specific problem areas related to fitness such as back and neck care. Activity periods will cover flexibility and relaxation training, with instruction in the various relaxation techniques such as breathing, progressive relaxation, deep relaxation, Autogenesis and visualization. (CSU) (Degree Credit)

## WELL 250 F Clinical Massage and Bodywork (formerly WELL 238 F)

Prerequisite: WELL 233 F with a grade of " C " or better or WELL 234 F with a grade of " C " or better.
18 hours lecture and 54 hours lab per term. This course offers students the practice experience of giving a professional massage that includes myofascial release, craniosacral therapy, acupressure and reflexology. This course develops the ability to these modalities to address the specific needs of the client. (CSU) (Degree Credit)

## WELL 265 F Kinesiology

3 Units
54 hours lecture per term. This course covers the musculoskeletal system and its function in human movement as well as movement in sports skills and activities of daily living and the muscles involved. This class will approach the human body primarily from a functional perspective. There will be emphasis on the relationship between the muscles and the bone as they relate to human movement. (CSU) (Degree Credit)

## WELL 270 F Sports Internship <br> 2 Units (formerly WELL 239 F)

Prerequisite: WELL 240 F with a grade of "C" or better or WELL 250 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course, students will apply their knowledge and skills working directly with the public in supervised settings with several different populations. Students will perform field work under supervision in various settings such as community agencies, with athletic teams, spas, chiropractors or health care facilities. (CSU) (Degree Credit)

## WELL 290 F Adaptive Therapeutic Massage and Bodywork <br> (formerly WELL 239 F)

Prerequisite: WELL 250 F with a grade of " C " or better or WELL 270 F with a grade of "C" or better.
18 hours lecture and 54 hours lab per term. In this course, students will apply their knowledge and skills working directly with the public in supervised settings. Students perform field work under supervision in various settings; at community agencies, with athletic teams, spas, chiropractor, health care facilities and approved AMTA events. Students are required to complete 2 units for the Therapeutic Sports and Massage Certificate, Level I. (CSU) (Degree Credit)

# Women's Studies (WMNS) 

Social Sciences Division<br>Office: Bldg 1400, Room 1415-714.992.7047<br>Dean: Kathy Bakhit<br>Website: http://socsci.fullcoll.edu/

## Women's Studies Courses

## WMNS 100 F Introduction to Women's Studies

54 hours lecture per term. This course is an interdisciplinary introduction to feminist topics. Designed to provide a foundation for Women's Studies with an examination of gender socialization, feminist theory, and feminist themes in literature, philosophy, psychology, the arts, economics and politics. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## WMNS 100HF Honors Introduction to <br> 3 Units Women's Studies

54 hours lecture per term. This Honors-enhanced course is an interdisciplinary introduction to feminist topics and is designed to provide a foundation for Women's Studies with an examination of sex role socialization, feminist theory, and feminist themes in literature, philosophy, psychology, the arts, economics and politics. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## Wood Technology (WOOD)

Technology and Engineering Division
Office: Bldg 700, Room 700-714.992.7115
Dean: Ken Starkman
Website: techneng.fullcoll.edu

## Wood Technology Courses

## WOOD 110 F Fundamentals of Woodwork 4 Units

36 hours lecture and 108 hours lab per term. This course covers the practice of bench woodwork and the basic machine operation of the table saw, jointer, surfacer, sander, drill press, and boring machine. Includes the care and the use of hand tools, typical joint construction, common furniture hardware, glues and gluing, and a study of common furniture wood. (CSU) (Degree Credit) AA GE

## Work Experience (WKEX)

Business and Computer Information Systems Division
Office: Bldg 300-714.992.7032
Dean: Douglas Benoit
Website: http://bizdiv.fullcoll.edu

## Work Experience Courses

## WKEX 191 F Work Experience/ Internship - Vocational

18 hours lecture and 90-360 hours lab per term. A program of on-the-job learning experiences designed to assist the student in developing occupational effectiveness. For students whose employment, internship, or volunteer work are related to a vocational occupational major. Each student will establish measurable learning objectives appropriate for his/her job. Students must carry a minimum of seven units which may include work experience. One unit of credit may be earned for each 75 hours of paid or 60 hours of unpaid work (approximately five hours per week). However, the total combined maximum credit earned for WKEX 191 F cannot exceed 16 units. (CSU) (Degree Credit)

## WKEX 192 F Work Experience/ <br> 1 to 3 Units Internship - General

18 hours lecture and 90-360 hours lab per term. A program of on-the-job learning experiences designed to assist the student in developing occupational effectiveness. Employment, internship, or volunteer work need not be related to a vocational or occupational major. Each student will establish measurable learning objectives appropriate for his/her job. Students must carry a minimum of seven units, which may include work experience. One unit of credit may be earned for each 75 hours of paid or 60 hours of unpaid work (approximately five hours per week). The combined maximum credit earned for this class may not exceed six units and the total combined maximum credit for WKEX 191 F and this course cannot exceed 16 units. (CSU) (Degree Credit)

## Faculty and Administration

## -A-

ABDEL HAQ, MOHAMMAD - Social Sciences Sociology
B.S., La Roche College, Pittsburgh, Pennsylvania
M.A., California State University, Fullerton

ABESAMIS, NAOMI - Director, Student Activities
B.A., University of California, Riverside
M.B.A., University of Phoenix
M.A., California State Polytechnic University, Pomona

ABUTIN, ALBERT - Dean, Admissions and Records
A.A., A.S., Fullerton College
B.A., California State University, Fullerton
M.S., University of La Verne

AGUIRRE, ELSA - Counseling/Student Development Counseling
A.A., Fullerton College
B.S., California State University, Fullerton
M.A., Azusa Pacific University

AGUIRRE, YOLANDA - Coordinator, CalWORKs B.A., California State University, Fullerton M.A., Chapman University

ALLEN, MAALA K. - Natural Sciences Biology
B.Sc., University of St. Andrews, United Kingdom M.S., Yale University

ALMODOVAR-SOLE, LAURA C. - Counseling/Student Development
Counseling
B.A., University of Puerto Rico M.A., California State University, Dominguez Hills

ANDERSON, JANNA K. - Humanities English
B.A., Pepperdine University
M.A., California State University, Fullerton

ANDRUS, ANGIE - Social Sciences Sociology
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

ANSARI, MOHD — Natural Sciences
Chemistry
Ph.D., Indian Institute of Technology, India
ARELLANO-DUEÑAS, CRISTINA — Counseling (EOPS)
B.S., Azusa Pacific University
M.S., University of La Verne

ARMAN, NICK - Counseling/Student Development Veterans Resource Center
A.A., Pierce College
B.A., M.S., California State University, Northridge

ARMANI, BEHNOOSH - Counseling/Student Development Counseling
A.A., Whatcom Community College
B.S., National University
M.S., California State University, Los Angeles

ARRIAZA, CECILIA - Director, Cadena/Transfer Center B.A., M.A., University of California, Los Angeles

ASHENMILLER, JOSHUA - Social Sciences History
A.B., Princeton University
M.A., Ph.D., University of California, Santa Barbara

ASSEF, CELIA - Technology and Engineering Cosmetology
A.S., Riverside Community College

AVILES, GREG - Physical Education
B.S., California State University, Fullerton
M.S., Concordia University, Irvine

AYON, CARLOS - Director, Institutional Research and Planning A.A., Fullerton College
B.A., M.P.P., M.A., University of California, Los Angeles

- B-

BABAD, BRUCE - Fine Arts
Music
B.A., Central Washington University, Ellensburg
M.M., California State University, Long Beach

BAKER, MICHAEL J. — Natural Sciences
Anatomy and Physiology
B.S., University of California, Irvine
M.S., California State University, Long Beach

BAKHIT, KATHY — Dean, Social Sciences B.S., M.S., California Polytechnic University, Pomona Ed.D., University of La Verne

BALMA, JODI JENKIN — Social Sciences Political Science B.A., M.P.A., California State University, Fullerton

BANDA, SERGIO A. - Social Sciences Sociology
M.A., California State University, Fullerton

BARAJAS, OLIVIA - Counseling
B.A., University of California, Berkeley
M.S., California State University, Long Beach

BARABAS, LILIANA — Natural Sciences
Physics and Astronomy
B.S., University of Bucharest, Romania
M.S., California State University, Long Beach

BARSAMIAN, ARAM — Fine Arts
Music
B.M., California State University, Fullerton
M.M., University of Southern California

BASSI, LISA - Physical Education
B.S., California Polytechnic University, Pomona
M.A., California State University, Dominguez Hills

BATTOCLETTE-YOUNG, RENEE - Technology and Engineering Fashion
B.F.A., Virginia Commonwealth University
M.A., California State University, Los Angeles

BENOIT, DOUGLAS - Dean, Business, Computer Information
Systems, Economic Workforce Development
A.S., Community College of Southern Nevada
B.S., University of Nevada, Las Vegas
M.Ed., Ed.D., Arizona State University

BENNETT, ERICA H. - Library/Learning Resources and Instructional Support Programs and Services
A.A., Cypress College
A.A., Santa Ana College
B.A., California State University, Fullerton
M.L.I.S., University of California, Los Angeles

BERTONI, NICOLA S. - Fine Arts
Music
B.M., James Madison University
M.M., Westminster Choir College

BEVEC, GINA M. - Physical Education
A.A., Fullerton College
B.S., California State University, Fullerton
M.Ed., Azusa Pacific University

BIANCHINO, ANNIE - Natural Sciences
Chemistry
B.S., Brooklyn College
M.S., University of California, San Diego

Ph.D., University of California, Los Angeles
BLANCHE, GISELLE - Social Sciences
Sociology
B.S., Louisiana State University, Baton Rouge
M.A., California State University, Fullerton

BLASCHKE, LILLIAN A. - Natural Sciences
Anatomy/Physiology/Microbiology
B.S., Queens College
M.A., Columbia University

Ph.D., University of California, Irvine
BOGAN, MARY - Humanities
Reading
B.A., University of Texas at Dallas
M.S., California State University, Fullerton

BONNAND, GEORGE J. - Technology and Engineering
Machine Tools
A.A., Orange Coast College
B.A., M.A., California State University, Long Beach

BOUZA, LAURA A. - Technology and Engineering
Cinema, Radio and Television
B.A., University of Buffalo
M.F.A., California Institute of the Arts

BROWN, DAVID - Library/Learning Resources and Instructional Support Programs and Services
B.S., Butler University
M.L.S., University of Missouri, Columbia

BUI, MINH - Mathematics and Computer Science Mathematics
B.A., University of California, Los Angeles
M.A., University of California, Irvine

BURGER, MARKUS - Fine Arts
Music
B.A., Conservatory Maastricht, Netherlands
M.A., Folkwangschule Essen, Germany

BYDE, ROBERT W. - Social Sciences Psychology
B.S., Ph.D., University of California, Irvine

BYRNES, TIMOTHY - Physical Education
B.A., California State University, Fullerton M.Ed., Azusa Pacific University
-C-
CADENA, M. LEONOR — Social Sciences
Anthropology
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

CAIN, JOYCE - Humanities English as a Second Language (ESL) B.A., University of California, Berkeley M.A., University of California, Los Angeles

CALLAHAN, LINA — Humanities Foreign Language B.S., M.A., California State University, Long Beach

CALVERT, LORETTA - Business and CIS Paralegal
B.A., Pace University, New York
J.D., New York University School of Law

CAMPBELL, GARRETT - Physical Education
A.A., Fullerton College
B.S., California State University, Fullerton M.S., Northern State University, South Dakota

CAMPBELL, LISA — Dean, Counseling/Student Development B.S., M.S., California State University, Fullerton M.P.A., California State University, Long Beach

CANTRELL, CANDICE L. - Business and CIS Computer Information Systems B.S., M.A., University of California, Los Angeles

CARLIN, ANNA - Business and CIS
Computer Information Systems
B.S., M.S., California State Polytechnic University, Pomona

CARRITHERS, JOE - Humanities
English
B.A., M.A., Mississippi State University
M.A., Ph.D., University of Southern California

CARROLL, CONNIE J. - Physical Education
A.A., Fullerton College
B.A., California State University, San Diego
M.S., California State University, Fullerton
M.A., University of Santa Monica

CARTER, DAN - Technology and Engineering
A.S., Fullerton College

CASILLAS, LUPE L. - Counseling/Student Development Counseling
B.A., M.S., California State University, Los Angeles

CHADWICK, JANICE E. - Natural Sciences
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M.S., Ph.D., University of California, Riverside

CHAMBERLIN, W. SEAN - Natural Sciences
Oceanography
B.A., University of Washington

Ph.D., University of Southern California
CHAN, THEODORE C. - Natural Sciences Chemistry
B.S., California State University, Long Beach
M.S., California State University, Los Angeles

CHIANG-SCHULTHEISS, DARREN - Humanities English
B.A., California State University, Fullerton
M.A., University of Nebraska, Lincoln

CHIAROMONTE, THOMAS - Social Sciences
Child Development
B.A., California State University, Long Beach
M.S., Iowa State University

Ph.D., The Claremont Graduate University
CHO, LEONARD Y. - Mathematics and Computer Science Mathematics
B.S., University of California, Los Angeles
M.S., University of Southern California
M.A., California State University, Fullerton

CLAASSEN, MAREIKE - Mathematics and Computer Science Technology and Engineering - Engineering
M.A., California State University, Fullerton
M.S., Ph.D., University of California, Berkeley

CLAHANE, DANA D. - Mathematics and Computer Science Mathematics B.S., Biola University
M.A., California State University, Long Beach Ph.D., University of California, Irvine

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Theatre Arts
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COBLER, TIMOTHY - Mathematics and Computer Science Mathematics
B.S., M.S., California Polytechnic University, Pomona
M.S., University of California, Riverside

COLLINS, KENNETH P. — Natural Sciences Biology
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COMBS, JENNIFER - Counseling B.A., University of Michigan M.A., Ph.D., University of California, Santa Barbara

CONFORTI, DANIEL A. - Social Sciences Political Science
B.A., M.A., California State University, Fullerton
J.D., Western State University College of Law

CONRAD, ROBIN — Physical Education Dance
B.A., University of California, Irvine
M.F.A., California Institute of the Arts

CONTRERAS, GILBERT — VP, Student Services
B.A., University of California, Berkeley M.A., MIT

Ph.D., University of California, Los Angeles
CORDELL, BRUCE M. - Natural Sciences
B.S., Michigan State University M.S., University of California, Los Angeles Ph.D., University of Arizona

COSTELLO, JEANNE - Humanities English
B.A., University of California, Los Angeles M.A., University of California, Santa Barbara

COURON, BRIAN L. - Counseling/Student Development Counseling
A.A., Santa Ana College
B.A., M.A., California State University, Fullerton Ph.D., United States International University, San Diego

COWIESON, WILLIAM J. - Mathematics and Computer Science Mathematics
B.S., University of Redlands

Ph.D., University of California, Los Angeles
CRAIG, DALE - Business and CIS Computer Information Systems B.A., M.A., California State University, Long Beach

CRANER, MICHELLE N. - Technology and Engineering Fashion
B.A., M.A., California State University, Long Beach

CRIPPEN, JAMES - Social Sciences
Philosophy \& Religious Studies
A.A., Fullerton College
B.A., Sonoma State University, Rohnert Park, California
M.A., University of Warwick, Coventry, England

Ph.D., Temple University, Philadelphia, Pennsylvania
CROOKS, BRIAN - Physical Education
B.S., California State University, Fullerton
M.A., National University

CROWELL, BENJAMIN — Natural Sciences
Physics
B.A., University of California, Berkeley

Ph.D., Yale University
CUATT, BENJAMIN P. - Technology and Engineering Printing Technology
B.A., University of California, San Diego

CURRIE, ADRIANA - Technology and Engineering Interior Design
B.A., California State University, Long Beach

- D-

DADSON, GUY W. - Natural Sciences
Chemistry
B.S., University of Utah
M.S., California State University, Fullerton

DAHI, NAJI J. — Social Sciences
Political Science
B.A., American University of Beirut
M.A., Ph.D., University of Southern California

DANIEL, WILLIAM - Technology and Engineering Manufacturing Technology/Welding
A.S., Fullerton College
B.S.M.E., California State University, Fullerton

DANUFSKY, JOSHUA - Mathematics and Computer Science Mathematics
B.A., B.M., University of California, Irvine
M.S., California State University, Long Beach

DAVIDSON, DEBORAH J. - Fine Arts
Art
M.A., California State University, Fullerton
M.F.A., California State University, Long Beach

DAWSON, BRADLEY — Natural Sciences
Biology/Microbiology/Health
B.A., Luther College

Ph.D., University of California, Irvine

DAYTON, STEVEN A. - Business and CIS
Paralegal Studies
A.A., Orange Coast College
B.A., M.A., California State University, Fullerton
J.D., Western State University

DEBIN, MEGAN L. - Fine Arts Art
B.A., M.A., Ph.D., University of California, Los Angeles

DE JESUS, ROMAN - Natural Sciences
Oceanography
B.S., Ph.D., University of California, San Diego

DIAZ, ROBERT - Mathematics and Computer Science Mathematics
A.A., Los Angeles Pierce College
B.A., M.S., California State University, Northridge

DIMITRATOS, SPIRIDON — Natural Sciences Biology
B.S., University of California, Los Angeles

Ph.D., University of California, Irvine
DIMITRIADIS, PHILIP — Fine Arts
Art
B.F.A., California State University, Fullerton

DOBYNS, SHEILAH-STOKES - Humanities English
B.A., University of San Francisco
M.A., California State University, Fullerton

DOLBIN, RONALD - Mathematics and Computer Science Mathematics
B.A., California State University, Fullerton
M.A., Ph.D., University of California, Riverside

DOMINGUEZ JR., ELIAS G. - Counseling/Student Development
Counseling
B.A., University of California, Irvine
M.S., University of La Verne

DONAHOE, MARGARET B. - Technology and Engineering Communications
B.A., University of Hawaii
M.B.A., California Polytechnic University, Pomona

DONIGAN, LINDSAY M. - Humanities
English as a Second Language (ESL)
B.Ed., College of Ripon and York St. John
M.S., California State University, Fullerton

DORADO, DAVID - Natural Sciences
B.S., University of California, Riverside M.S., University of California, Santa Cruz

DOWDALLS, JAMES - Fine Arts
Art
B.F.A., M.A., California State University, Long Beach

DURON, YOLANDA - Physical Education
A.A., North Central Texas College, TX
B.S., Drexel University, PA
M.S., California State University, Fullerton

## - E-

EDWARDS, SCOTT W. - Mathematics and Computer Science
Computer Science
B.M., M.M., M.S., California State University, Fullerton

EGIGIAN, RUTH - Humanities
Foreign Language
A.A., East Los Angeles College
B.A., Azusa Pacific University
M.A., California State University, Fullerton

EISNER, DOUGLAS - Humanities
English
A.B., Washington University
M.A., University of Wisconsin, Madison

Ph.D., University of California, Riverside
ELLIS, PILAR - Manager, International Students Program
B.S., University of Cincinnati
M.S., California State University, Long Beach

ENGLAND, ELLI — Humanities
English
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

ESPINOSA, TIMOTHY — Fine Arts
Theatre Arts
B.F.A., California State University, Fullerton
M.F.A., Brandeis University
-F-
FACER, CAROLYN - Mathematics and Computer Science Mathematics
B.S., M.A., Central Michigan University

FARLEY, JOHN - Technology and Engineering
Automotive Technology
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FARNHAM II, PAUL T. - Mathematics and Computer Science Mathematics
A.S., Long Beach City College
B.S., California State University, Long Beach
M.A., California State University, Fullerton

FEASTER, JEFFREY E. - Natural Sciences
Biology/Horticulture
B.A., California State University, Fullerton
M.S., University of California, Riverside

FELENDER, JULIE - Social Sciences
Psychology
B.A., California State University, San Diego

Ph.D., University of California, Santa Barbara
FERNANDEZ, CHRISTOPHER - Natural Sciences Chemistry
B.S., M.S., California State University, Fullerton

FERNANDEZ, GABRIELLA - Business and CIS
Computer Information Systems
B.A., California State University, Fullerton
M.B.A., California Polytechnic University, Pomona

FLOERKE, BRANDON G. - Humanities English
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

FLORES, CHRISTY - Humanities
English
B.A., University of California, Los Angeles
M.A., Ph.D, University of Washington, Seattle

FOSTER, MARCIA — Physical Education Kinesiology
B.A., Seton Hall University
M.S., California State University, Fullerton

FOSTER, SAMUEL — Natural Sciences
Chemistry
B.S., Andrews University

Ph.D., University of California, Irvine
FOUQUETTE, DANIELLE - Humanities English
B.A., M.A., California State University, Fullerton

FUSCARDO JR., NICHOLAS P. — Physical Education A.B., West Liberty University, West Virginia M.Ed.Ad., California State University, Fullerton

## - G-

GAITATJIS, ELIZABETH B. - Humanities English as a Second Language (ESL) B.A., Rutgers University, New Jersey M.A., Northeastern Illinois University

GAMBOA, ROBERT - Counseling/Student Development Counseling Center
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B.A., California State University at Fullerton
M.S., University of La Verne

GARCIA, AMY M. - Humanities Reading
B.A., M.S., California State University, Fullerton

GARCIA, MICHELLE - Manager, SDSI/Incite
A.A., Rio Hondo Community College
B.A., California Polytechnic University, Pomona
M.S., California State University, Fullerton

GARCIA, RODRIGO - Vice President, Administrative Services B.A., California Polytechnical University, Pomona M.A., California State University, Fullerton

GILES, SCOTT - Athletic Director, Physical Education B.S., M.S., Brigham Young University

GLEASON, TERENCE - Manager, Distance Education
B.S., Portland State University
M.S., University of California, Riverside
M.Ed., University of Phoenix

GOLDSTEIN, JAY - Technology and Engineering Communications
A.A., Orange Coast College
B.A., California State University, Fullerton

GONZALES, MARIO - Fine Arts
Music
B.F.A., M.F.A., California Institute of the Arts

GONZALEZ, AMBER ROSE - Social Sciences
Ethnic Studies
A.A., Mount San Antonio College
B.A., California Polytechnic University, Pomona M.A., Ph.D., University of California, Santa Barbara

GORDON, ROBERT S. - Technology and Engineering Automotive Technology
B.A., California State University, Fullerton
B.A., California State University, Los Angeles

GRABIEL, SUSAN A. - Social Sciences
Geography
M.A., California State University, Fullerton

GRAVES, GARY - Business and CIS Business
B.S., B.A., M.B.A., University of Phoenix

GREEN, PATRICIA - Social Sciences
Child Development
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B.S., California State University, Fullerton M.S., Azusa Pacific University

GREENHALGH, MARK - Dean, Mathematics and Computer Science B.A., M.A., California State University, Fullerton

GREGORIO, ALINE - Social Sciences
Geography
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B.A., M.A., California State University, Fullerton

GREIN, CYNDI - Manager, Campus Accounting A.A., Fullerton College
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B.A., M.S., Ed.D., California State University, Fullerton

GUARDADO, CYNTHIA - Humanities English
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GUILD, TRACY — Social Sciences
Psychology
B.A., University of California, Irvine M.A., Pepperdine University, Irvine

GUSS, HEIDI - Humanities
English
B.A., California State University, San Diego
M.A., California State University, Fullerton

GUTHRIE, FRANK J. - Fine Arts Digital Arts
A.S., Cypress College
B.A., California State University, Long Beach

## - H -

HALVERSON, HEATHER - Counseling/Student Development Counseling
B.A., California Polytechnic University, Pomona
M.S., California State University, Fullerton

HANSON, BRUCE - Social Sciences
Philosophy/Religious Studies M.A., Ph.D., The Claremont Graduate University

HARLESS, ZACHARY T. - Fine Arts Theatre Arts B.A., California Polytechnic College, Pomona M.B.A., Keller Graduate School of Management

HARRIS, RANDY - Manager, Maintenance and Operations A.A., Coastline Community College

HARTMANN, RICHARD - Dean, Natural Sciences
B.S., University of Wisconsin, Madison Ph.D., University of Wisconsin, Milwaukee

HEATH, CAROLYN - Natural Sciences Earth Science and Biological Science B.S., University of California, Berkeley Ph.D., University of California, Santa Cruz

HENDERSON, ANGELA - Humanities Reading B.A., University of California, Santa Barbara M.S., M.A., California State University, Fullerton

HENDERSON, BRUCE R. - Humanities English B.A., Oberlin College, Ohio M.A., University of Washington Ph.D., State University of New York, Albany

HENKE, CAROL - Fine Arts Art
B.A., Cornell University
M.A., California State University, Fullerton

HENKE, WILLIAM D. - Fine Arts Art
B.A., M.A., M.F.A., California State University, Fullerton

HIGGINS, RITA — Natural Sciences
Foods and Nutrition B.S., University of California, Irvine M.P.A., Loma Linda University

HINARO, NAHRIN - Counseling/Student Development Counseling
A.A., Modesto College
B.A., University of California, Irvine
M.S., California State University, Long Beach

HOBBS, ROYDEN J. - Natural Sciences
Environmental Science
B.A., University of California, San Diego
M.S., Ohio University

Ph.D., University of Arizona
HOGAN, DAVID - Technology and Engineering Wood Technology
B.A., California State University, Fullerton

HOWEY, DENNIS - Technology and Engineering
Printing Technology
B.A., M.A., California State University, Long Beach

HOYT-HEYDON, MELA - Fine Arts
Theatre Arts
B.A., University of Redlands
M.F.A., University of California, Irvine

HUERTA, FLOR - Counseling/Student Development Counseling/Career Development
B.A., M.S., California State University, Long Beach

HUERTA, NICOLAS - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton

HUGHES, DEIDRE - Humanities Reading
B.A., Scripps College
M.A., Northern Arizona University
M.S., California State University, Fullerton

HUI, ARTHUR - Humanities English as a Second Language (ESL)
B.A., University of California, San Diego
M.A., San Francisco State University

HUNTER, TAMIEKA - Counseling/Student Development Counseling
B.A., M.S., California State University, Long Beach

## - I-

IKEDA, NANCY - Mathematics and Computer Science Mathematics
B.S., University of California, Irvine
M.A., M.S., California State University, Fullerton

ISHIBASHI, JANE - Library/Learning Resources and Instructional Support Programs and Services
B.A., University of California, Los Angeles M.L.I.S., University of California, Berkeley

ISON, JOHN - Humanities English
B.A., University of California, Los Angeles
M.A., California State University, Los Angeles

Ph.D., University of California, Riverside

## - J-

JAGODINA, MARIANNA - Mathematics and Computer Science Mathematics
B.S., Eastern Oregon University
M.S., California State University, Long Beach

JANE, COURTNEY - Business and CIS Business
B.A., University of California, San Diego
M.B.A., Dartmouth College, The Amos Tuck School

JEWELL, JOSEPH — Fine Arts
Music
A.A.S., Onondaga Community College
B.M., Syracuse University
M.M., Ithaca College
D.M.A., University of Southern California

JIMMONS, CHARLOTTE - Technology and Engineering Cosmetology
A.A., Cerritos College

JOHNSON, JESSICA - Coordinator, Supplemental Instruction B.S., Embry-Riddle Aeronautical University, Prescott

JONES-RAMEY, BRIAN - Humanities Spanish
B.A., Georgia State University
M.A., University of Missouri, Kansas City
M.A., University of Texas, Brownsville

## - K-

KAGEYAMA, JILL - Library/Learning Resources and Instructional Support Programs and Services
B.A., M.L.I.S., University of California, Los Angeles

KANEKO, BRIAN - Technology and Engineering Interior Design
B.A., M.A., California State University, Los Angeles

KARVIA, NICK - Director, Bookstore
A.A., Lower Columbia Community College
B.A., Western Washington University

KELLY-MANDICH, LINDA - Counseling/Student Development Counseling
B.A., Loyola Marymount University
M.S., California State University, Los Angeles

KEMP, DARNELL - Humanities
Reading
B.A., Chapman University
M.A., California State University, Long Beach

KIM, KELLY - Humanities
Foreign Language
A.A., Saddleback College
B.A., M.A., Ph.D., University of California, Los Angeles

KIMURA, STEWART — Counseling/Student Development Counseling B.A., University of California, Santa Barbara
M.A., California Lutheran University

KINKEL, JENNIFER — Social Sciences
Child Development and Educational Studies
B.A., University of California, Irvine
M.A., Pacific Oaks College, Pasadena

KIRKHAM, RICHARD A. - Humanities
Speech
B.A., M.A., University of Southern California

KLASSEN, KELLY - Mathematics and Computer Science B.A., California State University, Fullerton M.S., San Diego State University

KLIPPENSTEIN, STEPHEN - Fine Arts
Art
A.A., Fullerton College
B.F.A., Art Center College of Design

KOMINEK, BRIDGET - Humanities
English
B.A., M.A., California State University, Fullerton

KONG, WEI-PING - Humanities
Foreign Language
B.S., Fudan University
M.S., California State University, Fullerton

KRAHN, GRAHAM J. — Natural Sciences Physics
B.S., University of British Columbia
M.S., Ph.D., University of California, Riverside

KRESSE, DOUGLAS - Humanities Speech
M.A., California State University, Fullerton

KVASKA, COLLEEN - Natural Sciences
Foods and Nutrition
B.S., Central Michigan University
M.A., California State University, Long Beach

KYLE, DIANA - Social Sciences
Psychology
B.A., M.A., California State University, San Marcos

## - L-

LABOUNTY, JENNIFER - Director, EOPS/CARE/CalWORKs
B.A., Chapman University
M.A., Pepperdine University

LA MONTIA, MELODY - Technology and Engineering Photography
B.F.A., Academy of Art College, San Francisco M.F.A., California State University, Long Beach

LARA, LARRY - Director of Physical Plant and Facilities B.S., California State University, Long Beach

LARSEN, CHRIS - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton

## LAZARUS, LAURA - Natural Sciences

Chemistry
B.A., University of California, Irvine
B.S., California State University, Los Angeles

Ph.D., University of Southern California
LEE, CALLISTA M. - Social Sciences Psychology
A.A., Los Angeles Pierce Community College
B.A., California State University, Northridge
M.S., California State University, Long Beach

LEE, MONICA - Fine Arts
Music
B.M., University of Oklahoma
M.M., University of Maryland
D.M.A., Northwestern University

LEE, SCOTT — Counseling/Student Development Articulation Officer
B.S., California State University, Fullerton
M.A., California State University, Dominguez Hills Ed.D., Argosy University

LEVESQUE, RICHARD - Humanities English
B.A., M.A., California Polytechnic University, Pomona Ph.D., University of California, Riverside

LEWIN, PAMELA - Physical Education
A.A., Orange Coast College
B.A., M.S., California State University, Hayward

LINAHON, JAMES J. - Fine Arts
Music
B.A., University of Northern Iowa
M.M.E., North Texas University

LINGGI, EDWARD — Humanities
Foreign Language
M.A., University of California, Santa Barbara

LIU, ANNIE - Humanities
English
B.A., University of California, Irvine M.A., University of California, San Diego

LOEW, VALERIE - Natural Sciences Horticulture
A.A., Fullerton College
B.S., California Polytechnic University, Pomona
M.S., California State University, East Bay, Hayward

LONEY, LAURA - Mathematics and Computer Science Mathematics
B.S., M.S., California State University, Long Beach

LOPEZ, BRIAN — Social Sciences
Psychology
B.A., University of California, San Diego, La Jolla Ph.D., University of California, Santa Barbara

LOPEZ, CONNIE - Technology and Engineering Cosmetology
B.S., Southern Illinois University, Carbondale M.A., California State University, San Bernardino

LOPEZ, DAVID - Technology and Engineering Automotive Technology
A.S., Rio Hondo College
B.A., University of Phoenix

LOPEZ, DAVID F. - Fine Arts
Music
B.M., California State University, Long Beach
M.M., California State University, Fullerton
D.M.A., University of Arizona

LOPEZ, RUBEN — Social Sciences
Geography
B.A., Occidental College, Los Angeles
M.A., California State University, Fullerton
M.A., Chapman University, Orange

LOY, MICHELLE - Natural Sciences
Foods and Nutrition
B.S., Missouri State University, Springfield
M.S., M.P.H., Saint Louis University

LOZINSKY, RICHARD — Natural Sciences
Earth Science
B.S./B.A., Humboldt State University
M.S., University of New Mexico

Ph.D., New Mexico Institute of Mining and Technology
LUNDERGAN, ROBERT - Humanities
English
B.A., M.A., California State University, Chico

Ph.D., University of Wisconsin, Milwaukee

## - M-

MACIAS, VALENTIN - Library/Learning Resources and Instructional Support Programs and Services A.A., A.S., Riverside City College
B.A., M.A., University of California, Santa Cruz
M.L.I.S., University of Alabama, Tuscaloosa

MAGEE, D. B. - Humanities
English
B.B.A., University of Louisiana, Monroe
M.A., The University of Alabama

Ph.D., Texas Christian University
MALLOY, SCOTT - Mathematics and Computer Science Mathematics
A.A., Fullerton College
B.A., University of California, Los Angeles
M.S., California State University, Northridge

MANDE, ANUPAMA - Social Sciences
History
B.A., Stella Maris College (India)
M.A., Ph.D., Ohio State University

MANGAN, MICHAEL — Humanities
English
A.A., Long Beach City College
B.A., M.F.A., California State University, Long Beach

MANJRA, SAMREEN - Business and CIS
Accounting
B.A., University of California, Irvine
M.S., California State University, Fullerton

MARKLEY, KAREN - Social Sciences
Anthropology
B.A., M.A., California State University, Fullerton

MARQUEZ, LORENA - Social Sciences Counseling
A.A., Santa Ana College
B.A., University of California, Los Angeles
M.S., California State University, Long Beach

MARTIN, MONICA - Director, Grants/Economic and Workforce Development B.A., National University, La Jolla M.Ed., Azusa Pacific University

MARTINEZ STLUKA, RENA — Registrar A.A., Fullerton College B.A., American Public University

MATTSON, CAROL - Counseling A.A., Fullerton College B.F.A., M.A., Chapman University Ed.D., California State University, Fullerton

MAYFIELD, PHILIP F. - Humanities English B.A., University of California, Santa Barbara M.A., University of Houston

MAZZAFERRO, ANTHONY P. — Fine Arts Music B.M., San Francisco State University M.M., Northwestern University D.M.A., Arizona State University

McALLISTER, G. ALAN - Business and CIS Accounting; Business B.S., M.B.A., California State University, San Bernardino

McCARTHY, BARRY KENDALL - Business and CIS Business B.S., University of Maryland M.A., American Military University

McGREW, PATRICK A. - Technology and Engineering Construction Technology A.A., San Diego Mesa College A.S., Fullerton College B.S., University of Phoenix

McGUTHRY, KATHERYN — Social Sciences Psychology B.S., Howard University M.S., University of California, San Diego Ph.D., Howard University

McPHERON, LISA - Director, Campus Communications B.A., M.A., California State University, Fullerton

McQUEEN, DEBORAH - Mathematics and Computer Science Mathematics
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

MEISENHELDER, CECILIA D. - Counseling/Student Development Counseling
A.A., Orange Coast College
B.S., California State University, Fullerton
M.S., University of Southern California

MELELLA, LAURA - Business and CIS Computer Information Systems
B.S., California State University, Fresno
M.A., Pepperdine University

MILLER, BRUCE - Fine Arts
Music
B.M., University of Hartford
M.M., University of Cincinnati

Ph.D., University of California, Los Angeles
MILLER, VANESSA - Director, Health Services
B.A., University of North Texas
B.S., M.S., Texas Women's University

DrPH, University of North Texas Health Science Center
MILLS, RENEE - Counseling/Student Development
Disability Support Services
B.S., Pacific Union College
M.A., Ph.D., Loma Linda University

MINTON, JEFFREY A. - Technology and Engineering
Photography
A.A., Pasadena City College
B.A., University of California, Riverside
M.F.A., California State University, Fullerton

MIRANDA, JOSE VICTOR - Technology and Engineering
Automotive Technician
B.A., California State University, Long Beach

MONTAGNE, LISA - Manager, Distance Learning
B.A., California Lutheran University
M.A., University of Nevada, Las Vegas

Ed.D., California State University, Fullerton
MONTOYA, MANUEL — Counseling/Student Development
Counseling
A.A., Merced College
B.A., California State University, Chico
M.A., California State University, Long Beach

MORISON, BOB - Engineering Supervisor, Media Systems
MORRIS, TOM E. - Natural Sciences
Environmental Science
B.S., San Diego State University
M.A., University of California, Berkeley

MUELLER, MICHAEL - Fine Arts
Theatre Arts
B.F.A., Wright State University
M.F.A., University of Pittsburgh

MUMMERY, FRANCIS — Social Sciences
Economics
A.S., Cypress College
B.A., M.A., M.B.A., California State University, Fullerton

## - N -

NAUER, KATHLEEN Y. - Fine Arts Art
B.F.A., University of Illinois
M.F.A., University of Arizona

NEGUS, A. LYNNE - Social Sciences
History
B.A., M.A., University of California, Berkeley
M.A., Ph.D., University of California, Los Angeles

NELSON-WRIGHT, KELLY — Social Sciences Sociology
B.A., M.A., California State University, Fullerton

NGUYEN, GREGORY V. - Mathematics and Computer Science Mathematics
A.A., Orange Coast College
B.S., M.S., California State University, Long Beach

NGUYEN, KARYN — Counseling/Student Development Counseling
B.A., M.A., University of San Diego

NIKKHOO, KRISTINE - Director, Basic Skills and Support Services B.A., University of California, Los Angeles M.A., California State University, Fullerton

NILKANTH, GITANJALI — Natural Sciences Biology
B.S., Gandhiji University, India
M.S., Ph.D., University of Bombay, India

NOLAN-RIEGLE, MARY C. — Natural Sciences Biology
B.A., Montclair State University
M.A., Ph.D., Rutgers University

NÚÑEZ, JOSE RAMÓN — Vice President, Instruction
B.A., M.A., University of Madrid Ph.D., University of California, Los Angeles

## - $0-$

O'BRIEN, DAN - Technology and Engineering Machine Tools
A.A., Orange Coast College
B.A., California State University, Long Beach

OKONYAN, STEFANI D. - Humanities
English
B.A., University of California, Santa Barbara
M.A., Ph.D., Claremont Graduate University

O'NEILL, BRENDAN - Natural Sciences
Physics
B.S., M.S., Ph.D., University of California, Riverside

OPPENHEIM, NORIKO - Humanities
Foreign Language
M.A., Columbia University, New York

ORLIJAN, KIMBERLY - Humanities
English
B.A., M.A., Ph.D., University of California, Riverside

O'ROURKE, MEG - Humanities
English
A.A., Fullerton College
B.A., California State University, Fullerton
M.A., California State Polytechnic University, Pomona

OUCHI, BRYAN Y. - Counseling/Student Development
Disability Support Services
B.A., University of California, Los Angeles
M.A., Fuller Theological Seminary
M.A., Alliant International University

- P-

PADILLA, GERALD M. - Social Sciences
Ethnic Studies/History
B.A., California State University, Fullerton
M.A., University of California, Los Angeles

PAIGE, DEBORAH - Humanities
English
B.A., M.A., California State University, San Marcos

PARIKH, JANAKI, J. - Social Sciences
Anthropology
B.A., University of California, Los Angeles
M.A., University of California, Irvine

PATEL, JULIE - Technology and Engineering Journalism
B.A., University of Chicago
M.A., Stanford University

PAVELEK, KARIN - Social Sciences
Child Development and Educational Studies A.A., Fullerton College
B.S., M.S., California State University, Fullerton

PEREZ, JAIME - Fine Arts
Art
B.A., University of California, Los Angeles
M.A., California State University, Long Beach

PEREZ, MARIE L. - Technology and Engineering Cinema-Radio-Television B.A., University of North Carolina, Chapel Hill M.A., California Polytechnic University, Pomona

## PEREZ, ROGER - Humanities

English
B.A., M.A., California State University, Fullerton

PEREZ, WENDY - Technology and Engineering Cosmetology Department
A.S., Fullerton College
B.S., Southern Illinois University, Carbondale

PERKINS, DEBORAH - Director, Student Equity
B.A., Central College, lowa M.S., California State University, Fullerton

PETERSON, QUEEN - Counseling/Student Development Counseling M.A., Chapman University Ed.D., Argosy University

PETRIE, CALEB - Mathematics and Computer Science Mathematics
B.A., Biola University
M.A., University of Southern California

Ph.D., Auburn University
PHAM, KARA - Mathematics and Computer Science Mathematics
B.S., Ph.D., University of California, Irvine

PIAZZA, STEPHANIE - Humanities Reading
B.A., M.S., California State University, Fullerton

PIMENTEL, SYLVIA - Counseling/Student Development B.A., California State University, Fresno M.S.W., University of Southern California

PLEDGER, SHIRLEE I. - Humanities Speech
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

PLETT, STEPHEN L. - Mathematics and Computer Science Mathematics
A.A., Fullerton College
B.A., California State University, Fullerton
M.S., University of California, Riverside
M.A., California State University, Fullerton

PLISKA, STEVEN M. - Fine Arts
Theatre Arts
B.A., M.F.A., University of California, Los Angeles

PLUM-WIDNER, ALIX - Physical Education
B.A., California State University, Long Beach M.A.Ed., Azusa Pacific University

POPE, DANIEL L. - Fine Arts Art
B.A., Chapman University M.A., California State University, Long Beach

POWERS, MIGUEL - Humanities English
B.A., University of San Diego M.A., Indiana University

PRATT, LYNETTE - Counseling/Student Development
Adaptive Computer Lab
A.A., Rio Hondo College
B.A., California State University, Fullerton
M.S., California State University, Long Beach

PRICE, RENE - Mathematics and Computer Science Mathematics
B.S., M.S., California State University, Long Beach

PRICE, RHETT J. - Physical Education
Recreation Administration
A.A., Fullerton College
B.A., B.S., M.S., California State University, Long Beach

## - R-

RAPP, EDWARD - Physical Education
B.S., California State University, San Diego
M.Ed., Azusa Pacific University

RAUDE, IRIS E. - Natural Sciences Chemistry
B.S., M.S., California State University, Los Angeles Ph.D., University of California, Los Angeles

REILLY, JOSEPH - Social Sciences
History; Political Science
B.A., M.A., University of California, Los Angeles

REINHARDT-ZACAIR, CATHERINE - Humanities Foreign Language
B.S., University of Wisconsin, Madison
M.A., Ph.D., University of California, Santa Barbara

REYES, JR., JOE S. - EOPS/Student Services Counseling
A.A., Compton Community College
B.A., University of California, Los Angeles
M.S., California State University, San Diego

RICHARDSON, KRISTY - Natural Sciences Foods and Nutrition B.S., California Polytechnic University, San Luis Obispo M.P.H., University of California, Los Angeles M.S., California State University, Fullerton

ROBERTSON, KELLY - Technology and Engineering Administration of Justice B.S., California Polytechnic University, Pomona M.A., California State University, Dominguez Hills

RODINE, JEFFREY - Humanities
Reading
B.A., California Polytechnic University, Pomona M.A., United States International University

RODRIGUEZ, JEANETTE - Humanities Speech
B.A., M.A., California State University, Fullerton

ROMERO, ALBERTO - Library/Learning Resources and Instructional Support Programs and Services
A.A., El Camino Community College
B.A., University of California, Los Angeles
M.L.I.S., University of California, Los Angeles

ROMERO HERNANDEZ, ABRAHAM — Mathematics and Computer Science Mathematics
B.A., California State University, Los Angeles M.A., California State University, San Bernardino

ROSA, MELANIE K. - Physical Education Dance
B.A., M.A., M.F.A., University of California, Irvine

ROSALES, KIMBERLY R. - Natural Sciences Biology B.S., Ph.D., University of California, Irvine

ROSEN, ELLEN M. - Humanities English as a Second Language (ESL) B.A., Calvin College, Grand Rapids, Michigan M.A., University of California, Los Angeles

ROSSI, NICOLE - Mathematics and Computer Science Mathematics B.S., M.S., California State University, Long Beach

ROTH, EDWARD - Director, Disability Support Services B.A., George Fox College M.Ed., Oregon State University M.A., Ph.D., University of Southern California

RUIZ, ROSALINDA M. - Humanities English
B.A., M.A., M.S., California State University, Fullerton

RUNDUS, KATHARIN — Fine Arts
Music
B.M., Coe College
M.M., Westminster Choir College
D.M.A., Claremont Graduate University

RYAN, GREG - Director, Financial Aid B.F.A., California Institute of the Arts M.A., University of Liverpool

## -S-

ST. JOHN, PAUL — Business/CIS
Accounting
A.A., Santa Monica College
B.S., California State University, Long Beach

SALAS, RICARDO - Social Sciences Political Science M.A., University of California, Santa Barbara

SALAZAR, YVONNE - Technology and Engineering Cosmetology
A.A., Cerritos College
B.S., Southern Illinois University

SALZAMEDA, BRIDGET - Natural Sciences
Chemistry
B.A., California State University, San Diego

Ph.D., University of Nevada, Reno
SAMANO, JEFFREY R. - Humanities
Speech Communication
B.A., M.A., California State University, Long Beach

SAMPSON, KEVIN - Technology and Engineering
Administration of Justice
B.A., California State University, Long Beach
M.S., M.Ed., University of La Verne

Ed.D., University of Southern California
SANABRIA, ROLANDO - Counseling/Student Development Counseling
B.S., California State University, Fullerton
M.S., California State University, Long Beach

Ed.D., Argosy University
SANCHEZ, ADRIANA - Humanities English
A.A., East Los Angeles College, Monterey Park
B.A., California State University, Los Angeles
M.A., California State Polytechnic University, Pomona

SANCHEZ, VIRGINIA - EOPS/Student Services
Counseling
A.A., Fullerton College
B.S., California State University, Fullerton
M.S., California State University, Dominguez Hills

SANTANA, CITLALLY - Counseling/Student Development Counseling
B.A., University of Southern California M.A., California State University, Dominguez Hills

SAPIRO, JACOB — Natural Sciences Anatomy/Physiology/Microbiology; Biology B.S., Brooklyn College

Ph.D., Case Western Reserve University
SCHILLING, CHARLES - Humanities
Speech
A.A., Santa Ana College
B.A., M.A., California State University, Fullerton

SCHULZ, GREG — President
A.A., Fullerton College
B.A., California State University, Fullerton
M.P.A., California State University, Long Beach

Ed.D., University of Southern California
SCHULZE, MICHAEL - Humanities English
B.A., California State University, Long Beach
M.A., M.F.A., Chapman University, Orange

SCOTT, MICHAEL — Fine Arts
Music
B.M., M.M., University of Southern California

SCOTT, MING-YIN — Business
Accounting
A.A., Fullerton College
B.A., American Public University

SEE, ROGER - Physical Education B.A., M.A., California State University, Fullerton

SEIDEL, JAY - Technology and Engineering Communications/Journalism A.A., Fullerton College B.A., M.A., California State University, Fullerton

SELBY, STEVEN S. - Director, Campus Safety
A.A., Rio Hondo College
B.S., Pepperdine University

SHEDD, KRISTEN - Social Sciences History
A.B., Bowdoin College, Brunswick, Maine M.A., Ph.D., University of California, Santa Barbara

SHEIL, SEAN - Physical Education B.A., California State University, Stanislaus M.S., California Polytechnic University, San Luis Obispo

SHEW, JAMIE - Fine Arts
Music
B.M., Washington State University
M.M., Western Michigan University

SHIDELER, LINDA - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton
M.A., University of California, San Diego

SHIER, CAROL G. - Humanities Reading
B.A., M.A., University of Arkansas
M.S., California State University, Fullerton

SHIROMA, RYAN M. - Humanities
English
B.A., California State University, Long Beach
M.F.A., Eastern Washington University

SHOTWELL, BRIAN - Natural Sciences
Physics
B.S., University of California, Berkeley
M.S., Yale University

Ph.D., University of California, San Diego
SIPPLE, RUTH - Counseling/Student Development Disability Support Services B.S., University of Connecticut M.S., California State University, Fullerton

SJOBERG, PAUL - Mathematics and Computer Science Mathematics
B.S., University of Redlands
M.A., University of California, Santa Barbara

SMEAD, RICHARD - Business and CIS
Computer Information Systems
A.A., Fullerton College
B.S., California State University, Fullerton

SMEDLEY, DEANNA - Counseling/Student Development Counseling
A.A., Mt. San Antonio College
B.A., California State University, Fullerton
M.S., University of LaVerne

SMITH, ARENTTA — Social Sciences
Ethnic Studies
B.A., M.A., San Francisco State University

SMITH, CHARMAINE - Business and CIS
Accounting; Real Estate
B.S., California State University, Long Beach
M.A., National University

SMITH, GEOFFREY - Humanities
English
B.A., Point Loma Nazarene University M.A., California State University, Fullerton M.S., Walden University

SNYDER, PETER - Physical Education B.A., M.A., Stanford University Ph.D., University of California, Santa Barbara

SPENCER, NORA - Business and CIS
Computer Information Systems
A.A., Fullerton College
B.A., M.S., California State University, Fullerton

STANAWAY, CARL - Fine Arts
Art
B.F.A., California State University, Chico
M.F.A., Cranbrook Academy of the Arts

STANDEN, KATHLEEN G. - Business/CIS
Business Management
B.S., B.A., Ohio State University
M.B.A., University of California, Los Angeles

STANTON, GRETCHEN - Natural Sciences
Chemistry
B.S., University of California, Riverside

Ph.D., University of Pennsylvania
STARKEY, MONIQUE - Library/Learning Resources and Instructional Support Programs and Services B.S., Louisiana State University, Baton Rouge M.S.I.S., University of Texas, Austin

STARKMAN, KEN - Dean, Technology and Engineering B.S., M.S., University of Wisconsin, Stout

SUMNER, VONN — Fine Arts
Art
B.A., M.F.A., University of California, Davis

## -T-

TAGUCHI-TRIEU, TANOMO - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton

TAYLOR, MATTHEW D. - Humanities Speech
B.S., Pacific Lutheran University
M.S., University of Oregon

Ph.D., University of Southern California
TEBAY, JOHN C. - Dean, Fine Arts
B.M., Biola University
M.M., California State University, Long Beach

TEIPE, EMILY — Social Sciences
History and Women's Studies
B.A., M.A., California State University, Fullerton

Ph.D., University of California, Riverside
TELLEFSEN, BLYTHE A. - Humanities
English
A.B., Occidental College
M.A., California State University, Los Angeles

Ph.D., University of California, Riverside
THOMAS, DAVID A. - Technology and Engineering Architecture, Construction Technology; Engineering B.A., California State University, Los Angeles M.A., Ed.D., Alliant International University

TIANGCO, JEFFERSON - Humanities English as a Second Language (ESL) A.A., Norco College
B.A., M.S., California State University, Fullerton

TRAN, BRANDON - Business and CIS Accounting
B.S., California State University, Fullerton

CPA - Certified Public Accountant, California
TRAPP, STEPHEN — Manager, Custodial Services
A.A., Los Angeles City College
B.A., California State University, Los Angeles

TRIBBE, MATTHEW D. - Social Sciences History
B.A., University of Cincinnati
M.A., Ph.D., University of Texas at Austin

TROOP, JANE - Business and CIS
Computer Information Systems
B.A., California State University, Fullerton
M.S., California State University, Los Angeles

TRUILLO, TAMARA - Humanities English
B.A., California State University, Northridge M.A., Arizona State University

## TUTTLE, VALERIE - Humanities

## Reading

B.S., M.S., California State University, Fullerton

## - V-

VAN RY, MICHELE - Fine Arts
Art
B.A., M.F.A., University of California, Irvine

VANDERPOOL, JEFFREY - Social Sciences Philosophy
B.A., California State University, Fullerton
M.A., Ph.D., University of California, Riverside

VANDERVORT, KIM - Humanities
English
B.A., M.A., California State University, Fullerton

VELOZ, OLIVIA - Director, Academic Support Programs/Services A.A., Cerritos College
B.A., M.B.A., University of Phoenix

Ed.D., California State University, Fullerton
VERGARA, DEREK — Dean, Student Support Services/Title IX Coordinator
B.A., M.A., Azusa Pacific University Ed.D., University of La Verne

VERZEANU, RAZVAN - Mathematics and Computer Science Mathematics
B.A., University of Southern California
M.S., University of California, Irvine

VIDAL, SUNSHINE D. - Counseling/Student Development Counseling
A.A., Golden West College
B.A., California State University, Long Beach
M.S., California State University, Fullerton

VINCENT, SUSAN - EOPS/Student Services Counseling
B.A., University of the Pacific M.S., California State University, Los Angeles
-W-
WADE, MARCU - Technology and Engineering Cosmetology
B.S., California State University, Fullerton

WEBSTER, PERRY - Physical Education
Kinesiology
A.A., Saddleback College
B.S., California State University, Fullerton
M.A., Concordia University

WHALEN, KATHLEEN A. - Physical Education A.A., Fullerton College
B.A., California State University, Long Beach M.A., California State University, Fullerton

WILLIS, CHAD — Fine Arts
Music
B.A., University of North Texas
M.M., University of Southern California

WILLIS, MARC - Natural Sciences
Earth Science
B.S., New Mexico Tech
M.A., Washington University

WILLOUGHBY, DAN - Dean, Humanities
B.A., University of California, Berkeley M.S., California State University, Fullerton

WILSON, DANI - Dean, Library/Learning Resources and Instructional Support Programs and Services B.A., University of California, Santa Barbara M.A., California State University, Fullerton Ed.D., Argosy University

WILSON, KELLY - Mathematics and Computer Science Mathematics
B.A., California State University, Fullerton
M.S., San Diego State University

WILSON, MARCUS - Business and CIS Business
B.S., M.B.A., University of Southern California
J.D. Law Center, University of Southern California

WOLFE, JEANA G. - Social Sciences
Psychology
A.A., Ventura College
B.S., California Polytechnic University, San Luis Obispo
M.A., California State University, Northridge

WOLL, GREG - Fine Arts
Music
M.M., University of North Texas
D.M.A., The Claremont Graduate University

WOOLRIDGE, NANCY A. - Business and CIS
Computer Information Systems
B.S., Regis College
M.S., The Claremont Graduate University

WU, JO WEN — Natural Sciences Biology
B.S., University of Missouri, Columbia

Ph.D., University of California, Irvine

- $\mathbf{Y}$ -

YIMENU, TILAHUN — Natural Sciences
Chemistry
B.A., Coppin State College

Ph.D., Howard University

YOUNG, CALVIN — Natural Sciences Biology
B.A., University of California, Berkeley Ph.D., Columbia University

YOUNG, GILENE M. - Natural Sciences Biology
B.S., Yale University
M.S., Ph.D., University of California, Los Angeles

## - Z-

ZARSKE, CINDY - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton

ZEPEDA, CHARLES - Technology and Engineering Automotive Technology
A.A., Fullerton College
B.A., California State University, Fullerton

# Faculty Emeritus <br> CLASS OF 2016 

## Sharon DeLeon

Social Sciences
Jeff Jesperson
Physical Education
Mark Allen Knoernschild
Humanities

Claudia Lowe
Social Sciences
John Pummer
Technology and Engineering
Bonnie Rick
Technology and Engineering

Robert Smitson Technology and Engineering

Jerry Stokes
Technology and Engineering

# Retiring Management 

Paul McKinley

Director, Disability Support Services and
Veterans Resource Center

## In Memoriam

## Amanda Rachel Walzer <br> October 18, 1972 - March 29, 2016

"dedicated teacher, a talented poet, an amazing friend, and, perhaps more than anything, a devoted mother"


Amanda was a tenured professor in the English Department at Fullerton College. Amanda Walzer was voted "Most Outspoken" in her senior class in high school, and graduated Phi Beta Kappa with a B.A. in English from UCLA (1994). She also holds an M.F.A. in Creative Writing from Antioch University (2000) and a Certificate in Postsecondary Reading and Learning from Cal State Fullerton (2013). She knew she wanted to be a teacher when, at the age of ten, she found herself admiring her sixth grade teacher's lesson planning. She started her teaching career as a writing center tutor while at UCLA, and then did a stint as a high school English teacher in Los Angeles. After earning her Masters, she taught at UCLA, East L.A. College, and Pasadena City College before coming to Fullerton. During her time at Fullerton, she delighted in teaching English \& Creative Writing at FC and serving as the Faculty Advisor for LiveWire, FC's Online Literary Arts Journal. Amanda lived in Fullerton with her two sons and their dog, Max. She enjoyed weekends in San Diego with her love, John Warshawsky. In her spare time, she ran track, played soccer, wrote, sang, and played her own songs on the piano.

# Fullerton College 

FALL 2016


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Fullerton, California
92832-2095
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[^0]:    ${ }^{1}$ These units count toward eligibility for admission. The units may not all apply toward certification of the corresponding GE-Breadth area. See Executive Orders 1033 and 1036 for details.
    ${ }^{2}$ Areas of GE Breadth (A1 through E) are defined in EO 1033. Areas of American Institutions (US-1 through US-3) are set forth in Sections IA and IB of EO 405, and at assist.org.
    3 If a student passes more than 1 CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of GE Breadth, as noted.

[^1]:    * = Course can only be used in one area (From AREA A to E).

[^2]:    * $=$ Course can only be used in one area (From AREA A to E).

[^3]:    CDES 112 F Teaching Peace 2 Units 36 hours lecture per term. This course provides an overview of peace education and a framework for creating environments and eurriculum that promote peace. Students gain skills in communieation, conflict management, the anti-bias perspective, promoting non-violence and community building. (CSU) (Degree Credit)

[^4]:    CRTV 030 F Media Industry Independent 1 Unit Contractor
    18 hours lecture per term. This course will present the basies of working as an independent freelance professional in the media industry. Subjects to be covered include choosing a business structure, basic business practice, handlling finances and taxes, marketing and managing your personal life. This course uses discussions and exercises, expert guest speakers and videotaped interviews with independent professionals from around the country. This course is designed for anyone who is thinking about, or currently working as an independent contractor in the areas of writing, producing, directing, technical crew or performing talent.

[^5]:    IDES 085 F Kitchen \& Bath Design
    2 Units
    Prerequisite: IDES 110 F with a grade of " C " or better.
    18 hours lecture and 54 hours lab per term. This course covers functional planning for the kitchen and bath. The emphasis is on layout, materials, appliances and fixtures, lighting and electrical planning, design character, construction and plumbing. This course also covers trends and career options. (Degree Credit)

[^6]:    SOSC 125 F Introduction to Research Methods
    (C-ID SOCI 120)
    Prerequisite: SOSC 120 F with a grade of "C" or better or MATH 120 F or MATH 120HF with a grade of " $C$ " or better. 72 hours lecture per term. This course examines fundamental elements of empirical research and the ways social scientists think critically. This course includes attention to the nature of theory, hypotheses, variables and ethics of research. Application of qualitative and quantitative analytic tools including logic and research design, such as survey, observational, experimental, case study, and comparative historical research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

