

## Dear Student,



Welcome to Fullerton College - where we pride ourselves as being one of the finest community colleges in the nation. The foundation of Fullerton College is its commitment to excellence. For nearly 100 years, the college has continued to build a rich tradition of excellence by expanding and creating academic opportunities for its community.

Fullerton College's strengths include excellence in academic and technical education, and diversified student life, complimented by exemplary, competitive athletics, activities and programs. Our faculty and staff are committed to assisting every single student in achieving their academic goals.

You will discover Fullerton College is a very unique place. A special relationship is established with all of our students, and this relationship lasts for a lifetime - Once a Hornet, Always a Hornet. I am pleased you have chosen to become a member of the Fullerton College family.

Fullerton College has a tremendous future which includes growth and prosperity. Fullerton College is what you, the students, make it. We wish you every success and enjoyment in the pursuit of your academic aspirations.


Rajen Vurdien, Ph.D., MBA
President, Fullerton

## North Orange County Community College District

1830 W. Romneya<br>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 lifelong 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. The District includes Cypress College, Fullerton College, and the School of Continuing Education.
The District includes the following cities: Anaheim, Brea, 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 at large by registered voters residing in the District. The Chancellor is Dr. Ned Doffoney.

NOCCCD is part of the California Community College system, one of three segments of public post-secondary 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<br>Jeffrey P. Brown<br>Dr. Barbara Dunsheath<br>Leonard Lahtinen<br>Michael B. Matsuda<br>Molly McClanahan<br>Donna Miller<br>M. Tony Ontiveros<br>Chris Sanchez, Student Trustee, Fullerton College<br>Jennifer Caspellan, Student Trustee, Cypress College<br>Ned Doffoney, Ed.D., Chancellor<br>Rajen Vurdien, President, Ph.D., MBA, Fullerton College

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# CATALOG <br> 2011-2012 

## VOLUME XCVIII (Based on Years in Operation)

# Fullerton College <br> North Orange County Community College District 321 East Chapman Avenue <br> Fullerton, California 92832-2095 

(714) 992-7000

Telecommunication Device for the Deaf
(714) 871-9192

# www.fullcoll.edu 

PRICE $\$ 10$ Per Copy
(\$15 Mailed)

Fullerton College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges (WASC), http://www.acswasc.org/index.htm, 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.

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## 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 2011-2012 North Orange County Community College District

First Day of Classes — Fall Term ..... Mon, Aug 15, 2011
Labor Day Holiday ..... Mon, Sep 5, 2011
College Hour (12-1 pm) and Homecoming Celebration (10 am-1:30 pm) ..... Wed, Nov 2, 2011
Veterans' Day Holiday Fri, Nov 11, 2011
Thanksgiving Recess Thurs-Sun, Nov 24-27, 2011
Fall Final Exams Thurs, Dec 8
Last Day of Fall Term ..... Fri, Dec 16, 2011
Winter Recess Fri, Dec 23 - Mon, Jan 2, 2012
Winter Intersession Tues, Jan 3 - Sun, Jan 22, 2012
Martin Luther King Jr. Holiday Mon, Jan 16, 2012
First Day of Classes - Spring Term ..... Mon, Jan 23, 2012
Lincoln's Birthday Holiday ..... Fri, Feb 17, 2012
Presidents' Day Holiday Mon, Feb 20, 2012
Spring Recess ..... Mon, Apr 2 - Sun, Apr 8, 2012
College Hour (12-1 pm) and Festival of Diversity (10 am-1:30 pm)

$\qquad$
Thurs, Apr 26, 2012
Spring Final Exams Mon, May
Memorial Day Holiday ..... Mon, May 28, 2012
Commencement Wed, May 30, 2012
Last Day of Spring Term ..... Wed, May 30, 2012
First Day of Summer Term Mon, June 4, 2012
(Tentative)

All calendar dates are subject to change without notice.

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Fullerton College Administration
President Dr. Rajen Vurdien, Ph.D.
Vice President, Student Services Toni DuBois, Ph.D.
Vice President, Instruction Terrence Giugi, Ph.D.
Vice President, Administrative Services Michael Perez, M.A.
Dean, Admissions and Records Albert Abutin, M.S.
Dean, Business \& Computer Info Systems Ann Hovey, Ed.D.
Dean, Counseling and Student Development Lisa Campbell, M.P.A.
Dean, Fine Arts Robert Jensen, Ed.M.
Dean, Humanities Dan Willoughby, M.S.
Dean, Library Jackie Boll, M.S.
Dean, Mathematics and Computer Science Mark Greenhalgh, M.A.
Dean, Natural Sciences (Interim) Carol Mattson, Ed.D.
Dean, Physical Education (Interim) Susan Beers, Ed.D.
Dean, Social Sciences Daniel Tesar, M.A.
Dean, Student Support Services Robert Miranda, M.P.A.
Dean, Technology and Engineering Scott McKenzie, M.A.
Director, Distance Ed and Academic Computing Technologies VACANT
Director, Academic Support Center Olivia Veloz, M.B.A.
Director, Bookstore Nick Karvia, B.A.
Director, Cadena/Transfer Center Lily E. Espinoza, Ed.D.
Director, Campus Safety
Christine D. Kiger, M.S.N.
Director, Disability Support Services and Veterans Paul McKinley, M.S.
Director, Financial Aid \& Student Services Greg Ryan, M.A.
Director, Institutional Research Kenneth Meehan, Ph.D.
Director, Physical Plant and Facilities Christine Fighera, B.S.
Director, Office of Special Programs Karen Rose, M.S.
Director, Student Activities Darlene Jensen, M.A.
Registrar Rena Negrete, B.A.
Manager, Campus Accounting Cyndi Grein, B.S.
Manager, EOPS (Interim) Andre Strong, M.A.
Manager, Instructional Technology Services ..... Robert Morison
Manager, International Students Program Pilar Ellis, M.S.
Manager, Maintenance and Operations ..... Javier Sierra, B.A.
Manager, Systems Technology Services Co Ho, M.B.A.
Public Information Officer Andrea Hanstein, M.A.

## Instructional Divisions and <br> Departments

Business and Computer Information Systems
Bldg 300, Room 310-714.992.7032
Dean: Ann Hovey
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)
Disability Support Services, Bldg 800, Rm 842, 714.992.7099
Student Services (STSV)
Veterans Resource Center, Bldg 500, Room 518, 714.992.7102

## Fine Arts

Bldg 1100, Room 1115 - 714.992.7034
Dean: Bob Jensen (Office 1115)
Email: rjensen@fullcoll.edu
Website: finearts.fullcoll.edu
Art (ART)
Art Computer Graphics (ACG)
Music (MUS)
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)
Russian (RUSS)
Spanish (SPAN)
Vietnamese (VIET)
Reading (READ)
Speech (SPCH)

## Library Technology

BIdg 800, Room 823 (LLRC) - 714.992.7039
Dean: Jackie Boll
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: Carol Mattson (Interim)
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)
Physical Sciences (PHSC)
Physics (PHYS)
Physical Education
Bldg 1200, Room 1206 - 714.992.7045
Dean: Susan Beers (Interim)
Websites: pe.fullcoll.edu, sports.fullcoll.edu
and http://dance.fullcoll.edu
Physical Education Activities and Theory (PE)
Dance (DANC)
Recreation (REC)
Wellness (WELL)

## Social Sciences

Bldg 1400, Room 1415 - 714.992.7047
Dean: Dan Tesar
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)

Student Support Services<br>Bldg 2000, Room 2020-04 - 714.992.7090<br>Dean: Robert Miranda<br>Associated Students EOPS<br>Financial Aid<br>Health Services<br>Student Affairs<br>Bldg 200, Rm 222 714.992.7118<br>Bldg $2000 \quad$ 714.992.7097<br>Bldg $100 \quad$ 714.992.7091<br>Bldg 1200/ 714.992.7093<br>Rm 1204<br>Bldg 200, Rm 223 714.992.7095

Technology and Engineering
Bldg 1000, Room 1005 - 714.992.7051

## Dean: Scott McKenzie

## Website: techneng.fullcoll.edu

Administration of Justice (AJ)
Architecture (ARCH)
Automotive Technology (AUTO)
Cinema-Radio-Television (CRTV)
Communications
Construction Technology (CSTR)
Cosmetology (COSM)
Industrial Drafting (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 for 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 more than 22,000 students each semester and employs 308 full-time faculty members and approximately 460 adjunct faculty members along with 285 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 to 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, 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-Thurs: 8:00 am to 5:00 pm and Fridays 8:00 am to 2:00 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 non-members of the credit union co-op.

## Corrections to Student Information

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

Date of birth and social security number corrections are submitted to the Admissions and Records Office. Documentation substantiating correction may be required.

## Military Experience Credit

[^1]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' Affairs Office.

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 outside of the U.S. must submit complete applications by July 1 (Fall) and November 15 (Spring). F-1 visa holders currently in the U.S. must apply by July 15 (Fall) and December 1 (Spring). A $\$ 40$ non-refundable application fee is required for processing.
2. F-1 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 SEVIS regulations, failure to do so will be reported to the U.S. Immigration and Customs Enforcement and status will be terminated.
4. Enrollment of $\mathrm{F}-1$ visa students is limited to a maximum of six semesters.
5. Criteria for admission of F-1 visa students:
a. The applicant must demonstrate English proficiency as indicated by a minimum TOEFL score of 500 (pBT) or 61 (iBT), an IELTS score of Band 5, or an iTEP score of Level 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 official 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. Official bank statements must be translated into English and represent American currency.
d. Applicants must submit original or certified 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"x2" 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. Immigration and Customs Enforcement. 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 front and back of 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-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. These students are limited to enrollment, which will not exceed two classes and when combined equal no more than seven units. 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.

## F-2 Visa Regulations

U.S. Federal Code states that "an F-2 spouse or F-2 child violates his/her non-immigrant status by engaging in full time study. The F-2 spouse and child of an F-1 student may engage in study that is avocational or recreational in nature." F-2 visa holders are encouraged to speak directly with the International Student Center regarding their legal enrollment at Fullerton College and a possible change of non-immigrant status.

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 F -1 status.

## All Visas

Visa regulations subject to change.

## Matriculation

Matriculation is a process by which the student and the college come into an agreement in order to identify and achieve the student's educational goals. In compliance with the State MatricuIation Mandate (AB-3), and Fullerton College's long-standing 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 ONE OR MORE MATRICULATION REQUIREMENTS WHEN THEY PROVIDE PROOF OF ONE OF THE FOLLOWING:

A. Completion of an AA degree or higher at an accredited college or university.
B. Completion of college coursework in English and math with a grade of "C" or better.
C. Scores from approved assessment tests taken within the last two years.
D. Enrollment in one job related or performance based class (e.g., music).
E. A matriculated student at another college enrolling in one non-English or math class.
F. A high school Special Admit student not intending to take math, reading or English classes.

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 Admissions and Records and Counseling offices. 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. Skills Assessment - students will receive an evaluation of their learning skills in reading, writing, English as a Second Language (ESL) and mathematics. 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.
2. 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.
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. On-line counseling is available to students seeking answers to general questions about policies and procedures, program requirements, prerequisites, course offerings, services and transferability of courses. On-line counseling may be reached through the counseling department homepage at http:// counseling.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 107AF Harmony I is required when enrolling for MUS 104AF 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 for a course that is not offered 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

Matriculated students have responsibilities, which include the following:

1. To express a broad educational intent upon admission.
2. To declare a specific educational goal no later than during the term after which the student completes 15 semester units. The student shall then have 90 days in which to develop a Student Educational Program Plan (SEPP).
3. To participate in counseling/advising.
4. To attend class, complete assignments and maintain progress toward a goal.

If you have any questions regarding the above Matriculation information, please 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 CCCApply. 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. Priority appointment times are issued to continuing students by total units completed at Fullerton and Cypress colleges. For new and former (returning) students, registration appointments are based on date of application. Special Admit students are not eligible for priority registration.

| Continuing Student: | Currently enrolled at Fullerton <br> College and will receive a <br> grade. |
| :--- | :--- |
| Former (Returning) Student: | Previously attended Fullerton <br> College or currently enrolled <br> but will not receive a grade. |
| New Student: | Never enrolled in classes at <br> Fullerton College. |
| Special Admit Students: | K-12 grade level students <br> concurrently enrolled at <br> Fullerton College. |

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 mean that the student will not be 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. A student who does not submit adequate information to establish the right to classification as a California resident will be classified as a nonresident.

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 one year prior to the residence determination date, coupled with proof of the intent to make California one's home.

## 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.

- Proof of employment (paycheck stub) in California, along with filing California State Income taxes as a resident
- Possessing a valid California Driver’s License
- Registering a vehicle in California
- Voting in California
- Owning residential property in California and currently residing on that property
- Being licensed to practice a profession in California
- Having an active checking and/or savings account in a California bank
- Showing California on military records (DD214, Military Orders, Leave and Earnings Statement)
- Possessing a divorce decree issued in California
- Having paid nonresident tuition in another state


## Exceptions to Residency Requirements

Several exceptions to the residency rules apply per Education Code. They include, but are not limited to the following:

- Active duty military personnel stationed in California
- Dependents of active duty military stationed in California
- Certain minors who remained in California when parents moved
- Self-supporting minors
- Full-time employees of California State University and Colleges, the University of California, or any California Community College, or State of California agency, or a child or spouse of the full-time employee


## Nonresident Student

A student's resident status is determined at the time of application. A nonresident student must pay nonresident tuition in addition to the enrollment fee and other fees (including a \$20 Capital Outlay Fee per Education Code 76141) for credit classes.

## Assembly Bill AB 540

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 nonresident tuition in California's colleges and universities.

## Who Qualifies?

- An alien student who is without lawful immigration status (undocumented, out of status).
- A U.S. Citizen or Permanent Resident card holder who does not meet the California residency requirement.


## Requirements

- Student attended a high school (public or private) in California for 3 or more years.
- Student graduated from a California high school or attained the equivalent (for example, passing the GED, California High School Proficiency Exam, or Certificate of Completion) prior to the start of the term.
- All qualified students who are without lawful immigration status must file an affidavit with the college stating that he/she has filed an application to legalize his/her immigration status, or will file an application as soon as he/she is eligible to do so.
- All students who do not meet the California residency requirements and are eligible for this exemption must file an affidavit with the college.

The affidavit is included in the California Nonresident 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 AB 540 exemption (Revised Guidelines for Implementation of AB 540 — Firebaugh, October 23, 2003).

## 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/not enrolled in school, enrolled in private school or home schooled students:

Persons attending a Home School Program or persons under 18 years of age who are not high school graduates and are not currently enrolled in school may be eligible as Special Admit students with the following exceptions:

- 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 as a Special Admit student at Fullerton College
- Home School programs must be accredited by Western Association of Schools and Colleges from Grades 9-12
- Obtain College President's signature, or designee
- 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 12-18 units) must pay enrollment and health fees.

## Students on F-1 and F-2 visas are not eligible to enroll as Special Admit students.

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 and Records Office at (714) 992-7075 or the Counseling Division at (714) 992-7010.

## Student Fees

- Fees are subject to change
- Fees are payable by cash, check, MasterCard or Visa

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 Affairs and 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 $\$ 2.50$. 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 \$2.50.

## Course Fee

These fees are noted in the class schedule.

## Enrollment Fee

The enrollment fee is $\$ 36$ 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 $\$ 17$ Health Fee per semester (\$14 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.

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 tuition fee of \$208 per semester unit for the 2011-2012 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 |
| $\$ 20$ (all terms) | Students with BOGW Fee |
|  | Waiver |

Pay fee 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 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.

## Fullerton College Transcripts

The Admissions and Records Office prepares and permanently retains a record of each student's academic work. A student's transcript reflects all academic work attempted at Fullerton College. It lists chronologically the courses, units, grades, cumulative grade point average, transfer credits (posted after graduation), and total units.

Transcripts may be requested via electronic/web, mail or in-person. Fax, phone and e-mail requests are not accepted.

For your convenience, utilizing our electronic service is a fast and easy way to order your transcripts. Electronic transcripts are sent within minutes of submitting the request online. Log on to myGateway, go to "Student Links" and click on "Student Records" for more information. You can also visit the Admissions and Records website at www.admissions.fullcoll.edu.

Transcripts can be ordered by web (online) through myGateway. Processing time for web requests is $7-10$ business days (PLUS mailing time). Rush is not available for this service. Visit the Admissions and Records website for complete instructions.

Transcripts requested via mail or in-person for current/past students will be processed in 10-15 business days (PLUS the mailing time). You may request your transcripts in person at the Admissions and Records Office or visit our website to download the transcript request form. Mail in requests must include the following: (1) student's current name and ALL names used in the past, (2) current address and phone number, (3) date of birth, (4) social security number (optional), (5) approximate dates of attendance, (6) mailing address where transcript is to be sent, (7) number of copies, (8) student's full signature, and (9) transcript fee. Send requests to Fullerton College, Admissions and Records Office, 321 E. Chapman Avenue, Fullerton, CA 92832.

Students who have completed the General Education Certification 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. Transcripts will be processed accordingly once received.

Students are entitled to two (2) free copies of their transcripts. Subsequent copies are $\$ 3$ per copy. (Note: Fee is subject to change at any time.) On Demand/Rush transcripts can be obtained for an additional \$10 PLUS the transcript fee.

Transcript requests must include full payment to be processed. A HOLD on a student's records may prevent Admissions and Records from processing a transcript request. If a student has outstanding financial obligations to the college, a transcript request will not be processed. Fullerton College accepts credit cards (Visa/MasterCard), check/money order and cash as form of payments. Cash payments may be made at the Admissions and Records office but are not recommended to be sent through the mail.

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 and may be obtained immediately online, by logging into myGateway.

Third party verifications may be obtained through www. studentclearinghouse.org for a fee of $\$ 3.00$.

In rare occasions where a verification form must be completed by the Admissions and Records Office, a fee of $\$ 3.00$ per request will be charged. Rush requests are an additional \$10. Photo ID is required for service.

Verifications for loan forms are processed in the Financial Aid Office.

## 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.

## Honors at Graduation

Students whose cumulative grade point average (excluding non-degree 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 from other colleges will be used in computing grade point average at graduation.

## 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.

## Acceptance of Transfer Credits

Evaluation of other college coursework must be requested by students through the Fullerton College Counseling Department. 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, NASC, NCA, NEASC-CIHE, 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. Units will not be counted toward the major. Grades from upper division courses will not be used when calculating the GPA.

## Adding or Dropping a Class


#### Abstract

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 from an instructor, it is the student's responsibility to process the add using myGateway on or before the deadline. Failure to do so will result in not being officially enrolled in the class.


A student will not be permitted to add a new full-term course after the end of the third week of school. For adding short-term courses (less than a semester in length) or late-start 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 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. However, it is the student's responsibility to officially drop the class. Do not rely on instructor to drop the class. 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 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 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, it is the student's responsibility to officially drop the class. The student must log onto myGateway and drop the class. 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 a "Petition to Audit" form in the Admissions and Records Office no later than the add deadline of the course. 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 and Records Office for current information. 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.)

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. A student may, with counselor's approval, carry a load of 20 or more units if, during the preceding semester, an average of at least 3.0 for each unit of credit in a total program of 12 or more units was earned.

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

Associated Students Elected Office: 9 units per semester
Athletic Eligibility: Full time: 12 units including P.E. classes
Veterans Benefits - Full time: 12 units per semester; 3/4 time: 9 units per semester; 1/2 time: 6 units per semester.

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 a week in study and homework. Thus, a full load of 15 units plus study time may require 45 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 three hours (one in class and two 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. However 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)

## SKILL, PERFORMANCE, OR ACTIVITY

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 be offered as repeatable courses.

Each such repetition of a course must be designated to create a discernibly higher level of achievement such that the academic progress is clearly defined and the grading standards increase substantially with each repetition.

The course description will indicate whether a course may be repeated and the number of times it may be repeated.

A student may take the repeatable course for credit for up to 4 times or the number of times the college has specified.

Repetition of classes to meet legally mandated training requirements is allowed.

## 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).

## WITHDRAWAL

Effective July 1, 2009, per Section 55042 of the Education code, students shall not be allowed to enroll in the same course in which they have previously received four "Withdrawals" within the college district.

## 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. A student who has previously audited a course cannot earn credit by examination.
8. Students must pay enrollment and health fees.
9. Students on fee waivers must pay the enrollment fees for credit by examination.
10. 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

At Fullerton College, Distance Education courses are offered as an alternative method of learning. Distance education is defined as "instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology." Title 5 § 55200

Distance Education courses provide students with quality instruction, while at the same time offering convenience and flexibility. Courses may be accessed on and off campus. Delivery options include:

Online - This is a course offered primarily or mostly online. Note: Some instructors also require coming to campus for orientation and/or testing.

Hybrid - This is a course that combines some percentage of class time online and some percentage of class time on campus.

TeleWeb - This is a course that combines cable television broadcasts, online technologies, and some campus attendance.

Students who take Distance Education courses are expected to access and use email, be comfortable navigating the Internet, and use a computer that meets certain technical requirements. NOTE: Computers are available on campus for registered students' use.

Transfer institutions generally accept Distance Education courses. However, students wishing to use an online, hybrid, or teleweb course for a specific transfer requirement should consult a counselor.

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.

## Evening and Weekend College

The evening and weekend course offerings of the college provide an opportunity for students to pursue their education in the late afternoon, evenings, and on weekends. Requirements for most two-year vocational majors or for the lower-division transfer programs of most four-year colleges can be completed. The faculty is selected from the regular college staff and from highly qualified practitioners who are employed part time by the college to teach in their specialty.

Evening and weekend college classes are a part of the regular college program and carry the usual college credit for degree and residence purposes. Students may enroll in day or evening classes, or both, as their needs dictate. All evening and weekend classes are planned and supervised by the regular administrative staff of the college.

## 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 <br> Satisfactory | 1 |
| 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 |
|  | Wo 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 | Grade <br> Points |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 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 130 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 $\mathbf{P}$ (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 "l" symbol being entered in the student's record. The condition of removal of the "l" 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 "l" is made up or the time limit has passed. A final grade shall be assigned when the work stipulated has been completed and evaluated or when the time limit for completing the work has passed.

The "l" must be made up no later than one year following the end of the term in which it was assigned. The "I" 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 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, or I.

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. Nondegree courses do apply toward residency, athletic eligibility, work study and financial aid, veterans 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) 992-7370 or visit our website at http://honors.fullcoll.edu.

## Learning Communities

Learning Communities are classes that work together and often use common themes, readings and assignments. Classes often meet General Education and transfer requirements. Instructors work closely together so learning becomes relevant and fun. Students learn in a friendly and supportive environment that promotes success.

## 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: 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 010 F, MATH 015 F, MATH 020 F, MATH 030 F, READ 027 F, READ 036 F, READ 056 F, READ 096 F, STSV 071 F, STSV 072 F, STSV 075 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


#### Abstract

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 Changes 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.

## 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 714-992-7145 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 nonparticipation 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 fourth 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 fourth week through the fourteenth week of the semester.
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 previouslyrecorded 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 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, 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 Affairs 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 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 in the end-of-term course grade report. Students have access to their end-of-term grades. These grades become a part of the 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 prior to being accepted by the Office of Admissions and Records. The Change of Grade form shall be completed and signed by the instructor, noting the basis for the change, and approved by the Division Dean.
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 change request has entered the formal process, it cannot be resolved informally.

## Nondiscrimination Statement

It is the policy of the North Orange County Community College District to provide an educational, employment, and business environment in which no person shall be unlawfully subjected to discrimination or sexual harassment, nor unlawfully denied full and equal access to the benefits of District programs or activities on the basis of ethnic group identification, national origin, religion, age, gender, race, color, ancestry, sexual orientation, marital status, or physical or mental disability as defined and prohibited by state and federal statutes. Any student who engages in unlawful discrimination or sexual harassment in violation of this policy will be subject to disciplinary action, which may include suspension or expulsion.

Students 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 District Director of Human Resources at (714) 808-4818 or the Office of Equity and Diversity at (714) 808-4819.

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: Jeffrey O. Horsley

Position: Vice Chancellor, Human Resources

| Address: | 1830 W. Romneya Drive <br>  <br> Anaheim, CA 92801-1819 |
| :--- | :--- |
| Telephone: | $(714) 808-4822$ |

## 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 Public Safety at (714) 992-7080. Except as may otherwise be required by law, all inquiries will be maintained in confidence.

## Afirmación Sobre No Discriminación

Las normas generales del North Orange County Community College District proveen un entorno educacional, laboral y comercial en el que ninguna persona es expuesta a la discriminación ni al acoso u hostigamiento sexual, como tampoco a ninguna vejación castigada por la ley, ni a negarle, contrario a la ley, acceso total y equitativo a los beneficios y actividades de los programas del Distrito, debido al grupo étnico al cual pertenece, nacionalidad de origen, religión, edad, género, raza, color, ancestros, inclinaciones sexuales, estado civil, o discapacidad física o mental, tal como lo definen y prohíben los estatutos estatales y federales. Todo estudiante que discrimine, acose u hostigue ilegalmente a otra persona, en contravención de las normas generales, quedará sujeto a que se tomen medidas disciplinarias contra esa persona, lo cual puede incluir suspensión o expulsión de este centro educacional.

Todo estudiante que crea ha sido objeto de discriminación ilícita, incluyendo acoso u hostigamiento, o que desee obtener información con respecto a las Normas Generales del Distrito sobre Discriminación llícita (District's Unlawful Discrimination Policy), debe comunicarse con la oficina del Director Distrital de Recursos Humanos (714) 808-4818 o la oficina de Equidad y Diversided (714) 808-4819.

La persona que mencionamos más adelante, ha sido designada por el North Orange County Community College District, como el Funcionario Responsable/Coordinador de la Sección 504/Derecho IX, ante quien se debe presentar la información para coordinar la investigación de todas las quejas de discriminación ilegal interpuestas, conforme a lo estipulado en la sección 59328 del Derecho 5 de las Reglamentaciones del Código de California, y para coordinar el acatamiento de la Sección 504 del Decreto de Rehabilitación de 1973 y del Derecho II del Decretote 1990 que ampara a los Americanos con Discapacidades, Derecho IX de las enmiendas de la educación de 1992, y responder a las quejas por discriminación relacionada:
Nombre: Jeffrey O. Horsley
Posición: Vice Chancellor, Human Resources
Dirección: 1830 W. Romneya Drive
Anaheim, CA 92801-1819
Teléfono: (714) 808-4822

## Victimas del Acoso u Hostigamiento Sexual

Aquellos estudiantes que sean víctimas de asalto sexual dentro del predio del Distrito o en algún sitio fuera del terreno o establecimiento universitario, bajo la responsabilidad del Distrito, o que busque información o ayuda con respecto a un asalto sexual, debe comunicarse con el Director de Servicios de Salubridad, Ilamando al teléfono: (714) 992-7093, o con el Director de la Seguridad Pública del Terreno Universitario, llamando al (714) 992-7080. Excepto como de alguna otra manera lo exija la ley, toda pregunta e información se mantendrá en la más estricta confidencialidad.

## 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 or at the Campus Safety Office.

Do not park in carpool slots or specially reserved spots. 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

Purchase a student parking sticker at the time of registration. If you have a DMV placard, you must display both the placard and a student parking sticker. If you do not have a DMV placard, you need to bring your student parking sticker to the Campus Safety Office (Building 1500) along with a medical verification of your physical disability including dates. They will assign you medical parking and provide you with information regarding where to park on campus.

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

## 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.

## Appeals Petition (Request to Exclude "D," "F,"

or "NP" Grades)
If a student previously received a "D," "F," "NC" or "NP" in a course taken at Fullerton College, and repeats the same course and earns a higher letter grade, the student may file an Appeals Petition (Request to Exclude "D," "F," "NC" or "NP" Grades). On repetition, the highest grade earned will count toward the grade point average and the remaining grade(s) will be discounted or forgiven. 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. The former grade(s) are not removed from the permanent record, but are noted and subtracted from the cumulative grade point average. (The college can provide no assurance that repeated courses will be treated in this way by other institutions.) This policy is retroactive and applies to identical courses taken at Fullerton College or at another regionally accredited college without any limitation as to the number of courses that can be repeated for this purpose. Appeals Petition (Request to exclude "D," "F," "NC" or "NP" Grades) can be obtained in the Admissions and Records Office.

## 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 1.75 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 continuing student who has been dismissed because of either poor academic achievement or poor progress may be considered for re-admission provided the student files a Petition for Re-admission at the Admissions and Records Office. Petitions for re-admission are available in the Admissions and Records Office. After the petition is reviewed by the Academic Standards Committee, the student will be notified by email of the decision.

A student who is readmitted will be placed on a probationary status and shall be required to maintain a cumulative grade point average greater than 1.75 and a semester grade point average of 2.00 . Failure to maintain the required probationary grade point average after re-admission from dismissal may lead to permanent dismissal from the College. Please note: If student is placed on academic or progress probation, the student will be dismissed the next semester if he/she does not follow the guidelines for being removed from Probation as stated above.

## 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, 760303, 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. If a student is uncomfortable speaking to the faculty or staff member, they have the right to have someone accompany them throughout the process.

## Formal

1. It is the student's responsibility to initiate the process. The college has a legal responsibility to deal directly with the student. Forms will be available in Division Offices.
2. Student should set up an appointment with the appropriate Dean or Director and submit the designated Complaint form.
3. If the student feels the issue is not resolved 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 the 100 building.
4. The student will be notified in writing after each formal step using the Student Complaint form available in Division Offices.

## Student Right-to-Know Act and Campus Security 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-toKnow Subscription Agreement." SRTK rates are based upon approximately three percent (3\%) of the student population.

## 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 statistics are currently available in the Campus Safety Department.

## Publication Requirements

It is mandatory that the statistics 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).

## 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 state wide. 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) for Fall 2008.

Campus Safety Institutional Security Policies and Crime Statistics

| Part 1 — Crime | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ |
| :--- | ---: | :---: | :---: |
| Aggravated Assault | 2 | 0 | 1 |
| Arson | 1 | 0 | 0 |
| Auto Theft | 6 | 11 | 0 |
| Burglary | 18 | 2 | 4 |
| Forcible Sex Offenses | 0 | 0 | 0 |
| Murder/Non-Negligent Manslaughter | 0 | 0 | 0 |
| Negligent Manslaughter | 0 | 0 | 0 |
| Non-Forcible Sex Offenses | 3 | 2 | 0 |
| Robbery | 0 | 1 | 0 |
|  |  |  |  |
| Special Category Arrest |  |  |  |
| Drug Abuse Violation | 5 | 4 | 16 |
| Hate Crimes | 0 | 0 | 0 |
| Liquor Laws | 1 | 1 | 3 |
| Weapons Possession | 0 | 0 | 2 |

## Safety for the Fullerton College Community

The information is published in accordance with the Jeanne Clery Disclosure of Campus Safety Policy and Campus Crime Statistics Act.

## Crime Reporting Procedures

Working together, campus safety at Fullerton College is everybody's business. No community, of course, can be totally riskfree in today's society. Students, faculty, staff and visitors are partners in creating an atmosphere that is safe and conducive to learning.

Fullerton College maintains a Campus Safety Department with personnel available 24 hours a day. A person may report any criminal action or any other emergency at any time, day or night, by calling (714) 992-7080 for the business line or (714) 992-7777 for emergencies. Students can also report in person to the Campus Safety Department located in Parking Lot C off Lemon Street at Fullerton College Drive. Emergency call boxes are located throughout the campus and will connect the caller directly to Campus Safety.

Persons can also report crime by contacting the Fullerton Police Department at (714) 738-6700, 237 W. Commonwealth Avenue, Fullerton, CA 92832.

## 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. All Fullerton College students and staff members have been issued ID cards which they may be asked to produce if there is a question about their authorization to be in a specific area.

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 permission and/or approval for necessary access.

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 to students through this document and through student publications. The Fullerton College Hornet newspaper is the student publication. Staff are informed through in-house memos or bulletins and regularly-published newsletters.

Another critical element of a campus safety program is training. Campus Safety, Student Health Services, and the Student Affairs 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. 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 and employees 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 Affairs

(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 223

For a complete Campus Safety Plan and/or more detailed information regarding the Students Right-to-Know and the Jeanne Clery Disclosure, visit the Fullerton College website: www.fullcoll.edu/ - click on Campus Safety; then click on Student Right-to-Know, OR, click on Student Affairs; then 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
International Student Library Materials/Fees
Registrar's Hold
Scholastic Dismissal
Special Admit Form
Transcript
Unpaid Balance

## Office to Contact

Bursar
Admissions and Records Bursar
Student Support Services
Financial Aid
International Student Center Library
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 that 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
E-mail: skillscenter@fullcoll.edu
Website: www.skillscenter.fullcoll.edu

- Individual instructional support for study skills, vocabulary improvement, critical thinking and writing
- Instructional support for courses in reading, English-as-a Second Language (ESL) and foreign languages. (Software, audio, and print materials available)
- With instructor approval, administer make-up exams for any Fullerton College course

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

- Free tutoring for most college courses by facultyrecommended tutors
- Walk-in tutoring for accounting, chemistry, physics, math (Monday-Saturday); appointment tutoring for most other academic subjects
- Inspiration software (for organizing ideas for any subject)
- Math Anxiety Workshop offered each fall
- 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

E-mail: writingcenter@fullcoll.edu
Website: www.writingcenter.fullcoll.edu

- Assistance with any academic writing projects in all disciplines, including transfer letters and scholarship application essays, whether for class or personal use
- Tutoring writing projects at any stage from brainstorming to final draft
- Both walk-in and by-appointment tutoring
- Frequent workshops on a wide variety of topics related to academic writing
- Computers available for academic use


## Admissions and Records

2000 Bldg, 1st Floor - (714) 992-7075 www.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 supportive contracts to students, faculty, administrators, and the community.

## Assessment/Orientation Center

## 500 Bldg, Rm 513 - (714) 992-7117 — staffwww.fullcoll.edu/gmenchaca

The Fullerton College Assessment Center offers required assessment in English, ESL, Reading, Math and Chemistry courses. No appointment needed, come to the center during operating hours to complete the assessment/orientation. A picture ID and a valid FC ID\# is required in order to take the assessment tests. Please allow 2 hours to complete the assessment/orientation process. Upon completion of the assessment and orientation, new students will be scheduled for a group advising session.

## 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-tolocate fashion by department, course numbers and CRN. In addition, extensive classroom and office supplies, study aids, college clothing, giftware, software at education discounts, small electronics, books, and snacks are available. During the semesters, the Bookstore is open Monday through Thursday 7:30 am to 7 pm , Friday 7:30 am to 3:45 pm. Special hours for breaks, holidays, rush periods, and inventory are posted in the Bookstore, on our website, bookstore.fullcoll.edu and on Facebook or call us at 714-992-7008. Go to our website for online ordering!

## Cadena Cultural Center

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

The Cadena Cultural Center is a dynamic department within the Counseling Division; the services provided are open to all students and staff. The Cadena Cultural Center supports the core values of the college to elevate excellence 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 action to enhancing multiculturalism at Fullerton College. The center offers students, faculty, and staff information about serving the needs of students from historically underrepresented groups such as African American, Native American, Latino/a, Asian/Pacific Islander, low income backgrounds, as well as undocumented immigrant students, Lesbian/Gay/Bisexual/ Transgender/Queer/Intersex/Questioning (LGBTQIQ) students. We encourage the entire campus community to attend and participate in the center activities and services.

Some activities and services offered through the Cadena Cultural Center include:

- Collaborations with faculty, staff, and student clubs and organizations; as well as campus committees and community members that provide a space for active dialog on diversity issues and self-empowerment
- Cultural celebrations, recognitions, and current events honoring diversity and culture
- Field trips to local cultural sites, museums and cultural exchanges
- Guest speakers to discuss issues of self-empowerment and ways to eradicate sexism, heterosexism, racism, ageism, bias regarding physical/mental ability, classism, monocultural ethnocentrism, religious domination, language discrimination, bias regarding immigrant status and other pertinent topics
- Listserv for our monthly e-newsletter providing the most recent center information and services
- Resource library with books, listings of scholarships, internships, and off-campus opportunities that promote transfer and cultural exchanges
- Seminars that address culture, diversity, and identity, in the context of student development, academic success, and lifelong learning
- Welcome services for historically underrepresented students, low income, AB540, LGBTQIQ and students who are the first in their family to attend college


## CalWORKs

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

The CalWORKs Program is designed for students who are receiving AFDC/Welfare. CalWORKs students are assigned to a CalWORKs Counselor who provides the guidance and support needed to meet both their academic goals and the requirements mandated by their County Social Worker. A team approach is used to advocate for student rights. Services include:

- Academic, career and personal counseling
- Child care grants for both on/off-campus child care providers
- Referral to both on/off-campus resources for basic needs and emergency support services (housing, utilities, mental health, shelter, etc.)
- Collaboration with on-campus programs in order to ensure student needs are met (DSP\&S; EOPS/CARE; Financial Aid; Skills Center, etc.)

In addition, students that are not currently receiving AFDC/ Welfare, but may be in the process of applying, are encouraged to schedule an appointment with a CalWORKs Counselor prior to applying through their local County office. Students will secure an overview of the CalWORKs Program requirements. Students that have been sanctioned and want information regarding how to cure their sanction are also encouraged to contact our office. Office hours: Mon-Thurs, $8 \mathrm{am}-5 \mathrm{pm}$.

## 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

Located in the College Center (200 Building), the Food Court offers several branded concepts including Grill 155, Ultimate Baja, La Vincita Pizza and Pasta, Stacks Deli, and a wide variety of grab-and-go items.

Stinger's Café, offering a variety of coffee drinks and grab-andgo sandwiches and salads, is located in the Historic Library Courtyard.

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

## CARE: Cooperative Agencies Resources of Education

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

CARE is an integral program of EOPS. It is designed to provide specific support services for single parent students who receive cash aid and are in the CalWORKS Program or deferred. Assistance is provided to ensure the opportunity for students to succeed and attain their educational goal. CARE offers the following services:

- Auto Repair Payment
- Academic Counseling
- Campus Orientation
- Special Theme Seminars and Workshops
- Book Grants (money for books)
- Bus Passes
- Child Care Referrals
- Educational Supplies
- Financial Aid Assistance and Scholarship Information
- Food Cards
- Life, Career and Academic Planning
- Monthly Gas Cards
- Parenting Workshops
- Social Services Referrals
- Tutoring


## Information on Eligibility

- 18 years of age or older
- Currently receive cash aid benefits
- EOPS eligible
- Have at least one child under fourteen years old
- Single head of household


## Career and Life Planning Center

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

The Career and Life Planning Center provides enrolled students with a comprehensive approach to career/life planning and development including a variety of resources and services such as:

- Individual and group counseling during non-registration periods to facilitate career exploration, career decision making, and career/life transitions
- Occupational and educational information utilizing internet programs (e.g. Fullerton College Career Planning System)
- Career-related assessment tools (e.g. Strong Interest Inventory ${ }^{\circledR}$, Myers-Briggs Type Indicator ${ }^{\circledR}$ )
- Special workshops and career exploration/planning courses for undecided students
- Career research assistance
- Extensive research library of career reference materials


## Child Development Center/ Lab School

1800 Bldg — (714) 992-7069 — ipearson@fullcoll.edu<br>(714) 992-7070 — tchiaromonte@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.

We are licensed by the State Department of Social Services, funded in-part by the State Department of Education, are a United Way 5 Star Quality Center and are accredited by the National Association for the Education of Young Children (NAEYC). We serve families without regard to sex, race, religion, ethnicity or sexual preference and make 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 and the Workforce Center. In addition, the division provides student development counseling and guidance courses in College Study Skills, Career Development and Educational Planning. (See course offerings under Counseling.)

The center also provides on-line counseling. This is a web based e-mail service through the Fullerton College website for students to ask general counseling questions. This service is not intended to take the place of our 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 - dsp.fullcoll.edu

The Disability Support Services (DSS) office offers 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.

Fullerton College's Disability Support Services 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 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 for you to receive services from DSS, you must:

1) Be currently enrolled as a Fullerton College student; and
2) Provide detailed documentation of your 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
- Priority registration
- Alternate media
- Notetaking assistance
- Interpreting services
- Learning disability assessment
- Assistive and adaptive technologies
- Adaptive computer and learning strategies classes


## EOPS: Extended Opportunity Program and Services

2000 Bldg, 2nd Floor - (714) 992-7097 - eops.fullcoll.edu
EOPS is a support services program designed to provide entry, retention and transition services for educationally and economically disadvantaged students. The support services are designed to assist and contribute to the student's success in college.

## Counseling Services

Experienced staff is 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.

## Escort Service

Escort service is available daily, Monday through Friday. Call ext. 27777 on any campus phone or by dialing *81 on any campus phone or (714) 992-7777 on any cell phone. Emergency phones are strategically located throughout the campus.

## Financial Aid

100 Bldg, Room 115 - (714) 992-7091 — 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. They 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 hopes to help 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."

ELIGIBILITY - Specific eligibility requirements vary from program to program. Please contact the office or access the website for the various State aid programs. 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 Bachelors 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 or passes a Federally-approved test
- Student must be an American 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.

## EXTENDED OPPORTUNITY PROGRAM AND SERVICES GRANT (EOPS)

A state funded program, awarded to students from limited income families.

## FEDERAL DIRECT SUBSIDIZED LOAN PROGRAM

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

To qualify for a State CAL GRANT A, B, or C, a student must be a California resident attending an eligible school or college in California, meet an early application deadline of March 2, and is based on GPA (as well as many other qualifying factors). A student can receive only one CAL GRANT, either CAL GRANT A, B, or C. (CAL GRANT A can only be received at a four-year institution.)

## BOARD OF GOVERNORS' ENROLLMENT FEE WAIVER

Provides three ways to help low-income students pay for the enrollment fee; eligibility requirements vary. This can be applied for online through the registration system.

## Pro-rata Refund Policy

In accordance with the Higher Education Act of 1995 as amended, Fullerton College will apply a pro-rata refund policy to all eligible students. As described in the applicable section of the federal regulations, 34 CFR 668.22 , pro-rata policy refunds will only be applied to students who completely withdraw on or before the $60 \%$ point of the semester. The $60 \%$ point of the semester at Fullerton College means the eleventh week in an 18-week semester.

A REFUND is defined as the unearned amount of institutional charges (i.e., books, supplies, living expenses, etc.) that must be returned to the student financial aid programs, other sources of aid or a student. A refund is the difference between the amount paid towards institutional charges and the amount the school may retain under the appropriate refund policy.

The refund period for full semester classes is the first two weeks of the semester, as cited in the Fullerton College catalog. After the second week, no refund can be made. For short term classes, refunds can be as early as the first or second day of classes. A $\$ 10$ processing fee will be deducted once each semester.

A REPAYMENT is the unearned amount of a direct disbursement of financial aid funds to a student that must be paid back. If the school determines that the student received a direct disbursement in excess of the educational living expenses he or she could have reasonably incurred while still enrolled, then a portion of the disbursement was not earned and must be repaid by the student to the financial aid program.

## Application Procedure

Students wishing to apply for financial aid should contact the Financial Aid Office as soon as possible. A single application form which is called a FAFSA ("Free Application for Federal Student Aid") is used for all financial aid. Students may access the website at www.fafsa.ed.gov. The application period for financial assistance for the 2011-2012 school year is January 1, 2011 through June 30, 2012. Priority funding will be awarded to those submitting completed files between April 1 and July 31 of each year.

## 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) 525-5651.

## Health Services

1200 Bldg, Room 1204 - (714) 992-7093 http://healthservices.fullcoll.edu

The Health Center provides health care and personal counseling to the students of Fullerton College. The Health Center 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 is 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 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 available to students is posted in the College Center, 2nd Floor, Room 223. 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 http://isc.fullcoll.edu isc@fullcoll.edu

The International Student Center (ISC) provides services to international students on the 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.

## Library Services (LLRC)

## 800 Bldg (LLRC) — (714) 992-7039 — library.fullcoll.edu

The library assists students, faculty, and staff 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 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.

Library Hours: Mon-Thurs: 7:30 am-9:00 pm - Fridays: 7:30 am1 pm - Saturdays: $10 \mathrm{am}-2 \mathrm{pm}$

## 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. Items can be claimed at the Campus Safety Department.

## Math Lab

800 Building, Room 807 - (714) 992-7140 http://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 enrolled in MATH 010 F, MATH 015 F, MATH 020 F, MATH 030 F, MATH 040 F, MATH 141 F and MATH 142 F can receive supplemental support services specific to their courses, textbooks and instructors. The Lab offers individual tutoring, CD and DVD lectures, computer tutorials, online homework programs, individual and group study locations, a place for make-up quizzes and tests to be administered, and provides students with access to textbooks. During the first week of classes each semester, students visit the Math Lab and receive class orientations explaining the services offered. Student attendance is required and 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.

## Puente Project

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

The University of California Puente Project is a Transfer-Ready Program that for more than 30 years has improved the collegeprep rate of tens of thousands of California's educationally disadvantaged students. Its mission is to increase the number of students who:

- Transfer and enroll in four-year colleges and universities
- Earn college degrees
- Return to the community as mentors and leaders of future generations

Students are guaranteed English and Counseling courses, receive one-to-one counseling, mentoring opportunities, participate in leadership conferences, social events, college field trips and professional networking.

## 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

## Service Learning

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

Service Learning provides the opportunity for students to connect the classroom to the community. The 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

College Center, 2nd Floor, Room 225 - (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 http://transfer.fullcoll.edu

The Transfer Center is a dynamic campus resource available to all Fullerton College students to help you 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 you explore, prepare, and succeed in your transfer plans. The Transfer Center can help you every step of the way! Services and activities include the following:

- Advisors for transfer exploration, admissions, and transitioning to a four-year institution
- Counselors available on a walk-in basis in the fall and spring semesters for course planning and clearances; career planning, academic success strategies, and any other professional counseling service
- University representatives available for scheduled appointments in the Transfer Center as well as contact information for any college or university representative
- Application assistance, i.e., application deadlines, personal statement review and preparation
- 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 collegerelated research
- Field trips to local colleges and universities such as CSUF, CSULB, UCLA, and USC, etc.
- Financial aid and scholarship information and listings
- Listserv for our monthly e-newsletter providing the most recent transfer information and services
- Major prerequisite information (guide sheets and internet sources)
- Resource Library of college catalogs and manuals to research your transfer options and major programs
- Seminars and workshops on transfer planning for UC/CSU/ Private/Out-of-State, Women's Colleges, Historically Black Colleges and Universities


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

College Center, 2nd Floor, Room 225 - (714) 992-7067 http://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.

## Veterans' Services

## 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.

## Veterans Academic Progress

A veteran student whose GPA falls below a 2.0 for one semester will be placed on Academic Probation and must submit a progress report to the Veterans Resource Center. If the veteran student continues to have a GPA below a 2.0 for two consecutive semesters they will no longer be able to receive educational benefits until a marked improvement has occurred. Please contact the Veterans Resource Center for more information.

## Transcripts

VA students must submit all of their official prior postsecondary transcripts (civilian) to be evaluated along with their second REQUEST form, and declare a program (major) for them to be evaluated. Military credit will be applied upon application for graduation only.

## Approved Majors and Transfer

Unless otherwise notified by SAA, all programs (majors) in this catalog are approved for the training of VA 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

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 would still be 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 Veteran's Center nor paid by the Veteran's Administration.

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


## Workforce Center

## 2000 Bldg — Room 2002 - (714) 992-7136 workforce.fullcoll.edu

The Workforce Center's goal is to educate students on the skills, attitudes, and experiences required to succeed in the workplace. We provide up-to-date information on employment opportunities, job-seeking techniques, employability skills, and business etiquette. The Center offers job placement services and resources to currently-enrolled students and alumni (within two years after graduation). The Center provides:

- Daily postings of full-time, part-time, temporary and seasonal employment opportunities
- Individualized assistance with resume and cover letter writing
- Mock interviews and interview techniques
- On-line resume, cover letter, and interview preparation and practice (password required)
- Workshops to improve employment skills
- Free resume faxing
- Resource materials on relevant job search and business etiquette topics
- Job Fairs each semester which connects hundreds of employers with FC students
- Computers to assist with job search

Students must register each school year by presenting their current student ID or a driver's license and class printout.

## Student Activities

## Associated Students

College Center - Room 222, 2nd Floor -<br>(714) 992-7118 - studentwww.fullcoll.edu/as

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 President, Recorder, Treasurer, Senators, Commissioners, Senate Members, and Inter-Club Council (I.C.C.) President. 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 pm in Room 227, College Center, 2nd Floor. All students and guests are welcome to attend.

Associated Students and Inter-Club Council provide a comprehensive 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 Monday at 1:30 pm in Room 227, College Center, 2nd Floor. All students and guests are welcome to attend.

Check the Associated Students Office (Room 222, College Center, 2nd Floor) or the Student Affairs 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 Bursar's Office or in Student Affairs (Bldg 200, Room 223/College Center, 2nd Floor). For more information on services and benefits offered, please see "Student Affairs and 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 (membership cards available in Student Center, Room 214)
- Free A.S. Student Handbook and Academic Planner
- 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, Festival of Diversity, college hours, educational programs, cultural events and more
- Free admission (or discount) to all Fullerton College Mainstage Theatre events
- Free admission (or discounted) to all home Fullerton College athletic events (excluding tournaments)
- Free Legal assistance
- Fullerton College Bookstore discounts as listed in the A.S. Student Handbook and Academic Planner
- 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 and Academic Planner)
- Instructional Funding
- Inter-Club Council
- 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)
- Pep Band
- Pep Squad/Dance Team
- Play pool, check out cue sticks, cue ball and board games in the Student Center Lounge
- Recycling and Sustainability Pilot Program
- 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
- A.S. Radio Station - pending
- Art shows and displays
- Athletics
- Campus newspaper and other student publications (beyond the basic class requirements)
- 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
- Inter-Club Council/Club involvement
- Music group activities - bands, choirs, ensembles
- Pep Band
- Pep Squad
- 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. In the more than ninety years since then, the College 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 fouryear 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 twelve 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 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 twelve 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 Directors or with the athletic academic advisor.

## Intercollegiate Athletics for Men

Sports in which Fullerton College fields teams for men include baseball, basketball, cross country, football, soccer, swimming, 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, 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 part-time 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 Pep Squad Training, are mandatory. For information, contact the Physical Education/Athletics Division at (714) 992-7045.

## Admission to Athletic Events

Students with an AS Card will be admitted free 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 Card

Campus Photo IDs may be obtained in the Student Center/ Room 214 of the College Center during the advertised hours. Areas/Services that require/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 Affairs 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 $\$ 2.50$ (amount subject to change) and is purchased only once during each student's tenure at Fullerton College. 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 and Academic Planner will be provided, upon the first-time purchase of the Campus Photo ID Card, as available.

## College Center

## College Center, 200 BIdg.

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 Affairs 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.

Students may pick up an application for permanent member ship in the Student Affairs 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 International Honor Society is the national scholastic honor organization for community colleges. In order to achieve Life Membership in Phi Theta Kappa International Honor Society, a student must have completed at least 12 hours of coursework leading to a degree and maintain a 3.25 GPA. For more information, contact Student Affairs (Room 223, College Center).

## Men and Women of Distinction

Each year the Student Affairs 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, theater, 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.

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 Affairs Office, Room 223, College Center, 2nd Floor, (714) 992-7095.

## Student Affairs

College Center — Room 223, 2nd Floor - (714) 992-7095 stuaff.fullcoll.edu

The office of Student Affairs provides leadership opportunities and practical learning experiences beyond the classroom. Student Affairs provides "hands on" experiences which complement students' educational, personal and professional goals, thus enhancing student success. Through a warm and welcoming atmosphere, Student Affairs 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 Affairs 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 Affairs staff. Some of these programs include Commencement, Men and Women of Distinction, the Student Affairs Marketplace and Teacher of the Year process. Literature to be distributed must be approved by the Director of Student Affairs. 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 8:00 pm Monday through Thursday and is closed Fri-Sun. 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 Affairs (714) 992-7095, stop by Room 223 of the College Center, 2nd Floor, or visit the Student Affairs website: 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.


## Academic Requirements

## Advanced Placement

Students who have attained a minimum score of " 3 " on College Board Advanced Placement Examinations may receive credit for those courses that are deemed equivalent to the courses offered by Fullerton College. It is the student's responsibility to petition for credit through the Admissions and Records Office. Once Advanced Placement credit is posted to the student's transcript, it cannot be removed.

NOTE: The posting of Advanced Placement 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 Drawing)
Biology (Score of 4)
Chemistry (Score of 4)
Chemistry (Score of 5)
Economics - Micro
Economics - Macro
English Language \& Comp
English Comp \& Literature
English Comp \& Literature
(Score of 4 or 5)
French (Language)
German (Language)
Government \& Politics (U.S.)
Government \& Politics
(Comparative)
History (U.S.)
History (European)
Mathematics: Calculus AB
Mathematics: Calculus BC
Mathematics: Statistics

Credit Allowed Units
ART 112 F and 113 F 6
ART 182 F 3
BIOL $101 \mathrm{~F} \quad 5$
CHEM $107 \mathrm{~F} \quad 5$
CHEM 111AF 5
ECON 101 F 3
ECON 102 F 3
ENGL 100 F 3
ENGL 100 F 3
ENGL 100 F and 102 F 6
FREN 101 F and 102 F 10
GERM 101 F and 102 F 10
POSC 100 F 3
POSC 215 F 3
HIST 170 F and $171 \mathrm{~F} \quad 6$
HIST 110 F and $111 \mathrm{~F} \quad 6$
MATH 150AF 4
MATH 150AF and 150BF 8
MATH 120 F 4

## AP Examination

Physics (B) (Score of 3 or 4)
Physics (B) (Score of 5)
Physics (C - Mechanics)
(Score of 5)
Physics (C - Elec \& Mag)
(Score of 5)
*Psychology (score of 4 or 5)
Spanish (Language)
Spanish (Literature)
CLEP Examination
College Composition Exam
(Score of 50 or higher)

| Credit Allowed | Units |
| :--- | :--- |
| PHYS 205 F | 4 |
| PHYS 205 F and 206 F | 8 |
| PHYS 210 F or 221 F | 4 |

(Fullerton College does not accept the College CompositionModular exam)

Equivalency for courses not listed above will be determined by the appropriate academic department.
*with a score of 3 on the AP exam, credit will be given if the High School Psychology course was completed with a "C" or better.

## Using Advanced Placement to Satisfy UC Eligibility and IGETC (2010-2011)

The University of California grants credit for all College Board Advanced Placement Tests on which a student scores 3 or higher. Students should be aware that college courses taken may duplicate the content of AP examination. In these cases, 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 Eligibility requirement or one IGETC area and the area 6A proficiency level as listed. In many cases, satisfaction of subject requirements or credit toward specific requirements is also awarded by the campuses. Consult 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.

| AP Subject Area | AP Score | UC Eligibility | Applicability (3 sem/ 4 qtr) | Total Quarter Units Awarded | Total <br> Semester Units Awarded | Limitations of Credit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ART: History of Art | 3,4,5 | UC-H | 3A/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+lab | 8 | 5.3 |  |
| CHEMISTRY | 3,4,5 | UC-S | 5A+lab | 8 | 5.3 |  |
| COMPUTER SCIENCE A | 3,4,5 |  |  | 2 | 1.3 |  |
| ECONOMICS: Macroeconomics | 3,4,5 | UC-B | 4B | 4 | 2.7 |  |
| Microeconomics | 3,4,5 | UC-B | 4B | 4 | 2.7 |  |
| ENGLISH: Language/Composition | 3,4,5 | UC-E | 1A | 8 | 5.3 | Maximum credit: 8 quarter/5.3 semester units for both English Lang/Comp and Lit/Comp |
| Literature/Composition | 3,4,5 | UC-E/UC-H | 1A/3B | 8 | 5.3 |  |
| ENVIRONMENTAL SCIENCE | 3,4,5 | UC-S | 5A+lab | 4 | 2.7 |  |
| GOVERNMENT/POLITICS: Comparative Government/Politics | 3,4,5 | UC-B | 4 H | 4 | 2.7 |  |
| U.S. Government/Politics | 3,4,5 | UC-B | 4H | 4 | 2.7 |  |
| HISTORY: European | 3,4,5 | UC-H/UC-B | 3B/4F | 8 | 5.3 |  |
| U.S. | 3,4,5 | UC-H/UC-B | 3B/4F | 8 | 5.3 |  |
| World | 3,4,5 | UC-H/UC-B | 3B/4F | 8 | 5.3 |  |

CSU SYSTEMWIDE CREDIT FOR EXTERNAL EXAMINATIONS (as of May 10, 2010)

| COLLEGE BOARD ADVANCED PLACEMENT TESTS | 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 ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AP Art History | 3 | 6 | 3 | C1 or C2 |  |
| AP Biology | 3 | 6 | 4 | B2+B3 |  |
| AP Calculus AB ${ }^{4}$ | 3 | 3 | 3 | B4 |  |
| AP Calculus BC ${ }^{4}$ | 3 | 6 | 3 | B4 |  |
| AP Calculus BC/AB Subscore ${ }^{4}$ | 3 | 3 | 3 | B4 |  |
| AP Chemistry | 3 | 6 | 6 | B1+B3 | F09 |
| AP Chemistry | 3 | 6 | 4 | B1+B3 |  |
| AP Chinese Language and Culture | 3 | 6 | 3 | C2 |  |
| AP Comparative Government \& Politics | 3 | 3 | 3 | D8 |  |
| AP Computer Science A ${ }^{4}$ | 3 | 3 | 0 | N/A |  |
| AP Computer Science AB ${ }^{4}$ | 3 | 6 | 0 | N/A |  |
| AP English Language | 3 | 6 | 3 | A2 |  |
| AP English Literature | 3 | 6 | 6 | A2+C2 |  |
| AP Environmental Science ${ }^{5}$ | 3 | 4 | 4 | B2+B3 | F09 |
| AP Environmental Science ${ }^{5}$ | 3 | 4 | 4 | B1+B3 |  |
| AP European History | 3 | 6 | 3 | C2 or D6 |  |
| AP French Language | 3 | 6 | 6 | C2 | F09 |
| AP French Language | 3 | 6 | 3 | C2 |  |
| AP French Literature | 3 | 6 | 3 | C2 | F09 |
| AP German Language | 3 | 6 | 6 | C2 | F09 |
| AP German Language | 3 | 6 | 3 | C2 |  |
| AP Human Geography | 3 | 3 | 3 | D5 |  |


| COLLEGE BOARD ADVANCED PLACEMENT TESTS | Passing <br> 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 ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AP Italian Language and Culture | 3 | 6 | 3 | C2 | F10 |
| AP Japanese Language and Culture | 3 | 6 | 3 | C2 |  |
| AP Latin Literature | 3 | 6 | 3 | C2 | F09 |
| AP Latin: Vergil | 3 | 3 | 3 | C2 |  |
| AP Macroeconomics | 3 | 3 | 3 | D2 |  |
| AP Microeconomics | 3 | 3 | 3 | D2 |  |
| AP Music Theory | 3 | 6 | 3 | C1 | F09 |
| AP Physics $\mathrm{B}^{6}$ | 3 | 6 | 6 | B1+B3 | F09 |
| AP Physics $\mathrm{B}^{6}$ | 3 | 6 | 4 | B1+B3 |  |
| AP Physics C (electricity/magnetism) ${ }^{6}$ | 3 | 4 | 4 | B1+B3 |  |
| AP Physics C (mechanics) ${ }^{6}$ | 3 | 4 | 4 | B1+B3 |  |
| AP Psychology | 3 | 3 | 3 | D9 |  |
| AP Spanish Language | 3 | 6 | 6 | C2 | F09 |
| AP Spanish Language | 3 | 6 | 3 | C2 |  |
| AP Spanish Literature | 3 | 6 | 6 | C2 | F09 |
| AP Spanish Literature | 3 | 6 | 3 | C2 |  |
| AP Statistics | 3 | 3 | 3 | B4 |  |
| AP Studio Art - 2D | 3 | 3 | 0 | N/A |  |
| AP Studio Art - 3D | 3 | 3 | 0 | N/A |  |
| AP Studio Art - Drawing | 3 | 3 | 0 | N/A |  |
| AP U.S. Government \& Politics | 3 | 3 | 3 | D2+US-2 |  |
| AP U.S. History | 3 | 6 | 3 | (C2 or D6) + US-1 |  |
| AP World History | 3 | 6 | 3 | C2 or D6 |  |
| COLLEGE LEVEL EXAMINATION PROGRAM (CLEP) |  |  |  |  |  |
| CLEP American Government | 50 | 3 | 3 | D8 |  |
| CLEP American Literature | 50 | 3 | 3 | C2 |  |
| CLEP Analyzing and Interpreting Literature | 50 | 3 | 3 | C2 |  |
| CLEP Biology | 50 | 3 | 3 | B2 |  |
| CLEP Calculus | 50 | 3 | 3 | B4 |  |
| CLEP Chemistry | 50 | 3 | 3 | B1 |  |
| CLEP College Algebra | 50 | 3 | 3 | B4 |  |
| CLEP College Algebra - Trigonometry | 50 | 3 | 3 | B4 |  |
| CLEP College Mathematics | 50 | 0 | 0 | N/A |  |
| CLEP English Composition (no essay) | 50 | 0 | 0 | N/A |  |
| CLEP English Composition with Essay | 50 | 0 | 0 | N/A |  |
| CLEP English Literature | 50 | 3 | 3 | C2 |  |
| CLEP Financial Accounting | 50 | 3 | 0 | N/A |  |
| CLEP French ${ }^{7}$ Level I | 50 | 6 | 0 | N/A |  |
| CLEP French ${ }^{7}$ Level II | 59 | 12 | 3 | C2 |  |
| CLEP Freshman College Composition | 50 | 0 | 0 | N/A |  |
| CLEP German ${ }^{7}$ Level I | 50 | 6 | 0 | N/A |  |
| CLEP German ${ }^{7}$ Level II | 60 | 12 | 3 | C2 |  |
| CLEP History, United States I | 50 | 3 | 3 | D6+US-1 |  |
| CLEP History, United States II | 50 | 3 | 3 | D6+US-1 |  |
| CLEP Human Growth and Development | 50 | 3 | 3 | E |  |
| CLEP Humanities | 50 | 3 | 3 | C2 |  |


| COLLEGE BOARD ADVANCED PLACEMENT TESTS | 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 ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CLEP Information Systems and Computer Applications | 50 | 3 | 0 | N/A |  |
| CLEP Introduction to Educational Psychology | 50 | 3 | 0 | N/A |  |
| CLEP Introductory Business Law | 50 | 3 | 0 | N/A |  |
| CLEP Introductory Psychology | 50 | 3 | 3 | D9 |  |
| CLEP Introductory Sociology | 50 | 3 | 3 | D0 |  |
| CLEP Natural Sciences | 50 | 3 | 3 | B1 or B2 |  |
| CLEP Pre-Calculus | 50 | 3 | 3 | B4 |  |
| CLEP Principles of Accounting | 50 | 3 | 0 | N/A |  |
| CLEP Principles of Macroeconomics | 50 | 3 | 3 | D2 |  |
| CLEP Principles of Management | 50 | 3 | 0 | N/A |  |
| CLEP Principles of Marketing | 50 | 3 | 0 | N/A |  |
| CLEP Principles of Microeconomics | 50 | 3 | 3 | D2 |  |
| CLEP Social Sciences and History | 50 | 0 | 0 | N/A |  |
| CLEP Spanish ${ }^{7}$ Level I | 50 | 6 | 0 | N/A |  |
| CLEP Spanish ${ }^{7}$ Level II | 63 | 12 | 3 | C2 |  |
| CLEP Trigonometry | 50 | 3 | 3 | B4 |  |
| CLEP Western Civilization I | 50 | 3 | 3 | C2 or D6 |  |
| CLEP Western Civilization II | 50 | 3 | 3 | D6 |  |
| INTERNATIONAL BACCALAUREATE (IB) |  |  |  |  |  |
| IB Biology HL | 5 | 6 | 3 | B2 |  |
| IB Chemistry HL | 5 | 6 | 3 | B1 |  |
| IB Economics HL | 5 | 6 | 3 | D2 |  |
| IB Geography HL | 5 | 6 | 3 | D5 |  |
| IB History (any region) HL | 5 | 6 | 3 | C2 or D6 |  |
| IB Language A1 (any language) HL | 4 | 6 | 3 | C2 |  |
| IB Language A2 (any language) HL | 4 | 6 | 3 | C2 |  |
| IB Language B (any language) $\mathrm{HL}^{7}$ | 4 | 6 | 0 | N/A |  |
| IB Mathematics HL | 4 | 6 | 3 | B4 |  |
| IB Physics HL | 5 | 6 | 3 | B1 |  |
| IB Psychology HL | 5 | 3 | 3 | D9 |  |
| IB Theatre HL | 4 | 6 | 3 | C1 |  |

${ }^{1}$ 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.
${ }^{4}$ 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 $\mathrm{B} 1+\mathrm{B} 3$ or $\mathrm{B} 2+\mathrm{B} 3$ of GE Breadth. Fall of 09 or later, those credits may only apply to $\mathrm{B} 1+\mathrm{B} 3$.
${ }^{6}$ 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.
${ }^{7}$ If a student passes more than one 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.
${ }^{8}$ The IB curriculum offers language at various levels for 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.

## Catalog Rights

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 selfunderstanding 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

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

If a student has taken courses at other colleges, official transcripts from all colleges must be on file in the Admissions and Records Office prior to graduation evaluation.

A maximum of 9 upper division units can be counted as elective units. Units will not be counted toward the major. 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 semester. Detailed information about the ceremony will be sent to all graduation candidates in early May. Diplomas are mailed approximately three months after graduation.

## Mathematics Proficiency Testing

Students who have previously attained an Associate's Degree where MATH 040 F or equivalent was not required, and who wish to complete general education requirements for an Associate's Degree at Fullerton College, must either successfully complete MATH 040 F , or score at an appropriate level on the Fullerton College Compass Math Placement Test within the last two years.

Students who have previously attained a degree whose mathematics requirement has no equivalent at Fullerton College may have the mathematics requirement waived by scoring at an appropriate level on the Fullerton College Compass Math Placement Test.

In either case, no units are given for passing the proficiency exam, 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 $\mathrm{A}, \mathrm{B}, \mathrm{C}$, 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 Compass Math Test may be taken only once in an attempt to waive the graduation requirement. Students wishing to take this examination should contact the Assessment/ Orientation Center.

## ASSOCIATE DEGREE GENERAL EDUCATION REQUIREMENT FULLERTON COLLEGE 2011-2012

## COUNSELOR ADVISING FORM

Twenty-four (24) units total minimum requirement - Three (3) units in each of the following eight (8) sub-categories.
NOTE: This list does not meet the requirements for UC or CSU transfer.
New courses for 2011-2012 are listed in Bold Italics.
Legend: C = Completed; IP = In Progress; R = Remaining

## AREA A: LANGUAGE AND RATIONALITY (6 units)

A1 - Written Communication (3 units)

$$
\text { BUS } 111 \text { F; ENGL } 100 \text { F or } 100 \mathrm{HF} \text {; JOUR } 101 \text { F }
$$

A2 - Analytical Thinking (3 units)
CIS 100 F, 111 F; CRTV 118 F; CSCI 123 F; ENGL 103 F or $103 \mathrm{HF}, 104$ F, 201 F; JOUR 110 F; MATH 120 F or 120HF; PHIL 170 F, 172 F; READ 142 F; SOSC 120 F; SPCH 100 F, 105 F, 120 F, 124 F, 135 F Also, MATH 120 F or 120 HF and SOSC 120 F may only be used in one area.

## AREA B: NATURAL SCIENCES AND MATHEMATICS (6 units)

B1 - Physical Sciences and Life Sciences (3 units)
Physical Sciences: CHEM 100 F, 101 F, 103 F, 107 F, 111AF; ESC 100 F, 101 F, 102 F, 103 F, 104 F, 105 F, 106 F, 116 F or 116HF, 120 F, 130 F or 130HF, 190 F; GEOG 102 F; PHSC 102 F, 103AF, 103BF; PHYS 130 F, 205 F, 210 F, 221 F; TECH 088 F
Life Sciences: ANTH 101 F or 101HF; BIOL 100 F (beg F 11), 101 F or 101HF, 102 F, 104 F, 108 F (beg F 11), 109 F, 141 F, 170 F, 222 F, 266 F (beg F 11), 268 F (beg F 11), 272 F (beg F 11), 274 F; ENVS 105 F, 106 F, 126 F; HED 140 F, 150 F; NUTR 210 F
B2 - Mathematics (3 units) Math Proficiency Exam (see catalog and/or counselor for information); BUS 151 F ; MATH 040 F or higher within the Math Division; SOSC 120 F; TECH 081 F.
Also, MATH 120 F or 120 HF and SOSC 120 F may only be used in one area.
AREA C: ARTS AND HUMANITIES (6 units)
C1 - Visual Arts, Music, Theatre and Dance (3 units)
ACG 108 F; ART 110 F, 112 F, 113 F, 114 F, 115 F, 116 F, 119 F, 120 F, 127 F, 150AF, 160 F, 179 F, 182 F, 185 F, 186AF, 187 F, 188 F, 189AF, 196HF, 210 F, 212 F, 213 F; CRTV 120 F, 121 F, 126AF, 126BF, 131 F; DANC 100 F, 101 F (beg F 11), 103 F, 105 F, 107 F, 111 F, 120 F, 210 F; ENGL 205 F, 206 F; FASH 242 F, 244 F; IDES 180 F; MUS 101 F, 102 F, 104AF, 106 F, 107AF, 113 F, 114 F, 116 F, 117 F, 118 F, 119 F, 120 F, 123 F, 138 F, 180 F, 196HF, 271 F, 273 F, 274 F, 281 F, 282 F; PHOT 100 F, 101 F, 111 F; THEA 100 F, 104 F, 106 F, 109 F, $127 \mathrm{~F}, 138 \mathrm{~F}, 151 \mathrm{~F}, 160 \mathrm{~F}, 161 \mathrm{~F}, 162 \mathrm{~F}, 196 \mathrm{HF}$; WOOD 110 F
C2 - Literature, Philosophy, Religion and Foreign Language (3 units)
ENGL 102 F or 102HF, 105 F, 203 F, 204 F, 205 F, 206 F, 207 F, 208 F, 210 F, 211 F, 212 F, 214 F, 218 F, 221 F, 222 F, 224 F, 225 F, 234 F or $234 \mathrm{HF}, 239 \mathrm{~F}, 243 \mathrm{~F}$ or $243 \mathrm{HF}, 245 \mathrm{~F}, 246 \mathrm{~F}, 247 \mathrm{~F}, 248 \mathrm{~F}, 249 \mathrm{~F}, 250 \mathrm{~F}, 251 \mathrm{~F}$, 252 F, 253 F, 254 F, 255 F; PHIL 100 F or 100HF, 101 F, 105 F or 105HF, 135 F, 160 F, 195 F, 200 F (beg F 11), 201 F (beg F 11), 202 F (beg F 11), 210 F (beg F 11), 250 F (beg F 11), 270 F (beg F 11); Foreign Language 101 F or $101 \mathrm{HF}, 102 \mathrm{~F}$ or $102 \mathrm{HF}, 201 \mathrm{~F}, 203 \mathrm{~F}, 204 \mathrm{~F}$
AREA D: SOCIAL AND BEHAVIORAL SCIENCES (6 units)
D1 - Social, Political and Economic Institutions (3 units)
ANTH 107 F, 209 F, 211 F; BUS 131 F, 162 F, 240 F, 241AF, 242 F; ECON 101 F or 101HF, 102 F or 102HF; ETHS $101 \mathrm{~F}, 129 \mathrm{~F}, 130 \mathrm{~F}$ (beg F 11), $131 \mathrm{~F}, 140 \mathrm{~F}, 170 \mathrm{~F}, 171 \mathrm{~F}$; GEOG 100 F or $100 \mathrm{HF}, 120 \mathrm{~F}$; 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 $113 \mathrm{HF}, 127 \mathrm{~F}, 151 \mathrm{~F}$ (beg F 11), 152 F (beg F 11), 154 F , 160AF (beg F 11), 160BF (beg F 11), 162AF, 162BF, 170 F or 170HF, 171 F or 171HF, $270 \mathrm{~F}, 275 \mathrm{~F}$ (beg F 11); POSC 100 F or 100HF, 110 F (beg F 11), 120 F, 150 F, 200 F, 215 F, 216 F, 220 F, 230 F, 275 F (beg F 11); SOC 102 F, 201 F, 277 F or 277HF, 285 F, 292 F
D2 - Social Behavior and Self-Understanding (3 units)
ANTH 102 F or 102HF, 103 F (beg F 11), 105 F; BUS 266 F; CDES 120 F, 140 F, 173 F, 201 F; COUN 163 F; GEOG 160 F; PSY 101 F or $101 \mathrm{HF}, 110 \mathrm{~F}, 120 \mathrm{~F}, 131 \mathrm{~F}, 139 \mathrm{~F}, 145 \mathrm{~F}$ (beg F 11), 202 F (beg F 11), 221 F, 222 F (beg F 11), 251 F (beg F 11) or 251HF (beg F 11); SOC 101 F or $101 \mathrm{HF}, 133 \mathrm{~F}, 225 \mathrm{~F}$ or $225 \mathrm{HF}, 275 \mathrm{~F}$ or 275HF; WMNS 100 F

## GRADUATION REQUIREMENTS FOR ASSOCIATE DEGREE

1. Completion of 18 or more units of specified course work in a major with a " C " or higher (see catalog for major course requirements).
2. Completion of 24 units of general education as shown above OR 39 units as stipulated by the CSU General Education Certification requirements OR 37-39 units as stipulated by the IGETC requirements. Courses appearing in more than one Area may only be counted in one Area.
3. Completion of one unit of physical education activity class; or PE 243 F or PE 266 F or WELL 242 F .
4. Completion of the Multicultural requirement (see reverse).
5. Completion of Reading requirement (see reverse).
6. Completion of additional units will be necessary in order to meet the total of at least 60 degree applicable units required for graduation. An overall grade point average of 2.0 (or better) is required.
"Equivalent Disclaimer" - Courses taken at another college must be equivalent to courses offered at Fullerton College.

| ASSOCIATE DEGREE GENERAL EDUCATION REQUIREMENT FULLERTON COLLEGE 2011-2012 |  |
| :---: | :---: |
| Multicultural Education Requirement |  |
| Beginning Fall Semester 1996, to meet this requirement, every student must complete one course from the following |  |
| AJ 278 F | Multicultural Issues in Administration of Justice |
| ANTH 102 F or | Cultural Anthropology or |
| ANTH 102HF | Honors Cultural Anthropology (beg F 06) |
| ANTH 105 F | Language and Culture (beg F 99) |
| ANTH 107 F | The Anthropology of Magic, Witchcraft and Religion |
| BUS 131 F | International Business (beg F 98) |
| BUS 242 F | International Business Law |
| CDES 110 F | Anti-Bias Perspective Seminar |
| CDES 201 F | Child in Home and Community (beg F 99) |
| CRTV 126AF | World Cinema to 1945 (beg F OO) |
| CRTV 126BF | World Cinema to 1946 to the Present (beg F 00) |
| DANC 210 F | Multicultural Dance in the U.S. Today (beg F 03) |
| ENGL 218 F | California Writers (beg F 01) |
| ENGL 224 F | World Literature through the Early Modern Period |
| ENGL 225 F | World Literature since the Early Modern Period |
| ENGL 239 F | Survey of Children's Literature (beg F 97) |
| ENGL 243 F or | Folklore and Mythology or |
| ENGL 243HF | Honors Folklore and Mythology (beg F 06) |
| ENGL 247 F | Voices of America: Studies in Multicultural Literature |
| ENGL 249 F | Survey of Chicano/a Literature |
| ETHS 101 F | American Ethnic Studies |
| FASH 244 F | Ethnic Costume |
| FOOD 130 F | Cultural Aspects of Food |
| GEOG 100 F or | Global Geography or |
| GEOG 100HF | Honors Global Geography (beg F 97) |
| GEOG 160 F | Cultural Geography |
| HIST 110 F or | Western Civilization I (beg F OO) or |
| HIST 110HF | Honors Western Civilization I (beg F 06) |
| HIST 111 F or | Western Civilization II (beg F OO) or |
| HIST 111HF | Honors Western Civilization II (beg F 06) |
| HIST 112 F or | World Civilizations I (beg F 99) or |
| HIST 112HF | Honors World Civilizations I (beg F99) |
| HIST 113 F or | World Civilizations II (beg F 99) or |
| HIST 113HF | Honors World Civilizations II (beg F 99) |
| MKT 205 F | Multicultural Marketing in USA (beg F 03) |
| PE 250 F | Sport and the United States Society (beg F 99) |
| PHIL 105 F or | World Religions (beg F 98) or |
| PHIL 105HF | Honors World Religions (beg F 98) |
| PHIL 270 F | Introduction to Asian Religions (beg F 98) |
| POSC 200 F | Introduction to International Relations (beg F 11) |
| PSY 131 F | Cross-Cultural Psychology (beg F 03) |
| PSY 145 F | Child Psychology (beg F 97) |
| SOC 101 F or | Introduction to Sociology or |
| SOC 101HF | Honors Introduction to Sociology (beg F 03) |
| SOC 102 F | Social Problems (beg F 99) |
| SOC 275 F | Marriage and Family or (beg F 10) |
| SOC 275HF | Honors Marriage and Family (beg F 10) |
| SOC 277 F or | Sociology of Religion |
| SOC 277HF | Honors Sociology of Religion |
| SPAN 206 F | Introduction to Latin American Literature (beg F 03) |
| SPCH 120 F | Intercultural Communication |
| THEA 108 F | Multicultural Perspectives in American Theatre (beg F 03) |
|  | nt 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 satisfactory score on the reading component of the placement test 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; OR
3) A passing grade in ESL 185 F .


## PARALEGAL STUDIES 2011-2012

## Associate of Science (AS) Degree

An ABA-approved curriculum leading to an ASSOCIATE OF 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 $\mathbf{9}$ 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

PARALEGAL STUDIES CERTIFICATE requires the completion of $\mathbf{3 0}$ units of which $\mathbf{2 4}$ are in the required courses below. An additional 12 units must be chosen from the restricted electives listed below. A minimum grade of " C " is required in each course. All required courses must be completed at Fullerton College. Six units of "Restrictive Electives" may be transferred into the program; restrictions apply. (Students must also possess an AA, BA or higher degree from a regionally accredited college.) All students with an associate degree must have their transcripts evaluated for General Education requirements as listed in the GE requirements for an AS in Paralegal Studies.
Because we are an American Bar Association approved program, students who wish to transfer Paralegal Studies units earned at another regionally accredited institution into the Fullerton College Paralegal Program may only transfer in a maximum of six (6) Restrictive Electives, and must obtain prior permission from the Paralegal Department Coordinator or the Business Division Dean.

Required Courses ( 24 units; [15 units for students enrolled prior to Fall '06, 18 units for students beginning Fall '06])

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PLEG 101 F Introduction to Paralegal Studies (3)
PLEG 104 F Introduction to Legal Research and Legal Terminology (3) (formerly PLEG 103 F)
PLEG 105 F* Introduction to Legal Writing (3) (formerly PLEG 102 F)
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) [New Students Only]
PLEG 216 F Computers in the Law Office II (3) [New Students Only]
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Restrictive Electives (Take any 3-6 units; [9 units for students beginning Fall '06, 12 units for students enrolled prior to Fall '06])
PLEG $090 \mathrm{~F}^{*} \quad$ 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 $207 \mathrm{~F}^{*} \quad$ Computer Assisted Legal Research (3)
PLEG 208 F* Worker's Compensation Law (3)
PLEG 209 F* Criminal Law and Procedure (3)
PLEG 210 F* Internship Paralegal Studies (1-4)
PLEG 211 F* Real Property Law and Procedure (3)
PLEG 212 F* Medical Records Analysis for the Paralegal (1.5)
PLEG 213 F* Employment and Labor Law (3)
PLEG 214 F* Contract Law Procedure (3)
PLEG 215 F* Discovery in the Electronic Age (3)
PLEG 216 F Computers in the Law Office II (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)

## Recommended Electives

BUS 241AF Business Law (3)
CIS $100 \mathrm{~F} \quad$ Introduction to Personal Computer Applications (3)

* Requires completion of prerequisites before enrollment.

Students will be required to demonstrate keyboard proficiency of 45 words per minute if the student's catalog rights begin Fall 2006. Testing will occur in the Business Division office.
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.

[^2]
## PARALEGAL STUDIES 2011-2012 ASSOCIATE IN SCIENCE DEGREE 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.

DEGREE-ORIENTED PARALEGAL STUDENTS:
First Semester: Units:
PLEG 101 F Introduction to Paralegal Studies ..... 3
PLEG 104 F Legal Research and Terminology ..... 3
ENGL 100 F ..... 3
Beginning Computer or Typing Course (if necessary) ..... 3
Area B1 (Physical Sciences and Life Sciences) ..... 3-4
Area C1 (Visual Arts, Music, Theatre, and Dance) ..... 3
Total: ..... 18-19
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 ..... 4
Total: ..... 16
Third Semester:
9 Units of Restrictive Electives (090 F \& 200 F $^{*}$ level courses*) ..... 9
Area C2 (Literature, Philosophy, Religion, and Foreign Language) ..... 3-5
Area D2 (Social Behavior and Self-Understanding) ..... 3

* All 200 F level classes (except PLEG 216 F, PLEG 218 F, \& PLEG 225 F) require the successful completion ofPLEG 101 F \& 104 F. PLEG 105 F requires a minimum completion of PLEG 101 F, 104 F, \& ENGL 100 F beforea student is allowed to register.Please Note: PLEG 210 F has additional requirements.
Total: ..... 15-17
Fourth Semester:
Units:
PLEG 201 F Civil Litigation I (2) ..... 3
PLEG 202 F Civil Litigation II (2) ..... 3
P.E. Activity ..... 1
Additional PLEG or G.E. Course ..... 1-4
Optional: Students are encouraged to take1-4 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.
In choosing General Education courses, make sure one course meets the Multicultural Requirement.
NOTE: - Students must have a minimum of 30 units for the certificate.
- Students will have to demonstrate keyboard proficiency of 45 words per minute. Testing will occur inthe Business Division office.


## PARALEGAL STUDIES 2011-2012 <br> 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.

## CERTIFICATE-ORIENTED PARALEGAL STUDENTS:

## First Semester: <br> Units:

## PLEG 101 F Introduction to Paralegal Studies <br> 3

PLEG 104 F Legal Research and Terminology 3
ENGL 100 F (prerequisite for other courses)
3
Beginning Computer or Typing Course (if necessary) 3

Total: 12
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: <br> Units:

12 Units of Restrictive Electives (090 F \& 200 F* $^{*}$ level courses)
12

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

Total:

12

| Fourth Semester: | Units: |
| :--- | :--- |
| PLEG 201 F Civil Litigation I (2) | 3 |
| PLEG 202 F Civil Litigation II (2) | 3 |
| Additional PLEG or G.E. Course | $\mathbf{1 - 4}$ |
| Optional: Students are encouraged to take |  |
| 1-4 units of PLEG 210 F (Internship Course) |  |
| Total: | $\mathbf{7 - 1 0}$ |

(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.

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

- Students will have to demonstrate keyboard proficiency of 45 words per minute. Testing will occur in the Business Division office.


## Graduation Requirements

The Associate in Arts or the Associate in Science degree will 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 following list:

AJ 278 F, ANTH 102 F or ANTH 102HF (Beg F 06), ANTH 105 F (Beg F 99), ANTH 107 F, BUS 131 F (Beg F 98), BUS 242 F, CDES 110 F, CDES 201 F (Beg F 99), CRTV 126AF (Beg F 00), CRTV 126BF (Beg F 00), DANC 210 F (Beg F 03), ENGL 218 F (Beg F 01), ENGL 224 F, ENGL 225 F, ENGL 239 F (Beg F 97), ENGL 243 F or ENGL 243HF (Beg F 06), ENGL 247 F, ENGL 249 F, ETHS 101 F, FASH 244 F, FOOD 130 F, GEOG 100 F or GEOG 100HF (Beg F 97), GEOG 160 F, HIST 110 F (Beg F 00) or HIST 110HF (Beg F 06), HIST 111 F (Beg F 00) or HIST 111HF (Beg F 06), HIST 112 F (Beg F 99) or HIST 112HF (Beg F 99), HIST 113 F (Beg F 99) or HIST 113HF (Beg F 99), HIST 270 F (Beg F 02), MKT 205 F (Beg F 03), PE 250 F (Beg F 99), PHIL 105 F (Beg F 98) or PHIL 105HF (Beg F 98), PHIL 270 F (Beg F 98), PSY 131 F (Beg F 03), PSY 145 F (Beg F 97), SOC 101 F or SOC 101HF (Beg F 03), SOC 102 F (Beg F 99), SOC 275 F or SOC 275HF, SOC 277 F, SPAN 206 F (Beg F 03), SPCH 120 F, THEA 108 F (Beg F 03)

A student may use the Multicultural courses listed above to also meet a major or general education requirement for the Associate Degree. All students graduating after the year 2001 (beginning 2002) 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 satisfactory score on the reading component of the placement test 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 after the year 2002 (beginning 2003) will be required to complete the reading requirement, regardless of how their previous catalog rights were defined.

## Multiple Associate Degrees

1. Students may earn an Associate Degree 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 Associate Degree 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.

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 A.A./A.S. 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 lower-division 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. Four-year 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 upper-division.
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 


#### Abstract

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 ACADEMIC/ VOCATIONAL 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

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 2011-2012 

| Legend: $\mathbf{C}=$ Completed; IP = In Progress; $\mathbf{R}=$ Remaining |
| :--- |
| AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING (9 semester or 12-15 |
| quarter units). One 3 unit course required from each section. Grades of "C" or better are required. |

1. ORAL: SPCH 100 F, 105 F, 124 F, 135 F* $^{*}$
2. WRITTEN: ENGL 100 F or 100 HF
3. CRITICAL THINKING: ENGL 103 F or $103 \mathrm{HF}, 104$ F, 201 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 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. NOTE: Some colleges may require two lab courses if student is not fully certified.

1. PHYSICAL SCIENCE:

CHEM $100 \mathrm{~F}, 101 \mathrm{~F}, 103 \mathrm{~F}, 107 \mathrm{~F}, 111 \mathrm{AF}$, 111BF
ESC $100 \mathrm{~F}, 101 \mathrm{~F}, 103 \mathrm{~F}, 104 \mathrm{~F}, 105 \mathrm{~F}, 116 \mathrm{~F}$ or $\mathbf{1 1 6 H F}, 120 \mathrm{~F}, 130 \mathrm{~F}$ or $130 \mathrm{HF}, 190 \mathrm{~F}$
GEOG 102 F
PHSC 102 F, 103AF (beg Spr 07), 103BF (beg Spr 07)
PHYS $130 \mathrm{~F}, 205 \mathrm{~F}, 206 \mathrm{~F}, 210 \mathrm{~F}, \underline{211 \mathrm{~F}}, \underline{221 \mathrm{~F}, 222 \mathrm{~F}, 223 \mathrm{~F}}$
2. LIFE SCIENCE:

ANAT $231 \mathrm{~F}, 240 \mathrm{~F}$
ANTH 101 F or 101 HF

ENVS 105 F, 106 F, 126 F
HORT $152 \mathrm{~F}, \underline{205 \mathrm{~F}}$, 207 F
MICR 220 F, 262 F
3. LABORATORY ACTIVITY: ANTH 101LF; BIOL 102LF; ESC 100LF, 101LF, 116LF, 130LF; ENVS 105LF; GEOG 102LF
Underlined courses from Area B. 1 and B. 2 also satisfy the Area B. 3 Laboratory requirement.
4. MATHEMATICS/QUANTITATIVE REASONING: (Grade of " C " or better required).

MATH 100 F, 120 F or $120 \mathrm{HF}, 129 \mathrm{~F}, 130 \mathrm{~F}, 141 \mathrm{~F}$ or 141HF, $142 \mathrm{~F}, 150 \mathrm{AF}, 150 \mathrm{BF}, 171 \mathrm{~F}, 172 \mathrm{~F}, 250 \mathrm{AF}$, 250BF
PSY 161 F
SOSC 120 F, 121 F
AREA C: ARTS AND HUMANITIES (9 semester or 12-15 quarter units min.). At least one course is required from section 1 and section 2.

1. ART 110 F, 112 F, 113 F, 114 F, 116 F, 117 F, 118 F, 119 F, 120 F, 121 F, 150AF, 150BF, 174AF, 179 F, 182 F, 184 F, 189AF, 196HF, 212 F, 213 F
CRTV 120 F, 121 F, 126AF, 126BF, 131 F
DANC $101 \mathrm{~F}, 120 \mathrm{~F}, 210 \mathrm{~F}$
ENGL 208 F
MUS 101 F, 102 F, 106 F, 107AF, 110 F, 113 F, 114 F, 116 F, 117 F, 118 F, 119 F, 120 F, 135AF, 196HF
PHOT 100 F, 101 F
THEA 100 F, 104 F, $105 \mathrm{~F}, 127 \mathrm{~F}, 196 \mathrm{HF}$
2. ENGL 102 F or $102 \mathrm{HF}, 105 \mathrm{~F}, 203 \mathrm{~F}, 204 \mathrm{~F}, 205 \mathrm{~F}, 206 \mathrm{~F}, 207 \mathrm{~F}, 211 \mathrm{~F}, 212 \mathrm{~F}, 214 \mathrm{~F}, 218 \mathrm{~F}, 221 \mathrm{~F}, 222 \mathrm{~F}$,

224 F, 225 F, 234 F or $234 \mathrm{HF}, 239$ F, 243 F or $243 \mathrm{HF}, 245 \mathrm{~F}, 246 \mathrm{~F}, 247 \mathrm{~F}, 248 \mathrm{~F}, 249 \mathrm{~F}, 250 \mathrm{~F}, 251 \mathrm{~F}$, 252 F, 253 F
ETHS $130 \mathrm{~F}^{*}$ (beg F 02)
Foreign Language 101 F or $101 \mathrm{HF}, 102 \mathrm{~F}$ or $102 \mathrm{HF}, 201 \mathrm{~F}, 203 \mathrm{~F}, 204 \mathrm{~F}, 205 \mathrm{~F}, 206 \mathrm{~F}, 207 \mathrm{~F}$
HIST 110HF*, 111HF*, $112 \mathrm{~F}^{*}$ (beg F 02) or 112HF*, $113 \mathrm{~F}^{*}$ (beg F 02) or 113HF*, $154 \mathrm{~F}^{*}, 170 \mathrm{HF}^{*}, 171 \mathrm{HF}^{*}$, 270 F* (beg Spr 06)
PHIL 100 F or $100 \mathrm{HF}, 101$ F, 105 F or 105HF, 135 F, 160 F, 195 F, 200 F, 201 F, 202 F, 210 F, 250 F, 270 F THEA 109 F

* = Course can only be used in one area.


# CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION REQUIREMENTS FULLERTON COLLEGE 2011-2012 

| Legend: C = Completed; IP = In Progress; $\mathbf{R}=$ Remaining | C | IP | R |
| :---: | :---: | :---: | :---: |
| AREA D: SOCIAL SCIENCES (9 semester or 12-15 quarter units min.). Select from at least two different disciplines. Courses in Italics may be used to meet the U.S. History, Constitution and American Ideals Requirement. |  |  |  |
| AREA E: LIFELONG LEARNING AND SELF-DEVELOPMENT (3 semester or 4-5 quarter units min.). <br> BUS 101 F (beg F 11); CDES 120 F* (beg F 06); COUN 151 F, 163 F; HED 140 F; NUTR 210 F; PSY 120 F, 139 F; PE 248 F, 266 F; SPCH 120 F; WELL 230 F <br> One unit maximum: All Physical Education Activity courses (except PE 113 F ) including 1 unit maximum from: DANC 100 F, 102 F, 103 F, 104 F, 105 F, 106 F, 107 F, 108 F, 111 F, 113 F, 115 F, 116 F, 119 F, 122 F (beg F 08), 130 F, 132 F, 150 F (beg F 08), 151 F (beg F 08), 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. Government: POSC 100 F or 100 HF (required) and
(2) U.S. History ( 1 course required from the following): ETHS $101 \mathrm{~F}, 130 \mathrm{~F}+, 131 \mathrm{~F}, 160 \mathrm{~F}$; HIST $127 \mathrm{~F}, 162 \mathrm{AF}, 170 \mathrm{~F}$ or $170 \mathrm{HF}+$, 171 F or $171 \mathrm{HF}+, 270 \mathrm{~F}+$ (These units may also be used to meet 6 of the 9 -unit AREA $C$ and AREA D requirements if applicable). $+=$ Courses are also listed in Area C2.
Students who took an out-of-state Political Science course, please see a counselor.

## FULLERTON COLLEGE <br> 2011-2012 California State University General Education

IMPORTANT NOTE: Courses on this list are approved for the academic year 2011-2012 which begins with Fall Semester, 2011. This list is valid through Summer 2012. New courses for 2011-2012 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 2011-2012 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.

Revised 05/11 (Dr. Lee/Moon)

* = Course can only be used in one area.


## 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 |
| RUSS | 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 2011-2012 "IGETC" WORKSHEET

Completion of 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 2011-2012 which begins Fall Semester, 2011. This list is valid through Summer 2012. 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.

$$
\text { Legend: } \mathbf{C}=\text { Completed; } \mathbf{I P}=\text { In Progress; } \mathbf{R}=\text { Remaining }
$$

AREA 1 - ENGLISH COMMUNICATION: CSU 3 courses $=9$ semester units / 12-15 quarter units UC $\mathbf{2}$ courses = $\mathbf{6}$ semester units / 8-10 quarter units
1A English Composition: ENGL 100 F or 100HF (1 course required)
1B Critical Thinking - English 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 F• or $120 \mathrm{HF} \bullet, 130 \mathrm{~F}+, 141 \mathrm{~F}, 150 \mathrm{AF}+, 150 \mathrm{BF}, 171 \mathrm{~F}, 172 \mathrm{~F}$ (beg F 07), 250AF, 250BF; PSY 161 F (beg F 07); SOSC 120 F•, 121 F• (see a counselor)

- If MATH 120 F or 120 HF , or SOSC 120 F , or SOSC 121 F and PSY 161 F combined: maximum UC credit allowed $=1$ course. + If MATH 130 F combined with MATH 150AF: 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, 210 F
ENGL 205 F, 206 F, 208 F (beg F 09)
MUS 113 F, 116 F, 117 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:
ENGL 102 F or $102 \mathrm{HF}, 203 \mathrm{~F}, 204 \mathrm{~F}, 207 \mathrm{~F}, 211 \mathrm{~F}, 212 \mathrm{~F}, 214 \mathrm{~F}, 218 \mathrm{~F}, 221 \mathrm{~F}, 222 \mathrm{~F}, 224 \mathrm{~F}, 225 \mathrm{~F}$, 234 F (beg F 08) or 234HF, 239 F, 243 F or 243HF, 245 F, 246 F, 248 F, 249 F, 250 F, 251 F, 252 F, 253 F
ETHS $130 \mathrm{~F}^{*}, 160 \mathrm{~F}$
FREN 203 F, 204 F
GERM 203 F, 204 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 $113 \mathrm{HF}^{*}, 127 \mathrm{~F} \sim 151 \mathrm{~F}, 152 \mathrm{~F}, 154 \mathrm{~F}$, 160AF, 160BF, 162AF, 162BF, 165 F, 170 F~ or 170HF~, 171 F~ or 171HF~, 270 F* (beg Spr 06), 275 F
ITAL 203 F, 204 F
JAPN 203 F, 204 F
PHIL 100 F or $100 \mathrm{HF}, 101 \mathrm{~F}, 105 \mathrm{~F}$ or $105 \mathrm{HF}, 160 \mathrm{~F}, 195 \mathrm{~F}$
SPAN 201 F+, 203 F+, 204 F, 205 F, 206 F
$\sim$ Credit will be granted for either HIST 127 F OR HIST 170 F or HIST 170 HF and HIST 171 F or HIST 171HF. Also courses used to meet American Institutions will not meet Area 3B category.
* Course can only be used in one area.
+ 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 102HF, 103 F, 105 F, 107 F, 209 F, 211 F (beg F 09)
4B ECON: 101 F or $101 \mathrm{HF}, 102 \mathrm{~F}$ or 102 HF
4C ETHS: 101 F, 129 F, 130 F* (beg Spr 06), 131 F, 140 F, 141 F, 142 F, 170 F, 171 F
4D WMNS: 100 F
4E GEOG: 100 F or $100 \mathrm{HF}, 120 \mathrm{~F}, 160 \mathrm{~F}$
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 F*
4H POSC: 100 F or $100 \mathrm{HF}, 110 \mathrm{~F}, 120 \mathrm{~F}, 200 \mathrm{~F}, 215 \mathrm{~F}, 216 \mathrm{~F}, 230 \mathrm{~F}$
4 I PSY: 101 F or $101 \mathrm{HF}, 131 \mathrm{~F}, 139 \mathrm{~F}, 145 \mathrm{~F}, 202 \mathrm{~F}, 222 \mathrm{~F}, 251 \mathrm{~F}$ or 251 HF
4J SOC: 101 F or 101HF, 102 F, 133 F (beg F 10), 201 F (beg F 09), 275 F or 275HF, 277 F (beg F 10), 285 F, 292 F
* Course can only be used in one area.


## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM 2011-2012 "IGETC" WORKSHEET

Legend: $\mathbf{C}=$ Completed; $\mathbf{I P}=$ In Progress; $\mathbf{R}=$ Remaining

AREA 5 - PHYSICAL AND BIOLOGICAL SCIENCES: At least 2 courses = 7-9 semester units / 12-15 quarter units. At least one course is required from both areas. One of the courses must include a laboratory. Underlined courses meet the laboratory requirement.

5A Physical Science:
CHEM: $100 \mathrm{~F}+, \underline{101 \mathrm{~F}+}, 103 \mathrm{~F}+, \underline{107 \mathrm{~F}+, 111 \mathrm{AF}}$, 111BF
ESC: $100 \mathrm{~F}+100 \mathrm{LF}+101 \mathrm{~F}, 101 \mathrm{LF}, 103 \mathrm{~F}, 105 \mathrm{~F}, 116 \mathrm{~F}, \underline{116 \mathrm{LF}}, 120 \mathrm{~F}, 130 \mathrm{~F}$ or $130 \mathrm{HF}, 130 \mathrm{LF}, 190 \mathrm{~F}$
GEOG: 102 F, 102LF
PHSC: $102 \mathrm{~F}+\sim$
PHYS: $\underline{130 \mathrm{~F}+}, \underline{205 \mathrm{~F}+}, \underline{206 \mathrm{~F}+}, \underline{210 \mathrm{~F}}, \underline{211 \mathrm{~F}}, \underline{221 \mathrm{~F}+}, \underline{222 \mathrm{~F}+}, \underline{223 \mathrm{~F}+}$

+ CHEM 100 F or 103 F : no UC credit if taken after CHEM 111AF.
+ If CHEM 101 F and 107 F combined: maximum UC credit allowed $=1$ course.
(No UC credit for CHEM 101 F or 107 F if taken after CHEM 111AF).
+ If ESC 100 F, 100 LF and PHSC 102 F combined: maximum UC credit allowed $=1$ course.
~ PHSC 102 F: no UC credit for PHSC 102 F if taken after a college course in Astronomy, Chemistry, Geology, or Physics.
+ PHYS 130 F: no UC credit if taken after PHYS $205 \mathrm{~F}, \underline{210 \mathrm{~F}}$, or $\underline{221 \mathrm{~F}}$.

5B Biological Sciences:
ANAT $231 \mathrm{~F}, \underline{240 \mathrm{~F}}$
ANTH 101 F or 101 HF , 101LF

ENVS 105 F, 105LF, 106 F (beg F 10), 126 F
MICR 262 F
$=$ BIOL 100 F and 101 F combined: maximum credit $=1$ course.
+ BIOL 101 F or $101 \mathrm{HF}:$ no UC credit if taken after a 200 -level Biological Science course (per catalog).
\# BIOL 102 F or 102LF: no UC credit if taken after BIOL 101 F or $\underline{101 \mathrm{HF} .}$
+ BIOL 109 F: no UC credit if taken after a 200-level Biology course.
6A - LANGUAGE OTHER THAN ENGLISH: (UC requirement on/y)
Complete 2 years of the same foreign language of high school level work with a grade of "C" or better;
OR earn a score of "3" or higher on the Foreign Language Advanced Placement Test;
OR earn a score of " 3 " or higher on the College Board Achievement Test in Foreign Language;
OR earn a score of " 5 " or higher in the International Baccalaureate Higher Level Examinations in languages other than English;
OR earn a satisfactory score on the SAT II: Subject Test in Languages other than English;
OR complete 1 course from the courses below:
CHIN 102 F, 203 F, 204 F; FREN 102 F; GERM 102 F; ITAL 102 F; JAPN 102 F; PORT 102 F; SPAN 102 F or 102HF, 201 F;
OR completion of a Foreign Language in Area 3B.


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

6 semester units / 8-10 quarter units; one course from Group 1 and one course from Group 2:

1) POSC 100 F or 100 HF and
2) ETHS $101 \mathrm{~F}, 130 \mathrm{~F}, 131 \mathrm{~F}, 160 \mathrm{~F}$; HIST $127 \mathrm{~F}, 162 \mathrm{AF}, 170 \mathrm{~F}$ or $170 \mathrm{HF}, 171 \mathrm{~F}$ or $171 \mathrm{HF}, 270 \mathrm{~F}$

Students who took an out-of-state Political Science course, please see a counselor.

## IMPORTANT NOTE:

Students enrolled in high unit majors (i.e., architecture, computer science, engineering, sciences) are frequently recommended not to use IGETC to meet general education certification but rather to meet transfer admission requirements and complete required lower division major and support courses. See your counselor to develop an academic educational plan.

It is recommended that all IGETC requirements be completed prior to transfer. If you are unable to complete one or two IGETC courses in the final term before transfer, you may be eligible to complete IGETC after transfer, providing that those courses are not among those required for admission. See your counselor for more information.

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.

## 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)

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
Liberal Studies (Teaching)
Mathematics
Music
Music Technology
Nutrition/Food (Dietetics)
Philosophy
Physics
Plant Science
Political Science
Pre-Chiropractic
Pre-Dental Hygiene
Pre-Dentistry
Pre-Medicine
Pre-Nursing
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
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)
Veterinary Science
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.
NOTE: Programs that are pending State approval, see online addendum at fullcoll.edu.
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.

| Listing of Instructional Division |  | A.A. Degree | $\begin{array}{\|c\|} \hline \text { A.S. } \\ \text { Degree } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { Voc } \\ & \text { Cert } \\ & \text { Prog } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| Academic Services |  |  |  |  |
| Business and Computer Information Systems |  |  |  |  |
| (ACCT) | Accounting |  | $\square$ | $\square$ |
| (BUS) | Business Administration | $\square$ |  |  |
|  | Business Management |  | $\square$ | $\square$ |
|  | Business \& Technology Skills |  |  | $\square$ |
|  | E-Business Development |  |  | $\square$ |
|  | Entrepreneurship |  | ■ | $\square$ |
|  | International Business Skills |  |  | 0 |
|  | International Business Mgmt |  | - | $\square$ |
|  | Managerial Communications |  |  | 0 |
|  | Project Management |  |  | 0 |
| (MKT) | Marketing Management |  | ■ | $\square$ |
| (CIS) | Computer Information Systems |  | ■ | $\square$ |
|  | Computer Software Appl. Specialist |  |  | $\square$ |
|  | Database Applications |  |  | 0 |
|  | E-Commerce Programming |  |  | $\square$ |
|  | Enterprise Database |  |  | 0 |
|  | Internet |  |  | $\square$ |
|  | Networking |  |  | 0 |
|  | PC Applications |  |  | 0 |
|  | Programming |  |  | 0 |
|  | Spreadsheet Applications |  |  | 0 |
|  | Web Design |  |  | 0 |
|  | Web Scripting |  |  | 0 |
| (0T) | Office Technology |  |  |  |
|  | Administrative Office Assistant |  | - | $\square$ |
|  | Legal Office Administration |  | ■ | $\square$ |
|  | Word Processing |  | ■ | $\square$ |
| (PLEG) | Paralegal Studies |  | ■ | $\square$ |
| (RE) | Real Estate Management |  | $\square$ | $\square$ |
|  | Real Estate Sales |  |  | 0 |


| Listing of Instructional Division | A.A. Degree | $\begin{array}{\|c\|} \hline \text { A.S. } \\ \text { Degree } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { Voc } \\ & \text { Cert } \\ & \text { Prog } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| (COUN) COUNSELING \& STUDENT DEVELOPMMENT |  |  |  |
| Fine Arts |  |  |  |
| (ART) Art | ■ |  |  |
| Illustration |  |  | $\square$ |
| (ACG) Art Computer Graphics |  |  | $\square$ |
| Computer Animation/Multimedia |  |  | $\square$ |
| Desktop Publishing |  |  | $\square$ |
| 3D Animation Certificate - Level II |  |  | $\square$ |
| (MUS) Music | - |  |  |
| Music: Commercial | - |  |  |
| Certificate in Piano Teaching |  |  | $\square$ |
| Recording/Production |  |  | $\square$ |
| (THEA) Theatre Arts (Drama) | ■ |  |  |
| Assistant Costume Designer |  |  | $\square$ |
| Costume Cutter/Draper |  |  | $\square$ |
| Costume Stitcher |  |  | $\square$ |
| Costume Wardrobe |  |  | $\square$ |
| Lighting Technician |  |  | $\square$ |
| Musical Theatre |  |  | $\square$ |
| Musical Theatre (Advanced) |  |  | $\square$ |
| Scenic Artist |  |  | $\square$ |
| Sound Technician |  |  | $\square$ |
| Stage Management |  |  | $\square$ |
| Technical Theatre |  |  | $\square$ |
| Theatrical Costumer |  |  | $\square$ |
| Theatrical Costumer (Advanced) |  |  | $\square$ |
| Humanities |  |  |  |
| (ENGL) English | ■ |  |  |
| Foreign Language | $\square$ |  |  |
| (SPCH) Speech | $\square$ |  |  |
| Interdisciplinary Studies |  |  |  |
| Arts and Human Expression | ■ |  |  |
| Science and Math | $\square$ |  |  |
| Social Behavior and Self-Dev. | $\square$ |  |  |
| Social Sciences | ■ |  |  |
| Mathematics and Computer Science |  |  |  |
| (CSCI) Computer Science |  | $\square$ |  |
| (MATH) Mathematics | $\square$ |  |  |



| Listing of Instructional Division | A.A. Degree | $\begin{aligned} & \text { A.S. } \\ & \text { Degree } \end{aligned}$ | $\begin{aligned} & \hline \text { Voc } \\ & \text { Cert } \\ & \text { Prog } \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Social Science (cont'd) |  |  |  |
| (GEOG) Geography | $\square$ |  |  |
| (HIST) History | $\square$ |  |  |
| Latin-American Studies | $\square$ |  |  |
| (PHIL) Philosophy | $\square$ |  |  |
| (POSC) Political Science | $\square$ |  |  |
| (PSY) Psychology | $\square$ |  |  |
| Religious Studies | $\square$ |  |  |
| (SOSC) Social Science | $\square$ |  |  |
| (SOC) Sociology | $\square$ |  |  |

Technology and Engineering

| (AJ) | Administration of Justice | - | $\square$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Crime Scene Investigation |  |  | $\square$ |
|  | P.O.S.T. Law Enforcement |  |  | $\square$ |
| (ARCH) | Architecture |  | $\square$ |  |
|  | Architectural CAD Technology |  |  | $\square$ |
| (AUTO) | Automotive |  |  |  |
|  | Automatic Transmission Specialist |  |  | 0 |
|  | Automotive Chassis Specialist |  |  | 0 |
|  | Automotive Maintenance Specialist |  |  | 0 |
|  | Automotive Management |  |  | $\square$ |
|  | Automotive Service Advisor |  |  | 0 |
|  | Automotive Technology |  | $\square$ | $\square$ |
|  | Emission Control Specialist |  |  | 0 |
|  | Engine Performance Specialist |  |  | 0 |
|  | Fabrication Specialist |  |  | 0 |
|  | Light Repair Specialist |  |  | 0 |
|  | Manual Drive Train Specialist |  |  | 0 |
|  | Carpentry | $\square$ |  |  |
|  | Civil Engineering Technology |  | $\square$ |  |
|  | Communications - General | ■ |  |  |
| (COSM) | Cosmetology |  | $\square$ | $\square$ |
|  | Cosmetology Instructor |  | $\square$ |  |
|  | Esthetician |  |  | $\square$ |
| (CRTV) | Communications - General | $\square$ |  |  |
|  | Radio Broadcasting | $\square$ |  | $\square$ |
|  | Radio Production | - |  |  |
|  | Radio \& Television/Video Production |  |  | $\square$ |
|  | Sports Broadcasting |  |  | 0 |
|  | Television/Film Production | ■ |  |  |
| (CSTR) | Construction |  |  |  |
|  | Construction Estimating |  |  | 0 |
|  | Construction Inspection |  | $\square$ | $\square$ |
|  | Construction Management |  | $\square$ |  |
|  | Construction Technology |  | $\square$ | ■ |
| (DRAF) | Industrial Drafting |  | $\square$ |  |
|  | Industrial Drafting Level I |  |  | $\square$ |
|  | Industrial Drafting Level II |  |  | $\square$ |
| (ENGR) | Engineering |  | $\square$ |  |


| Listing of Instructional Division | A.A. Degree | A.S. Degree | Voc <br> Cert <br> Prog |
| :---: | :---: | :---: | :---: |
| Technology and Engineering (cont'd) |  |  |  |
| (FASH) Fashion Design | ■ |  | $\square$ |
| Advanced Fashion Design |  |  | $\square$ |
| Dressmaking-Alterations |  |  | $\square$ |
| Fashion Illustration |  |  | $\square$ |
| Fashion Journalism | $\square$ |  |  |
| Fashion Merchandising | $\square$ |  | $\square$ |
| Image Consultant |  |  | $\square$ |
| Patternmaker |  |  | 0 |
| Product Development Apparel |  |  | 0 |
| Textiles and Clothing | $\square$ |  |  |
| Industrial Arts | $\square$ |  |  |
| Industrial Lab Technician (Chemistry) | $\square$ |  |  |
| Industrial Technology | $\square$ |  |  |
| (IDES) Interior Design Assistant |  | $\square$ |  |
| Interior Design Commercial Design |  |  | $\square$ |
| Interior Merchandising Level I |  |  | $\square$ |
| Residential Design |  |  | $\square$ |
| (JOUR) Advertising | $\square$ |  | $\square$ |
| Journalism |  |  | $\square$ |
| Public Relations |  |  | $\square$ |
| (MACH) Machine Technology |  |  | $\square$ |
| CNC Operator |  |  | 0 |
| Computer Numerical Control (CNC) |  |  | $\square$ |
| Machine Technology Level I |  |  | $\square$ |
| Machine Technology Level II |  |  | $\square$ |
| Mastercam |  |  | 0 |
| Surfcam |  |  | 0 |
| Manufacturing Technology |  | $\square$ |  |


| Listing of Instructional Division | A.A. Degree | A.S. Degree | Voc Cert |
| :---: | :---: | :---: | :---: |
| Technology and Engineering (cont'd) |  |  |  |
| (PHOT) Photography | ■ |  |  |
| Professional Photography |  |  | $\square$ |
| (PRNT) Printing Technology |  | $\square$ | $\square$ |
| Advanced Offset Presswork |  |  | $\square$ |
| Customer Service Training |  |  | 0 |
| Digital Printing |  |  | $\square$ |
| Electronic Imaging |  |  | $\square$ |
| Flexography |  |  | 0 |
| Graphic Communications |  |  | 0 |
| Offset Duplicator Training |  |  | 0 |
| Printing Technology (General) |  |  | $\square$ |
| Quick Print/In-Plant Graphics |  |  | $\square$ |
| Screen Printing |  |  | $\square$ |
| (WELD) Welding Technology |  |  | $\square$ |
| (WOOD) Wood Technology |  |  | $\square$ |
| Cabinetmaking/Millwork Technology Specialist |  |  | $\square$ |
| Wood Technology: Woodcarving Specialist |  |  | 0 |




## ACCOUNTING

## Accounting Associate in Science Degree <br> PROGRAM CODE： $2 S 03824$

Curriculum leads to the Associate in Science Degree and／or employment in the field of bookkeeping and／or accounting．This degree requires the completion of 33－34 units of which 30－31 must be chosen from the required courses listed below．An additional 3 units must be chosen from the restricted electives listed below．See college catalog for options for the Associate of Science Degree general education requirements．

| Required Courses（30－31 units） | Units |  |
| :--- | :--- | ---: |
| ACCT 100BF | Financial Accounting Principles or | 3 |
| ACCT 101AF | Financial Accounting | 4 |
| ACCT 101BF | Managerial Accounting | 4 |
| ACCT 104 F | Computerized Accounting | 2 |
| ACCT 112 F | Income Tax Procedure | 3 |
| ACCT 201AF | Intermediate Accounting | 4 |
| ACCT 201BF | Intermediate Accounting | 4 |
| ACCT 202 F | Introduction to Cost Accounting | 4 |
| 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 units） | 3 |  |
| ACCT 001 F | Accounting for Small Business | 2 |
| ACCT 011 F | Payroll Accounting | 0.5 |
| ACCT 012 F | Updating State Income Tax Regulations | 0.5 |
| ACCT 013 F | Estate and Gift Tax Regulations | 0.5 |
| ACCT 014 F | Updating Federal Tax Regulations | 3 |
| ACCT 100AF | Financial Accounting Principles | 3 |
| ACCT 105 F | Accounting for Supervisors and Managers | 2 |
| ACCT 107 F | QuickBooks | 2 |
| ACCT 109 F | Computerized Tax Preparation | 2 |
| ACCT 112 F | Income Tax Procedure | 3 |
| ACCT 116 F | Tax Preparation for Practitioners | 4 |
| ACCT 117 F | Tax Preparation for Practitioners：Intermed． | 3 |
| ACCT 118 F | Tax Preparation for Practitioners：Advanced | 3 |
| ACCT 120 F | Tax／Financial Planning | 3 |
| ACCT 203 F | Auditing | 3 |
| ACCT 204 F | Analysis of Financial Statements | 3 |
| BUS 151 F | Business Mathematics | 3 |
| CIS 105 F | Spreadsheet I | 2 |
|  |  |  |

＊（See counselor for determination of correct course）

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

The Accounting Certificate requires the completion of 29－30 units of which 24－25 is 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．
Required Courses（24－25 units） ..... Units
ACCT 100BF Financial Accounting Principles or ..... 3
ACCT 101AF Financial Accounting ..... 4
ACCT 101BF Managerial Accounting ..... 4
ACCT 104 F Computerized Accounting ..... 2
ACCT 201AF Intermediate Accounting ..... 4
ACCT 201BF Intermediate Accounting ..... 4
ACCT 202 F Introduction to Cost Accounting ..... 4
BUS 111 F Business Communications or ..... 3
BUS 211 F Writing for Business ..... 3
Restricted Electives（5 units） ..... Units
ACCT 001 F Accounting for Small Business ..... 3
ACCT 011 F Payroll Accounting ..... 2
ACCT 112 F Income Tax Procedure ..... 3
ACCT 012 F Updating State Inc Tax Regulations ..... 0.5
ACCT 013 F Estate and Gift Tax Regulations ..... 0.5
ACCT 014 F Updating Federal Tax Regulations ..... 0.5
ACCT 090 F Current Topics in Taxation ..... 0．5－3
ACCT 100AF Financial Accounting Principles ..... 3
ACCT 105 F Accounting for Supervisors and Managers ..... 3
ACCT 107 F QuickBooks ..... 2
ACCT 109 F Computerized Tax Preparation ..... 2
ACCT 116 F Tax Preparation for Practitioners ..... 4
ACCT 117 F Tax Preparation for Practitioners：Intermed． ..... 3
ACCT 118 F Tax Preparation for Practitioners：Advanced ..... 3
ACCT 120 F Tax／Financial Planning ..... 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 105 F Spreadsheet I ..... 2
ADMINISTRATION OF JUSTICE

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

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．

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 | 3 |

## Restricted Electives（6 units）

| AJ 128 F | Police－Community Relations |
| :--- | :--- |
| AJ 222 F | Rules of Evidence |
| AJ 278 F | Multicultural Issues within Admin．of Justice |
| PSY 101 F | General Psychology |
| SOC 101 F | Introduction to Sociology |

## Units

AJ 128 F Police－Community Relations 3
AJ 222 F Rules of Evidence 3
PSY 101 F General Psychology 3
SOC 101 F Introduction to Sociology 3

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## Administration of Justice <br> Associate in Science Degree <br> PROGRAM CODE: 2S03876

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.

| 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 |
|  |  | Units |
| Restricted Electives (15 units) | 1.5 |  |
| AJ 097 F | Law Enforcement Supervisory Update | 3 |
| AJ 102 F | Introduction to Probation and Parole | 3 |
| AJ 110BF* | Advanced Criminal Law | 3 |
| AJ 111 F | Traffic Enforcement | 3 |
| AJ 128 F | Police-Community Relations | 1 |
| AJ 135 F | Weaponless Defense | 1 |
| AJ 137 F | Firearms | 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 226 F | Narcotics and 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 Admin. of Justice | 3 |
| AJ 279 F | Contemporary Issues in Law Enforcement | 3 |
| AJ 901 F | Organized Crime and Criminal Justice Sys. | 3 |

## Administration of Justice Certificate PROGRAM CODE: 2C08437

The Administration of Justice Certificate Program requires the completion of 52 units from the courses listed below, with a minimum grade point average of 3.00 or better. At least one half of the units toward the certificate must be completed at Fullerton College.

| Completion of: | Units |  |
| :--- | :--- | ---: |
| AJ 059AF* | Basic Police Academy — Ext. Format I | 26 |
| AJ 059BF* | Basic Police Academy — Ext. Format II | 26 |

*Prerequisite required

## Crime Scene Investigation Skills Certificate <br> PROGRAM CODE: 2C00054

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. A minimum of 12 units toward the certificate must be completed at Fullerton College.

Required Courses (17 units)

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

## P.O.S.T. Law Enforcement Skills Development Certificate

PROGRAM CODE: $2 C 00057$
The P.O.S.T. Law Enforcement Skills Development Certificate Program is intended to meet the basic requirements of California Penal Code 13510 in raising the competence level of current and aspiring law enforcement personnel. The certificate 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. 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.

## Required Courses (9.5) <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 | 3 |

AJ 100 F Introduction to Law Enforcement 3
AJ 151 F Police Report Writing 3

| Restricted Electives (7.5) |  | Units |
| :---: | :---: | :---: |
| AJ 067 F | Current Issues in Admin. of Justice 0 | 0.5-3 |
| AJ $068 \mathrm{~F}^{*}$ | Parolee Contacts | 1.5 |
| AJ 069 F | H\&S 11550 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 073 F | Interview and Interrogation Update | 1.5 |
| AJ 074 F | Conflict Resolution for Police Officers | 0.5 |
| AJ 075 F | Cultural Diversity | 1 |
| AJ 076 F | Comm. Oriented Policing \& Prob. Solving | 0.5 |
| AJ 077 F | Organized Crime | 1 |
| AJ 078 F | Multi-Agency Task Forces | 0.5 |
| AJ 080 F | Lifetime Fitness/Law Enforcement | 2 |
| AJ 081 F | Use of Force | 0.5 |
| AJ 082 F | Tactical Awareness | 0.5 |
| AJ 083 F | Narcotics Training for Field Officers | 0.5 |
| AJ 084 F | Domestic Violence | 0.5 |
| AJ 085 F | Police Vehicle Pursuits | 2 |
| AJ 086 F | Values, Principles, and Ethics | 0.5 |
| AJ $087 \mathrm{~F}^{*}$ | Supervis. Resp. to Officer Involved Shooting | g |
| AJ $088 \mathrm{~F}^{*}$ | Gang Awareness Update | 1.5 |
| AJ 089 F | Child Abuse/Child Pornography | 0.5 |
| AJ 090 F | Weaponless Defense/Baton Training | 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 | 0.5 |
| AJ 097 F | Law Enforcement Supervisory Update | 1.5 |
| *Prerequisite required |  |  |

## ANTHROPOLOGY

## Anthropology Associate in Arts Degree PROGRAM CODE: 2A03880

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

| Required Courses (13 units) |  |
| :--- | ---: |
| I. Required Courses -6 units | Units |
| ANTH 101 F | Physical Anthropology |
| ANTH 102 F | Cultural Anthropology |
|  | 3 |
| II. Category A -7 units from the following: | 3 |
| ANTH 101LF | Physical Anthropology Lab |
| ANTH 103 F | Introduction to Archaeology |
| ANTH 105 F | Language and Culture |
| ANTH 107 F | Anthro. of Magic, Witchcraft, and Religion |
| ANTH 109 F | Primate Behavior |
| ANTH 209 F | Cultures of Latin America |


| Restricted Electives (6 units) |  |  |
| :--- | :--- | ---: |
| Select two courses from the following: | Units |  |
| ANAT 231 F | General Human Anatomy | 4 |
| ANAT 240 F | Human Physiology | 5 |
| BIOL 266 F | General Zoology | 5 |
| BIOL 268 F | General Botany | 5 |
| BIOL 272 F | Cell and Molecular Biology | 4 |
| ETHS 101 F | American Ethnic Studies | 4 |
| ETHS 129 F | Introduction to African-American Studies | 3 |
| ETHS 140 F | Introduction to Chicano/Chicana Studies | 3 |
| ETHS 160 F | History of the Native Americans | 3 |
| ETHS 170 F | Introduction to Asian American Studies | 3 |
| GEOG 100 F | Global Geography | 3 |
| GEOG 102 F | Physical Geography | 3 |
| GEOG 160 F | Cultural Geography | 3 |
| ESC 100 F | Physical Geology | 3 |
| HIST 270 F | Women in United States History | 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 Contemp. | 3 |
| PSY 101 F | General Psychology | 3 |
| PSY 161 F | Elementary Statistics for Behavioral Science | 3 |
| SOC 101 F | Introduction to Sociology | 3 |

## ARCHITECTURE

## Architecture Associate in Science Degree <br> PROGRAM CODE: 2503819

The curriculum leads to the Associate in Science Degree in architecture from Fullerton College. Courses are designed to fulfill requirements (admission is also based on a portfolio review) for transfer to a university for a Bachelor of Architecture (B.Arch.) Degree. The curriculum is also designed to prepare students for employment in the architectural profession. The program requires a minimum of 31 units.
Required Courses (31-35 units) ..... Units
ARCH 111 F Introduction to Architecture ..... 3
ARCH 113 F Architectural Drawing I ..... 3
ARCH 124 F Architectural CAD I ..... 3
ARCH 924 F Architectural CAD II ..... 3
ARCH 934 F Architectural CAD III ..... 3
ARCH 944 F Architectural CAD IV ..... 3ARCH 125 F Design Studio IARCH 215 F Design Studio IIARCH 225 F Design Studio IIIARCH 227 F Internship in Architecture4

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

The Architectural CAD Technology Certificate Program requires the completion of a minimum of 28 units, of which 22 are in required courses. An additional 6 units must be chosen from the restricted electives listed below.

| Required Courses (minimum 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 944 F | Architectural CAD IV | 3 |
| ARCH 114 F | Architectural Materials and Methods | 3 |
| ARCH 227 F | Internship in Architecture | $1-4$ |
| BUS 180 F | Small Business Management | 3 |
|  |  |  |
| Restricted Electives (6 units) | Units |  |
| CSTR 036 F | Uniform Building Code: Residential or | 3 |
| CSTR 037 F | Uniform Building Code: Comm./Indstrl. or | 3 |
| SPCH 135 F | Essentials of Argumentation | 4 |

## ART COMPUTER GRAPHICS

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

3-D Animation Skills Certificate - Level II is a continuation of the Level I Basic Computer Graphics certificate with emphasis in 3-D animation software. This certificate provides the skill set required for entry-level 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 units listed below. Units earned from Level I certificate may not be used for Level II certificate. Any advanced ACG course may replace required introduction to class of Level II if introduction was completed as part of the Level I certificate.
Required Courses (9 units) ..... Units
ACG 104 F Introduction to 3D Graphics/Mac ..... 3
ACG 120 F 3D Modeling ..... 3
ACG 150 F 3D Computer Animation for Mac ..... 3
Restricted Electives (6 units) ..... Units
ART 120 F Basic Design ..... 3
ART 182 F Basic Drawing ..... 3
ART 121 F Three-Dimensional Design ..... 3
ART 186AF Beginning Life Drawing ..... 3

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

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

| Select one of the Introduction classes (3 units) | Units |  |
| :--- | :--- | ---: |
| ACG 100 F | Intro: Computer Graphics/MAC | 3 |
| ACG 102 F | Introduction: Web Graphics/Mac | 3 |
| ACG 104 F | Introduction to 3D Graphics/Mac or | 3 |
| ACG 106 F | Introduction: Dimensional Design/Mac | 3 |
| ACG 108 F | Survey Computer Applications | 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) | 3 |  |
| ACG 120 F | 3D Modeling | 3 |
| ACG 150 F | 3D Computer Animation for Mac | 3 |
| ACG 162 F | Multi Media for Macintosh | 3 |
| ACG 164 F | Multimedia Authoring | 2 |
| ART 144 F | Fundamentals of Cartooning |  |

ACG 100 F Intro: Computer Graphics/MAC 3
ACG 102 F Introduction: Web Graphics/Mac 3
ACG 104 F Introduction to 3D Graphics/Mac or 3
ACG 106 F Introduction: Dimensional Design/Mac 3
ACG 108 F Survey Computer Applications 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
ACG 120 F 3D Modeling 3

ACG 164 F Multimedia Authoring 3
ART 144 F Fundamentals of Cartooning 2
Restricted Electives (12 units) Units
ACG 112 F Electronic Illustration 3
ACG 132 F Electronic Paint for Macintosh 3
ACG 140 F Desktop Publishing I for Mac 3
ACG 146 F Desktop Publishing II 3
ACG 170 F Digital Photography 3
ACG 180 F Digital Video 3
ART 123 F Business Practices in Art 3
ART 180 F Perspective Drawing and Rendering 3
ART 182 F Basic Drawing 3
ART 299 F Art Independent Study 1
MUS 124 F Recording Studio I 3
CRTV 150 F Television Studio Production 3
CRTV 164AF Adv. Digital Production/Non-Linear Editing 3
CRTV 245AF Digital Editing, Graphics and Effects 3

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

The Computer Graphics Certificate Program requires the completion of 30 units of which 24 units are in required courses. An additional 6 units must be chosen from the restricted units listed below. This 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.

## Required computer graphics introduction class

( 3 units), select one from a list below: Units
ACG 100 F Intro: Computer Graphics/MAC 3
ACG 102 F Introduction: Web Graphics/Mac 3
ACG 104 F Introduction to 3D Graphics/Mac
ACG 106 F Introduction: Dimensional Design/Mac
ACG 108 F Survey of Graphics Software
Required art introduction class (3 units), select one from the list below:
ART 118 F Color Theory
ART 120 F Basic Design
Units
Required Advanced classes (12 units)
ACG 112 F Electronic Illustration
3
ACG 132 F Electronic Paint for Macintosh
ACG 140 F Desktop Publishing I for Mac
ART 182 F Basic Drawing
Required Additional computer graphics classes
(6 units), select two from the list below:
Units
ACG 140 F Desktop Publishing I for Mac
3
ACG 146 F Desktop Publishing II
ACG 170 F Digital Photography
Restricted Electives: (6 units)
ACG 120 F 3D Modeling
ACG 140 F Desktop Publishing I for Mac
ACG 146 F Desktop Publishing II
ACG 150 F 3D Computer Animation for Mac
ACG 162 F Multi Media for Macintosh
ACG 164 F Multimedia Authoring
ACG 170 F Digital Photography
ACG 180 F Digital Video
ART 123 F Business Practices in Art
ART 145 F Publication Design
ART 146 F Advertising Design
ART 147 F Production Techniques/Graphic
ART 180
PRNT 101 F Introduction Printing 3
PRNT 130 F Graphics

## Desktop Publishing Certificate

## PROGRAM CODE: 2C10611

The Desktop Publishing Certificate Program requires a total of 30 units of which 27 units are in required courses. An additional 3 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.

| Required computer graphics introduction class |  |  |
| :--- | :--- | ---: |
| (3 units), select one from the list below: | Units |  |
| ACG 100 F | Intro: Computer Graphics/MAC | 3 |
| ACG 102 F | Introduction: Web Graphics/Mac | 3 |
| ACG 104 F | Introduction to 3D Graphics/Mac | 3 |
| ACG 106 F | Introduction: Dimensional Design/Mac | 3 |
| ACG 108 F | Survey of Graphics Software | 3 |

Required art and printing classes (6 units), select two from the list below:

Units
ART 120 F Basic Design 3
PRNT 070 F Quick Printing and In-Plant Graphics 3
PRNT 075 F Electronic and Conventional Pre-Press 3
Required advanced classes: (18 units) Units
ACG 112 F Electronic Illustration 3
ACG 132 F Electronic Paint for Macintosh 3
ACG 140 F Desktop Publishing I for Mac 3
ACG 146 F Desktop Publishing II 3
ART 140 F Intro to Advertising and Graphic Design 3
ART 145 F Publication Design 3
Restricted Electives: (3 units) Units
ACG 120 F 3D Modeling 3
ACG 150 F 3D Computer Animation for Mac 3
ACG 162 F Multi Media for Macintosh 3
ACG 164 F Multimedia Authoring 3
ACG 170 F Digital Photography 3
ACG 180 F Digital Video 3
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/Graphic Designers 3
ART $148 \mathrm{~F} \quad$ Packaging Design 3
ART 180 F Perspective Drawing and Rendering 2
ART 182 F Basic Drawing 3
JOUR 227 F Newspaper Mgmt., Makeup and Editing
PRNT 070 F Quick Printing and In-Plant Graphics
PRNT 075 F Electronic and Conventional Pre-Press
PRNT 101 F Introduction to Printing
PRNT 130 F Graphics
ART
Art Associate in Arts Degree
PROGRAM CODE: 2A03847
Curriculum leads to the Associate in Arts Degree. This degreerequires 18 units from the following:
One Art History course (3 units) Units
ART 112 F Art History: Ancient/Medieval or ..... 3
ART 113 F Art History: Renaissance to Modern or ..... 3
ART 114 F Art History: Impressionism to the Present or ..... 3
ART 116 F Art History - Mexico or ..... 3
ART 212 F Asian Art History ..... 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 150AF Ceramics: Beginning Handbuilding ..... 3
ART 160 F Fundamentals of Sculpture ..... 3
ART 174AF Jewelry: Fabrication ..... 3
ART 176 F Stained Glass ..... 3
ART 185 F Life Sculpture ..... 3
And required ( $9-10$ units)
Units
Any ART course except ART 110 F, ART 119 F,
ART 179 F, ART 187 F, ART 190 F, or ART 194 F

## Illustration

## PROGRAM CODE: 2C18742

The Illustration Certificate Program consists of 30-31 units. There are a total of 21-22 required units and a total of 8 restricted elective units. This certificate 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. A minimum grade of "C" or better is required for each course taken.
Required Art Courses: Units
ART 120 F Basic Design ..... 3
ART 180 F Perspective Drawing and Rendering ..... 3
ART 182 F Basic Drawing ..... 3
ART 186AF Beginning Life Drawing ..... 3
ART 244 F Illustration ..... 3
ART 299 F Art Independent Study ..... 1-2
Required Computer Graphics courses: ..... Units
ACG 100 F Intro: Computer Graphics/MAC or ..... 3
ACG 102 F Introduction: Web Graphics/Mac ..... 3
ACG 112 F Electronic Illustration ..... 3
Restricted Electives:
Select 8 units from the list below: ..... Units
ART 118 F Color Theory ..... 3
ART 123 F Business Practices in Art ..... 3
ART 131 F Printmaking ..... 3
ART 139 F Fashion Sketching ..... 2
ART 140 F Intro to Advertising and Graphic Design ..... 3
ART 144 F Fundamentals of Cartooning ..... 2
ART 146 F Advertising Design ..... 3
ART $181 \mathrm{~F} \quad$ Drawing from the Masters ..... 2
ART 183 F Representational Drawing ..... 2
ART 184 F Expressive Drawing ..... 2
ART 188 F Watercolor Painting ..... 3
ART 189AF Beginning Painting ..... 3
ART 195 F Anatomical Figure Drawing ..... 2
ACG 120 F 3D Modeling ..... 3
ACG 150 F 3D Computer Animation for Macintosh ..... 3
AUTOMOTIVE TECHNOLOGY
Automotive Technology Associate in Science
PROGRAM CODE: 2S03838Curriculum leads to the Associate of Science Degree andemployment in automotive specialties: tune-up and electrical,engine repair, automatic transmissions, brakes and suspen-sions, power trains, air conditioning, service writing, parts con-trol. Complete 24 or more units from the following list:
Complete $\mathbf{2 4}$ or more units from following list: Units
Any Automotive course
MACH 116 F Machine Tools ..... 2
TECH 081 F Technical Mathematics I ..... 3
WELD 121AF Introduction to Welding ..... 2
Automatic Transmission Specialist Skills Certificate
PROGRAM CODE: 2 C00039
The Automatic Transmission Specialist Skills CertificateProgram requires a total of 17 units of which 17 units are inrequired courses. This program will help the student becomeemployed as an automatic transmission specialist.
Required Courses (17 units) ..... Units
AUTO 050 F Automotive Specialty Practice ..... 2
AUTO 065 F Automotive Electrical \& Electronic Systems ..... 4
8
AUTO 086 F Automatic Transmission Fundamentals ..... 3

## Automotive Chassis Specialist Skills Certificate

PROGRAM CODE: $2 C 00037$

The Automotive Chassis Specialist Skills Certificate Program requires a total of 14 units of which 14 units are in required courses.

Required Courses (14 units)<br>Units<br>AUTO 050 F Automotive Specialty Practice 2<br>AUTO 065 F Automotive Electrical \& Electronic Systems 4<br>AUTO 083 F Brake and Suspension Systems Repair

## Automotive Maintenance Specialist Skills Certificate

PROGRAM CODE: $2 C 00038$
The Automotive Maintenance Specialist Skills Certificate Program requires a total of 16 units of which 16 units are in required courses. This program will help the student become employed as an entry level automotive maintenance specialist.

Required Courses (17 units) Units
AUTO 050 F Automotive Specialty Practice 2
AUTO 065 F Automotive Electrical \& Electronic Systems 4
AUTO 082 F Engine Performance and Drivability 8
AUTO 089 F Automotive Air Conditioning 3

## Automotive Management Certificate PROGRAM CODE: 2C12007

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 50 units of which 45 units are in required courses. An additional 5 units must be chosen from restricted electives listed below.

Required Courses (45 units)
Units
AUTO 055 F Automotive Business Management
AUTO 060 F Automotive Powertrains
5

AUTO 065 F Automotive Electrical \& Electronic Systems
AUTO 081 F Engine Rebuilding and Repair
AUTO 082 F Engine Performance and Drivability 8
AUTO 083 F Brake and Suspension Systems Repair 8
AUTO 084 F Automatic Transmissions
AUTO 086 F Automatic Transmission Fundamentals
AUTO 089 F Automotive Air Conditioning
COUN 141 F Career Exploration

| Restricted Electives (5 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 | 3 |
| ET 100 F | Introduction to Environmental Technology | 3 |
| MACH 116 F | Machine Tools | 2 |
| TECH 081 F | Technical Mathematics I | 3 |

## Automotive Service Advisor Skills Certificate PROGRAM CODE: 2C00052

The Automotive Service Advisor Skills Certificate Program requires a total of 16 units of which 11 units are in required courses. An additional 5 units must be chosen from the restricted units listed below.

| Required Courses (11 units) | Units |  |
| :--- | :--- | ---: |
| AUTO 055 F | Automotive Business Management | 5 |
| BUS 180 F | Small Business Management | 3 |
| CIS 100 F | Introduction to Personal Computers | 3 |
|  |  |  |
| Restricted Electives (5 units) | Units |  |
| AUTO 050 F | Automotive Specialty Practice | 2 |
| AUTO 131 F | Automotive Fundamentals | 4 |
| BUS 266 F | Human Relations in Business | 3 |

## 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.

## Required Courses (28 units) <br> Units <br> AUTO 050 F Automotive Specialty Practice 2 <br> AUTO 060 F Automotive Powertrains 6 <br> AUTO 065 F Automotive Electrical \& Electronic Systems 4 <br> AUTO 070 F Engine Reconditioning 7 <br> AUTO 072 F Automotive Engine Performance 7 <br> AUTO 073 F Brake Systems Repair 7 <br> AUTO 081 F Engine Rebuilding and Repair 8 <br> AUTO 082 F Engine Performance and Drivability 8 <br> AUTO 083 F Brake and Suspension Systems Repair <br> AUTO 084 F Automatic Transmissions <br> AUTO 086 F Automatic Transmission Fundamentals <br> AUTO 088 F Fuel Systems and Adv. Drivability Diagnosis <br> AUTO 089 F Automotive Air Conditioning <br> AUTO 090 F Emission Control Sys. and Adv. Diagnosis <br> AUTO 091 F Cylinder Head Repair

Restricted Electives (4 units) Units
MACH 116 F Machine Tools2
DRAF 070 F Blueprint Reading for the Metal Trades ..... 2
WELD 121AF Introduction to Welding ..... 2
WELD 121BF Fundamentals of Inert Gas Welding ..... 2

## Automotive: Emission Control Specialist Skills Certificate

The Emission Control Specialist Skills Certificate Program requires a total of 16 units of which 16 units are 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.
Required Courses (16 units) Units
AUTO 050 F Automotive Specialty Practice ..... 2
AUTO 082 F Engine Performance and Drivability ..... 8
AUTO 090 F Emission Control Sys. and Adv. Diagnosis ..... 6

## Automotive: Engine Performance Specialist Skills Certificate <br> PROGRAM CODE: 2C00041

The Engine Performance Specialist Skills Certificate Program requires a total of 16 units of which all units are 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.

## Required Courses (16 units)

Units
AUTO 065 F Automotive Electrical \& Electronic Systems 4
AUTO 082 F Engine Performance and Drivability 8
AUTO 088 F Fuel Systems and Adv. Drivability Diagnosis 4

## Automotive: Fabrication Specialist Skills Certificate <br> PROGRAM CODE: 2 C00042

The Fabrication Specialist Skills Certificate Program requires a total of 17 units of which 17 units are required courses. This certification will be an important first step toward gaining employment in the automotive fabrication area where it is necessary to design and manufacture parts as well as repair them.

| Required Courses (17 units) | Units |  |
| :--- | :--- | ---: |
| AUTO 055 F | Automotive Business Management | 5 |
| AUTO 065 F | Automotive Electrical \& Electronic Systems | 4 |
| DRAF 171 F | Fundamentals of Drafting | 2 |
| MACH 116 F | Machine Tools | 2 |
| WELD 121AF | Introduction to Welding | 2 |
| WELD 121BF | Fundamentals of Inert Gas Welding | 2 |

## Automotive: Light Repair Specialist Skills Certificate

PROGRAM CODE: $2 C 00043$
The Light Repair Specialist Skills Certificate Program requires a total of 16 units of which 16 are in required courses. Completion of this program will help the graduate find entry level employment as an automotive light repair specialist.

| Required Courses (16 units) | Units |  |
| :--- | :--- | ---: |
| AUTO 050 F | Automotive Specialty Practice | 2 |
| AUTO 065 F | Automotive Electrical \& Electronic Systems | 4 |
| AUTO 073 F | Brake Systems Repair | 7 |
| AUTO 089 F | Automotive Air Conditioning | 3 |

## Automotive: Manual Drive Train Specialist Skills Certificate <br> PROGRAM CODE: 2C00044

The Manual Drive Train Specialist Skills 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.
Required Courses (12 units) ..... Units
AUTO 050 F Automotive Specialty Practice ..... 2
AUTO 060 F Automotive Powertrains ..... 6
AUTO 065 F Automotive Electrical \& Electronic Systems ..... 4

## 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.
Required Courses: (7-10 units) ..... Units
ANAT 231 F General Human Anatomy ..... 4
ANAT 240 F Human Physiology ..... 5
BIOL 222 F Marine Biology ..... 3
BIOL 266 F General Zoology ..... 5
BIOL 268 F General Botany ..... 5
BIOL 272 F Cell and Molecular Biology ..... 4
BIOL 274 F General Ecology ..... 4
BIOL 276 F Genetics and Evolutionary Biology ..... 4
MICR 262 F General Microbiology ..... 5
Restricted Electives: (8-11 units) ..... Units
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
CHEM 200 F Elementary Organic Chemistry ..... 3
CHEM 211AF Organic Chemistry I ..... 5
CHEM 211BF Organic Chemistry II ..... 5
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 the Life Sciences I ..... 4
PHYS 211 F Physics with Calculus for the Life Sciences II ..... 4
PHYS 221 F General Physics I ..... 4
PHYS 222 F General Physics II ..... 4
PHYS 223 F General Physics III ..... 4
MATH 141 F College Algebra ..... 4
MATH 142 F Trigonometry ..... 4
MATH 150AF Calculus I ..... 4
MATH 150BF Calculus II ..... 4

## Biological Technician <br> Associate in Science Degree <br> PROGRAM CODE: 2 S08414

The 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.
Complete 9-10 units from the following:BIOL 101 F General Biology or5
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 ..... 3
ELEC 100 F Direct Current/Alternating Current Theory ..... 1-4
ELEC 100LF Direct Current/Alternating Current Lab ..... 1-2
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 ..... 3
CHEM 111AF General Chemistry I ..... 5
HORT 205 F Applied Entomology ..... 3
MICR 262 F General Microbiology ..... 5
ESC 130 F Introduction to Oceanography ..... 3
ESC 130HF Honors Introduction to Oceanography ..... 3

## BUSINESS

## Business Administration <br> Associate in Arts Degree

PROGRAM CODE: 2A03823
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.

| Complete 18 units from the following: | Units |  |
| :--- | :--- | ---: |
| ACCT 101AF | Financial Accounting | 4 |
| ACCT 101BF | Managerial Accounting | 4 |
| 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 | 3 |
| CIS 111 F | Introduction to Information Systems | 3 |
| 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 |
| PHIL 160 F | Introduction to Ettiscs or | 3 |
| PHIL 170 F | Logic and Critical Thinking | 3 |
| *See counselor for determination of correct course. |  |  |
|  |  |  |
| Business Management |  |  |
| AsSociate in Science Degree |  |  |
| PROGRAM CODE: 2So8387 |  |  |

The Associate in Science Degree in Business Management requires 30-31 units. Completion of this degree will provide the skills necessary to obtain employment in a business capacity at an organization.

One course from the following
for a total of 3 units:
Units
CIS 100 F Introduction to Personal Computers
CIS 111 F Introduction to Information Systems
One course from the following
for a total of 3-4 units:
Units
ACCT 001 F Accounting for Small Business
3
ACCT 100BF Financial Accounting Principles
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
BUS 131 F Principles of International Business
BUS 180 F Small Business Management

One course from the following
for a total of 3 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
Three courses from the following
for a total of 9 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
One course from the following
for a total of 3 units:
MKT 100 F Introduction to Marketing 3
MKT 151 F Internet Marketing and Promotion 3
BUS 224 F International Marketing 3

## Business and Technology Skills Certificate <br> PROGRAM CODE: 2 C11688

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 $38-41$ units of which 28 units are required courses.

| Required Courses (28 units) | 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 | 3 |
| CIS 111 F | Introduction to Information Systems | 3 |
| COUN 141 F | Career Exploration | 1 |
| OT 080 F | Keyboarding - Beginning | 1.5 |
| OT 081 F | Keyboarding - Speed and Accuracy | 1.5 |
| LANG 101 F | Elementary Foreign Language (3)* or |  |
|  | Course which meets Multicultural Course |  |
|  | Requirement* | 3 |
| MKT 208 F | Principles of Selling | 3 |
| READ 142 F | College Reading: Logical Analysis/Evaluation | 3 |

## 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
Students must take career area courses equal to 9 units from any of ONE of the topic areas below:
Auto Technology, Cinema-Radio-Television, Construction Technology, Cosmetology, Engineering, Fashion, Interior Design, Machine Technology, Photography, Printing Technology, Welding, Woodworking
*The student is responsible for completing any necessary prerequisites.
*Students completing one year of high school algebra with a grade of "C" or better meet the business mathematics (BUS 151 F) requirement; students completing a portfolio or MOUS tests (Word, Excel and Access) meet the requirement for personal computers (CIS 100 F ); students who test out at 35 net WPM on a 5 minute timed test meet the keyboarding requirement (OT 080 F and OT 081 F ); and students who complete one year of high school foreign language with a grade of " C " or better meet the foreign language/multicultural course requirement (LANG 101 F). Classes that satisfy the Multicultural Education Requirement are listed under Graduation Requirements in this catalog.

## Business Management Certificate PROGRAM CODE: 2C21256

The Certificate in Business Management provides the skills necessary to obtain employment in a business capacity in an organization. The certificate requires total of 30-31 units.

## One course from the following

for a total of 3 units:
Units
CIS 100 F Introduction to Personal Computers
CIS 111 F Introduction to Information Systems
One course from the following
for a total of 3-4 units:
Units
ACCT 001 F Accounting for Small Business
3
ACCT 100AF Financial Accounting Principles
ACCT 101AF Financial Accounting
3

One course from the following
for a total of 3 units:
BUS 111 F Business Communications
Units
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 3
One course from the following
for a total of 3 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
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
One course from the following
for a total of 3 units:
Units
MKT 100 F Introduction to Marketing 3
MKT 151 F Internet Marketing and Promotion 3
BUS 224 F International Marketing 3

## E-Business Development Skills Certificate PROGRAM CODE: $2 C 00066$

The E-Commerce Business Development Skills Certificate requires a total of 15-17 units of which 15-17 units are required courses.
Required Courses ..... Units
BUS 170 F Principles of E-Business ..... 3
BUS 182 F Doing Business Online ..... 3
CIS 150 F Introduction to the Internet ..... 2
MKT 151 F Internet Marketing and Promotion
One course from the followingfor a total of 2-3 units:

BUS 180 F Small Business Management
BUS 181 F Business Plan Developments
One course from the following
for a total of 2-3 units:
CIS 100 F Introduction to Personal Computers
CIS 105 F Spreadsheet I
One course from the following
for a total of 2 units:
$\begin{array}{ll}\text { CIS } 050 \text { F } & \text { Web Page Design I } \\ \text { CIS } 152 \text { F } & \text { Web Page Design II }\end{array}$
CIS 152 F Web Page Design II

Units

## Entrepreneurship Associate in Science Degree PROGRAM CODE: $2 S 08388$

The Entrepreneurship Associate in Science Degree will prepare a student with the skills necessary to start up a new business. It requires a total of 32-34 units.

Required Courses (9 units)<br>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 3-4 units:
Units
ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principles
ACCT 101AF Financial Accounting
Choose one course from the following
for a total of 3 units:
Units
BUS 111 F Business Communications
BUS 211 F Writing for Business
Choose one course from the following
for a total of 2-3 units:
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 Internet Marketing and Promotion
Choose one course from the following
for a total of 3 units:
Units
BUS 162 F Business Economics
ECON 101 F Principles of Economics - Micro
BUS 251 F Business Finance
Choose one course from the following
for a total of 3 units: (See counselor for
determination of correct course)
BUS 240 F Legal Environment of Business
BUS 241AF Business Law

Choose one course from the following
for a total of 3 units:
BUS 262 F Principles of Management
BUS 266 F Human Relations in Business
BUS 267 F Principles of Supervision
BUS 271 F Leadership and Business Ethics
Choose one course from the following
for a total of 3 units:
Units
MKT 201 F Small Business Promotions
BUS 224 F International Marketing
Choose one course from the following
for a total of 3 units:
CIS 100 F Introduction to Personal Computers
CIS 111 F Introduction to Information Systems
Units
3
3
3

## Entrepreneurship Certificate <br> 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 26-28 units.

Required Courses (3 units)

Units

BUS 180 F Small Business Management 3

One course from the following

for a total of 3-4 units

Units

ACCT 001 F Accounting for Small Business $\quad 3$

ACCT 101AF Financial Accounting 4

One course from the following

for a total of 3 units

Units

BUS 211 F Writing for Business 3

One course from the following
for a total of 2-3 units
BUS 100 F Introduction to Business 3
BUS 170 F Principles of E-Business 3
BUS 181 F Business Plan Development 2
BUS 182 F Doing Business Online 3
BUS 269 F Managing Business Projects 2
MKT 151 F Internet Marketing and Promotion 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
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 3 units:
Units
CIS 100 F Introduction to Personal Computers 3

## International Business Management <br> Associate in Science Degree <br> PROGRAM CODE: 2S08391

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 29-31 units.

Five courses from the following
for a total of 15 units:
Units
BUS 131 F Principles of International Business
BUS 132 F Principles of Import/Export 3
BUS 170 F Principles of E-Business
BUS 224 F International Marketing
BUS 225 F International Management
Int
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 3
CIS 111 F Introduction to Information Systems
One course from the following
for a total of 3-4 units:
Units
ACCT 001 F Accounting for Small Business
ACCT 100BF Financial Accounting Principles 3
ACCT 101AF Financial Accounting 4
One course from the following
for a total of 3 units:
Units
BUS 111 F Business Communications 3
BUS 211 F Writing for Business
One course from the following
for a total of 3 units:
Units
$\begin{array}{ll}\text { BUS 100 F } & \text { Introduction to Business } \\ \text { BUS 180 F } & \text { Small Business Management }\end{array}$
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
One course from the following
for a total of 2-3 units:
Units
OT 070 F Business Protocol and Ethics
BUS 170 F Principles of E-Business

## International Business Skills Certificate <br> PROGRAM CODE: 2C21258

The International Business Skills Certificate 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.
Required Courses (6 units) ..... Units
BUS $131 \mathrm{~F} \quad$ Principles of International Business ..... 3
BUS 132 F Principles of Import/Export ..... 3
One course from the following
for a total of 3 units: ..... Units
BUS 224 F International Marketing ..... 3
BUS 225 F International Management ..... 3
BUS 242 F International Business Law ..... 3

## International Business Management Certificate

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 29-31 units.

Five courses from the following
for a total of 15 units:
Units
BUS $131 \mathrm{~F} \quad$ Principles of International Business 3
BUS 132 F Principles of Import/Export 3
BUS 224 F International Marketing 3
BUS 225 F International Management 3
BUS 267 F Principles of Supervision 3
BUS 271 F Leadership and Business Ethics 3
CIS 100 F Introduction to Personal Computers or 3
CIS 111 F Introduction to Information Systems 3
One course from the following
for a total of 3-4 units: Units
ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principles 3
ACCT 101AF Financial Accounting 4
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 3 units:
Units
BUS 180 F Small Business Management 3
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 3
BUS 242 F International Business Law
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

## Managerial Communications Skills <br> Certificate

## PROGRAM CODE: 2 C00059

The Certificate in Managerial Communications will help employees meet their needs to improve their communication skills. Employers may consider the certificate in decisions for promotion, job hiring or transfers, or may rely upon the Certificate as evidence of employee involvement and commitment. The Managerial Communications Certificate requires a total of 9 units of which 9 units are required courses.

Required Courses (9 units)
Units
BUS 211 F Writing for Business
3
BUS 290 F Managerial Communications 3
BUS 266 F Human Relations in Business or 3
BUS 267 F Principles of Supervision or 3
BUS 271 F Leadership and Business Ethics or 3
MKT 208 F Principles of Selling 3

## Marketing Management <br> Associate in Science Degree <br> PROGRAM CODE: $2 S 03825$

The Associate in Science Degree in Marketing Management requires a total of 30-31 units, all of which are required courses. Completion of ths degree will provide the skills necessary to obtain employment in a marketing capacity at an organization.

| Required Courses (6 units) | Units |  |
| :--- | :--- | ---: |
| MKT 100 F | Introduction to Marketing and | 3 |
| CIS 100 F | Introduction to Personal Computers or | 3 |
| CIS 111 F | Introduction to Information Systems | 3 |

Choose one course from the followingUnits
ACCT 001 F Accounting for Small Business ..... 3
ACCT 100BF Financial Accounting Principles ..... 3
ACCT 101AF Financial Accounting ..... 4
Choose one course from the following for a total of 3 units:BUS 111 F Business Communications 3
BUS 211 F Writing for Business3
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 Internet Marketing and Promotion ..... 3
MKT 201 F Small Business Promotions ..... 3
MKT 205 F Understanding Multicultural Markets in U.S. ..... 3
MKT 208 F Principles of Selling ..... 3
BUS 224 F International Marketing ..... 3
Marketing Management Certificate
PROGRAM CODE: 2 C03825The Certificate in Marketing Management requires a total of28-30 units.
Required Courses (5 units) ..... Units
CIS 100 F Introduction to Personal Computers ..... 3
MKT 151 F Internet Marketing and Promotion ..... 3
One course from the following for a total of 3-4 units: ..... Units
ACCT 001 F Accounting for Small Business ..... 3
ACCT 100BF Financial Accounting Principles ..... 3
ACCT 101AF Financial Accounting ..... 4

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
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
BUS 170 F Principles of E-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
One course from the following
for a total of 3 units:
Units
MKT 100 F Introduction to Marketing
BUS 224 F International Marketing
One course from the following
for a total of 3 units:
Units
MKT 103 F Principles of Advertising
MKT 205 F Understanding Multicultural Markets in U.S.
3

One course from the following
for a total of 2-3 units:
Units
MKT 201 F Small Business Promotions
MKT 208 F Principles of Selling 3
MKT 090 F Current Issues in Marketing 0.5-3
BUS 269 F Managing Business Projects 2

## Project Management Skills Certificate PROGRAM CODE: 2C00067A

The Project Management Skills Certificate will prepare a student with the basic knowledge of program management skills. These skills can be applied across a broad spectrum of disciplines, including construction, software development, contractor management and various business related projects. The program requires a total of 6 units in required courses.

## Required Courses (6 units)

Units
BUS 269 F Managing Business Projects
CIS 120AF Project Management I
CIS 120BF Project Management II

## CARPENTRY

Technology \& Engineering Division
Office: Bldg 1000, Room 1005
714.992.7251

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

## Carpentry Associate in Arts Degree

PROGRAM CODE: 2A13206
Curriculum leads to the Associate in Arts Degree. This degree requires 18 units chosen from the following:
Select 18 units from the courses listed below:

Units
ARCH 113 F Architectural Drawing I ..... 3
CSTR 006 F Residential Plumbing and Mech. Systems ..... 3
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 Construction ..... 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
CSTR 112 F Construction Matls., Specs., \& Purchasing ..... 2
CSTR 116 F Residential Construction Practice I ..... 4
WOOD 012 F Cabinetmaking/Millwork

## CHEMISTRY

## Chemistry Associate in Arts Degree <br> PROGRAM CODE: 2A03873

Curriculum leads to the Associate in Arts Degree. This degree requires 18 units of which 10 units are in required courses; the additional 8 units must be chosen from the restricted electives listed below.
Required Courses (10 units) ..... Units
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
Restricted Electives (8 units) ..... Units
CHEM 211AF Organic Chemistry I ..... 5
CHEM 211BF Organic Chemistry II ..... 5
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 Life Sciences I ..... 4
PHYS 211 F Physics with Calculus for Life Sciences II ..... 4
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

## CHILD DEVELOPMENT \& EDUCATION STUDIES

## Child Development and Educational Studies

Associate in Arts Degree
PROGRAM CODE: 2A18801
Curriculum leads to the Associate in Arts Degree and/or employment as a teacher or assistant in private preschools or children's centers. The AA and CDES 225 F ECE: Student Teaching with Field Experience will meet the Title V Child Development Teacher Permit requirement. This degree requires a total of 21 units of which 18 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.

## Required Courses (18 units)

## Units

CDES 110 F Anti-Bias Perspective Seminar 3
CDES 120 F Child Development
3
CDES 200 F Adolescent Development 3
CDES 201 F Child in the Home and Community 3
CDES 204 F Introduction to Special Education
3
CDES 125 F Observation and Assessment for
Early Learning and Development

## Restricted Electives (3 units) <br> Units

CDES 115 F Intro to Early Childhood Ed. Curriculum ..... 3
CDES 122 F Principles of Early Childhood Education ..... 3
CDES 123AF Early Childhood Art Education ..... 2
CDES 123BF Early Childhood Language and Literacy Ed. ..... 2
CDES 123CF Early Childhood Science and Math Ed. ..... 2
CDES 123DF Early Childhood Music Education ..... 2
CDES 151 F School Age Child: Programs/Curric./GuidanceCDES 131 F Business Principles of Family Care3
CDES 125 F Observation and Assessment for Early Learning and Development ..... 3
CDES 238 F Advanced Curriculum Design Seminar ..... 3
EDUCATION DEGREES

## Early Childhood Education

## Associate in Arts Degree <br> PROGRAM CODE: 2A16838

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 preschools, and children's centers. The program meets the basic course requirements for teachers in private preschools licensed by the California State Department of Social Services, and the Child Development Permit at the Associate Teacher Level issued by the Commission for Teacher Preparation and Licensing for teachers in public infant care; preschools, school age and children center programs. Upon completion of the Associates degree with a major in Early Childhood Education and after meeting the required employment experience hours, students would be eligible to apply for a Child Development Permit, Teacher Level. This requires the Associates degree plus an additional seven units early childhood education and the required hours of employment experience. Program: Total number of units: 23
Required Courses (21 units) ..... Units
CDES 110 F Anti-Bias Perspective Seminar or ..... 3
PSY 131 F Cross Cultural Psychology ..... 3
CDES 115 F Intro to Early Childhood Ed. Curriculum ..... 3
CDES 120 F Child Development ..... 3
CDES 121AF Introduction to Early Childhood Teaching ..... 2
CDES 121BF Intro to Early Childhood Teaching Lab ..... 1
CDES 122 F Principles of Early Childhood Education ..... 3
CDES 201 F Child in the Home and Community ..... 3
CDES 125 F Observation and Assessment for
Early Learning and Development ..... 3
Restricted Electives (2 units) ..... Units
CDES 123AF Early Childhood Art Education ..... 2
CDES 123BF Early Childhood Language and Literacy Ed. ..... 2
CDES 123CF Early Childhood Science and Math Ed. ..... 2
2

## Elementary Education

## Associate in Arts Degree <br> PROGRAM CODE: 2A16970

The curriculum leads to an Associate of Arts Degree in Elementary Education. It is designed for students who will be transferring to a four-year institution, obtaining a Bachelors degree and pursuing a teaching credential through a California State University (CSU) integrated program or traditional program. This degree program meets the requirements of the Integrated and Streamlined Program at California State University, Fullerton. Course and degree requirements vary at respective universities. It is important to consult with a Fullerton College Teacher Preparation Counselor and respective university transfer representative to confirm program requirements and transferable work. Program: Total number of units: 22

## Required Courses (22 units)

Units
CDES 110 F Anti-Bias Perspective Seminar or 3
CDES 120 F Child Development 3
CDES 242 F Introduction to Liberal Studies 3
CDES 261AF Introduction to Elementary Classroom Teaching
CDES 261BF Introduction to Elementary Classroom Teaching: Observation
ENGL 210 F Introduction to Language Structure and Use 3
ENGL 239 F Survey of Children's Literature 3
MATH 203 F Math for Future Elementary Teachers 4
PSY 131 F Cross Cultural Psychology

## Early Childhood Education

## Associate Teacher Skills Certificate

 PROGRAM CODE: 2A10628The Associate Teacher Skills Certificate requires a total of 17 units of which 14 are in required courses. An additional 3 units must be chosen from the restricted units listed below.

| Required Courses (14 units) | Units |  |
| :--- | :--- | ---: |
| CDES 115 F | Intro to Early Childhood Ed. Curriculum | 3 |
| CDES 120 F | Child Development | 3 |
| CDES 121AF | Introduction to Early Childhood Teaching | 2 |
| CDES 121BF | Intro to Early Childhood Teaching Lab | 1 |
| CDES 122 F | Principles of Early Childhood Education | 3 |
| CDES 201 F | Child in the Home and Community | 3 |
|  |  |  |
| Restricted Electives (3 units) | Units |  |
| CDES 110 F | Anti-Bias Perspective Seminar or | 3 |
| CDES 123AF | Early Childhood Art Education or | 2 |
| CDES 123BF | Early Childhood Language and Literacy |  |
| CDES 123CF | Education or | 2 |
|  | Education or |  |
| CDES 123DF* | Early Childhood Music Education | 2 |

## Early Childhood Education Administration Certificate

PROGRAM CODE: 2 C08432

To qualify for the Early Childhood Education Administration Certificate, the student must have already met the minimum requirements for a State approved fully qualified teacher and must complete a total of 20 units of required courses. 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.

| Required Courses (20 units) | Units |  |
| :--- | :--- | ---: |
| CDES 110 F | Anti-Bias Perspective Seminar | 3 |
| CDES 204 F | Introduction to Special Education | 3 |
| CDES 205 F | Creating Environments for Young Children | 2 |
| CDES 230 F | Early Childhood Education Administration | 3 |
| CDES 231 F | Early Childhood Education Administration II | 3 |
| CDES 215 F | Health, Safety, Food, \& Nutrition for Children | 3 |
| CDES 240 F | Leadership in Early Childhood Profession | 3 |

## Early Childhood Education Teacher Certificate

PROGRAM CODE: 2 C08431
The Early Childhood Education Teacher Certificate Program requires the completion of 30 units of which 27 are in required courses. An additional 3 units must be chosen from the restricted electives listed below. A grade of "C" or better is required in each course taken. The certificate plus 16 units of general education will meet the Title V Child Development Permit, Teacher level requirements.

## Required Courses (27 units) Units

CDES 110 F Anti-Bias Perspective Seminar 3
CDES 115 F Intro to Early Childhood Ed. 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 225 F Early Childhood Teaching w/ Field Exp. 3
CDES 238 F Advanced Curriculum Design Seminar 3
A valid American Red Cross First Aid Card or equivalent must be on file.

| Restricted Electives (3 units) | Units |  |
| :--- | :--- | ---: |
| CDES 112 F | Teaching Peace | 2 |
| CDES 121AF | Introduction to Early Childhood Teaching and | 2 |
| CDES 121BF | Intro to Early Childhood Teaching Lab | 1 |
| CDES 123AF | Early Childhood Art Education | 2 |
| CDES 123BF | Early Childhood Lang. and Literacy Ed. | 2 |
| CDES 123CF | Early Childhood Science and Math Ed. | 2 |
| CDES 123DF | Early Childhood Music Education | 2 |
| CDES 135 F | Early Childhood CPR and First Aid | 1 |
| CDES 141 F | Principles of Infant/Toddler Care and Ed. | 3 |
| CDES 200 F | Adolescent Development | 3 |
| CDES 206 F | Perceptual-Motor Development for Children | 2 |
| CDES 207 F | Principles and Techniques of Early Childhood |  |
|  | Special Education with Field Experience | 3 |
| CDES 208 F | Working with Families of Children with |  |
|  | Special Needs | 3 |
| CDES 215 F | Health, Safety, Food, \& Nutrition for Children | 3 |

## Family Child Care Skills Certificate <br> PROGRAM CODE: 2C08433

The Family Child Care Skills Certificate prepares the individual to be a licensed family childcare provider. Providers need to apply to the State Department of Social Services for licensing. The certificate requires completion of 15 units. A minimum grade of " $C$ " is required in each course taken.

## Required Courses (15 units)

Units
CDES 110 F Anti-Bias Perspective Seminar 3
CDES 120 F Child Development 3
CDES 131 F Business Principles of Family Care 3
CDES 132 F Environmts. \& Programs: Family Child Care 3
CDES 215 F Health, Safety, Food, \& Nutrition for Children 3
Students are encouraged to add coursework specific to the ages of children whose care is provided.

## Infant/Toddler Caregiver Certificate <br> PROGRAM CODE: 2C15781

This certificate is designed to educate caregivers for employment in programs serving infants and toddlers. It is also recommended for the 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. The Infant/ Toddler Caregiver Certificate requires completion of 21 units. A minimum grade of " $C$ " is required in each course taken.

| Required Courses (21 units) | Units |  |
| :--- | :--- | ---: |
| CDES 110 F | Anti-Bias Perspective Seminar | 3 |
| CDES 120 F | Child Development | 3 |
| CDES 140 F | Infant/Toddler Development and Observation | 3 |
| CDES 141 F | Principles of Infant/Toddler Care and Ed. | 3 |
| CDES 201 F | Child in the Home and Community | 3 |
| CDES 208 F | Working with Families of Children with |  |
|  | Special Needs | 3 |
| CDES 215 F | Health, Safety, Food, \& Nutrition for Children | 3 |

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 degree (transfer) in Child Development is strongly recommended for those students considering a professional career in the area of Infant Development.

## The Para-Professional in Education

## Certificate

PROGRAM CODE: 2C16840
The Certificate for Para-Professional in Education Program requires a total of 18 units of which 18 units are in required courses.
Required Courses (18 units) ..... Units
CDES 120 F Child Development ..... 3
CDES 204 F Introduction to Special Education ..... 3
CDES 207 F Principles and Techniques Early Childhood Special Education w/ Field Experience or ..... 3
PSY 219 F The Human Services ..... 3
CDES 208 F Working with Families of Children with Special Needs ..... 3
CDES 209 F Role of Para-Professional in Diverse Settings ..... 3
CDES 211 F Classroom Practices for Diverse Learners ..... 3

## School Age Skills Certificate <br> PROGRAM CODE: $2 C 00078$

The School Age Skills Certificate is designed to educate adults for employment in programs serving school-age children. Completion of this certificate will meet the State requirements for school age providers in a facility licensed for after-school care. The certificate requires a completion of 15 units of which 12 are required courses. An additional 3 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required in each course taken.

Required Courses (12 units) Units
CDES 110 F Anti-Bias Perspective Seminar 3
CDES 120 F Child Development 3
CDES 151 F School Age Child: Programs, Curriculum and Guidance

3
CDES 201 F Child in the Home and Community 3
Restricted Electives (3 units) Units
CDES 112 F Teaching Peace 2
CDES 123AF Early Childhood Art Education 2
CDES 123BF Early Childhood Language \& Literacy Ed. 2
CDES 123CF Early Childhood Science and Math Ed. 2
CDES 123DF Early Childhood Music Education 2
CDES 200 F Adolescent Development 3
CDES 208 F Working with Families of Children with Special Needs

3
CDES 215 F Health, Safety, Food, \& Nutrition for Children 3
Completion of the required courses for this certificate plus CDES 200 F and 50 days experience (minimum of 3 hours/day) qualify for the school age emphasis for the Child Development Permit.

## Weekend Associate Teacher Skills Certificate PROGRAM CODE: 2C00017A

The Associate Teacher Skills Certificate requires a total of 15 units of which 11 units are in required courses. An additional 4 units must be chosen from the restricted units listed below.

## Required Courses (11 units)

Units
CDES 120 F Child Development
3
CDES 122 F Principles of Early Childhood Education 3
CDES 135 F Early Childhood CPR and First Aid 2
CDES 201 F Child in the Home and Community

## Restricted Electives (4 units)

Units
CDES 123AF Early Childhood Art Education 2
CDES 123BF Early Childhood Language \& Literacy Ed.
2
CDES 123CF Early Childhood Science and Math Ed.
CDES 123DF Early Childhood Music Education

## CINEMA-RADIO-TV

## Communications: General Associate in Arts

## Degree

PROGRAM CODE: 2A03828
The Communications: General A.A. Degree Program requires 18 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.

| Required Courses (18 units) | 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 Prod./Non-Linear Editing Video/Film | 3 |
| JOUR 101 F | Reporting and Writing | 3 |
| JOUR 102 F | Advanced Reporting and Writing | 3 |
| JOUR 110 F | Mass Media Survey | 3 |
| PHOT 101 F | Introduction to Photography | 3 |

## Radio Broadcasting Associate in Arts Degree

 PROGRAM CODE: $2 A 03830$The Communications: Radio Broadcasting Associate in Arts Degree Program requires a total of 18 units of which 15 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below. Curriculum leads to the A.A. Degree in Radio Broadcasting and/or entrylevel employment in radio broadcasting.

| 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 |
|  |  | Units |
| Restricted Electives (3 units) | 1 |  |
| CRTV 124 F | Broadcast Advertising Sales | 3 |
| CRTV 128 F | Writing for Radio, Television and Film | 3 |
| CRTV 129 F | Broadcast News | 3 |
| CRTV 133 F | Traffic Reporting | 3 |
| CRTV 145 F | Radio/TV Sports Broadcasting |  |
|  |  |  |

## Radio Production Associate in Arts Degree PROGRAM CODE: 2A08397

The Communications: Radio Production Associate in Arts Degree Program 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. Curriculum leads to the A.A. Degree in Radio Production and/or entry-level employment in radio broadcasting.

## 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, Television and Film 3
CRTV 130 F Broadcast Audio Production 3
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 2-4
CRTV 133 F Traffic Reporting 3
CRTV 135 F Broadcast TV and Radio Announcing 3

## 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.

| Required Courses (6 units) | Units |  |
| :--- | :--- | ---: |
| CRTV 120 F | Media Aesthetics | 3 |
| CRTV 150 F | Television Studio Production | 3 |
|  |  |  |
| Restricted Electives (12 units) | 3 |  |
| CRTV 118 F | Introduction to Radio, TV and Film | 3 |
| CRTV 121 F | The American Cinema | 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, Television and Film | 3 |
| CRTV 130 F | Broadcast Audio Production | 3 |
| CRTV 131 F | Contemporary Cinema | 3 |
| CRTV 157 F | Digital Prod./Non-Linear Editing 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 | $2-4$ |
| JOUR 110 F | Mass Media Survey | 3 |

## Radio and Television/Video Production Certificate

PROGRAM CODE: 2 C21266
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 units of which 32 are in required courses. An additional 5 units must be chosen from the restricted units listed below. A minimum grade of " C " is required in each course taken.

| Required Courses (32 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, Television and Film | 3 |
| CRTV 129 F | Broadcast News | 3 |
| CRTV 130 F | Broadcast Audio Production | 3 |
| CRTV 135 F | Broadcast TV and Radio Announcing | 3 |
| CRTV 150 F | Television Studio Production | 3 |
| CRTV 157 F | Digital Prod./Non-Linear Editing Video/Film | 3 |
| CRTV 164 F | Advanced Digital Production/Non-Linear |  |
|  | Editing for Video | 3 |
| CRTV 235 F | On-Air Radio Broadcasting | 3 |
| CRTV 290 F | Internship in Communications | $2-4$ |
|  |  |  |
| Restricted Electives (5 units) | 3 |  |
| CRTV 127 F | Screenwriting | 3 |
| CRTV 133 F | Traffic Reporting | 3 |
| CRTV 196 F | Communications Seminars | $0.5-3$ |
| CRTV 235 F | On-Air Radio Broadcasting | 3 |
| CRTV 280 F | Television Production Workshop | $2-5$ |
| CRTV 245AF | Digital Editing, Graphics and Effects | 3 |

## Radio Broadcasting Certificate <br> PROGRAM CODE: 2C21265

The Radio Broadcasting Certificate Program requires the completion of 25 units of which 19 units 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. Upon completion of this certificate program a student will be prepared for an entry-level position with a radio station.
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

## Restricted Electives (6 units)

Units
CIS 100 F Introduction to Personal Computers
CRTV 128 F Writing for Radio, Television and Film
3

CRTV 235 F
CRTV 290 F
SPCH 105 F
THEA 127 F
THEA 129 F Beginning Voice for Actors
CRTV 133 F Traffic Reporting

## Sports Broadcasting Skills Certificate <br> PROGRAM CODE: 2C08400

The Sports Broadcasting Skills Certificate requires a total of 16 units of which 13 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. Upon completion of this certificate program, a student will be prepared for entry-level position in radio, television or cable television sports broadcasting.

Required Courses (13 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 145 F Radio/TV Sports Broadcasting 3
Restricted Electives (3 units)
Units
JOUR 101 F Reporting and Writing 3
CRTV 130 F Broadcast Audio Production 3
CRTV 135 F Broadcast TV and Radio Announcing 3
CRTV 137 F Television Announcing
CRTV 145 F Radio/TV Sports Broadcasting
CRTV 150 F Television Studio Production
CRTV 164AF Adv. Digital Production/Non-Linear Editing
CRTV 235 F On-Air Radio Broadcasting
CRTV 290 F Internship in Communications
PE 247 F Sports Management

## CIVIL ENGINEERING TECHNOLOGY

Technology \& Engineering Division
Office: Bldg 1000, Room 1005
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Website: techneng.fullcoll.edu

## Civil Engineering Technology Associate in Science Degree <br> PROGRAM CODE: $2 S 03845$

Curriculum leads to an Associate in Science Degree for employment in the construction industry, government agencies, and private surveying/civil engineering firms. It is not designed to fulfill requirements to transfer to a Bachelors Degree in Civil Engineering. The degree requires a total of 26 units of which 18-19 units are in required courses. An additional 7-8 units must be chosen from the restricted electives listed below.

| Required Courses (18-19 units) | Units |
| :--- | ---: |
| ENGR 101AF | Surveying I |
| ENGR 101BF | Surveying II |
| ENGR 102 F | Engineering Drawing |
| ENGR 105 F | Engineering CAD |
| TECH 081 F | Technical Mathematics I |
| MATH 141 F | College Algebra |
|  |  |
| Restricted Courses (7-8 units) | 4 |
| CHEM 107 F | Elementary Chemistry |
| ESC 100 F | Physical Geology |
| ESC 100LF | Physical Geology Lab |
| MATH 142 F | Trigonometry |
| RE 101 F | Principles of Real Estate |

## COMPUTER INFORMATION SYSTEMS

## Computer Information Systems Associate in Science Degree <br> PROGRAM CODE: $2 S 03831$

Curriculum leads to the Associate of Science Degree and/or employment in computer applications and computer information systems. This degree requires 30-31 units which must be chosen from the required courses listed below. (See college catalog for options for the Associate of Science Degree general education requirements.)

Required Courses (8 units)
Units
CIS 107 F Intro to Operating Systems
CIS 180 F Introduction to Networking Concepts
CIS 217 F Visual Basic Programming I

| Choose one o | of the following for a total of 3-4 units: | Units |
| :---: | :---: | :---: |
| ACCT 001 F | Accounting for Small Business | 3 |
| ACCT 100BF | Financial Accounting Principles | 3 |
| ACCT 101AF | Financial Accounting | 4 |
| Choose one o | of the following for a total of 3 units: | Units |
| BUS 111 F | Business Communications | 3 |
| BUS 211 F | Writing for Business | 3 |
| Choose one o | of the following for a total of 2 units: | Units |
| BUS 182 F | Doing Business Online | 3 |
| MKT 151 F | Internet Marketing and Promotion | 3 |
| Choose one o | of the following for a total of 3 units: | Units |
| CIS 100 F | Introduction to Personal Computers | 3 |
| CIS 111 F | Introduction to Information Systems | 3 |
| CIS 111HF | Honors Intro to Information Systems | 3 |
| Choose one o | of the following for a total of 2 units: | Units |
| CIS 105 F | Spreadsheet I | 2 |
| CIS 205AF | Spreadsheet II | 2 |
| Choose one o | of the following for a total of 2 units: | Units |
| CIS 142 F | Database I | 2 |
| CIS 242 F | Database II | 2 |
| Choose one o | of the following for a total of 2 units: | Units |
| CIS 150 F | Introduction to the Internet | 2 |
| CIS 151 F | Internet Research | 2 |
| Choose one o | f the following for a total of 2 units: | Units |
| CIS 152 F | Web Page Design II | 3 |
| CIS 252 F | Web Page Design III | 2 |
| Choose one o | of the following for a total of 3 units: | Units |
| CIS 225 F | Netware System Manager | 3 |
| CIS 291 F | Enterprise Networking | 3 |

## Computer Information Systems Certificate PROGRAM CODE: 2 C21267

The Computer Information Systems Certificate requires the completion of 28-33 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.

## Required Courses (5 units)

Units
CIS 107 F Intro to Operating Systems 2
CIS 180 F Introduction to Networking Concepts 3
One course from the following
for a total of 3-4 units:
Units
ACCT 001 F Accounting for Small Business
ACCT 100BF Financial Accounting Principles
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 2 units:
BUS 182 F Doing Business Online 3
MKT 151 F Internet Marketing and Promotion 3
CIS 298 F Advanced Computer Topics 0.5-3
One course from the following
for a total of 3 units:
Units
CIS 100 F Introduction to Personal Computers 3
CIS 111 F Intro to Information Systems 3
CIS 111HF Honors Intro to Information Systems 3
One course from the following
for a total of 2 units:
CIS 105 F Spreadsheet I 2
CIS 205AF Spreadsheet II 2
CIS 205BF Macro Programming 2
One course from the following
for a total of 2 units: Units
CIS 142 F Database I 2
CIS 242 F Database II 2
One course from the following
for a total of 2-3 units:
CIS 150 F Introduction to the Internet 2
CIS 151 F Internet Research 2
CIS 109 F Personal Computer Security 2
CIS 149 F Internet Entertainment 3
One course from the following
for a total of 2-3 units: Units
CIS 152 F Web Page Design II 3
CIS 252 F Web Page Design III 2
CIS 212 F Robotic Programming 3
CIS $230 \mathrm{~F} \quad$ PHP and MySQL Programming 3
CIS 154 F JavaScript Programming I 2
CIS 155 F Web Page Multimedia Design I 2
CIS 157 F Dreamweaver I 3
CIS 157BF Dreamweaver II 3
CIS 254 F JavaScript Programming II 2
CIS 255 F Web Page Multimedia Design II 2
CIS 109 F Personal Computer Security 2
One course from the following
for a total of 2-3 units:
Units
CIS 217 F Visual Basic Programming I 3
CIS 219 F Visual Basic Programming II 3
CIS 218 F Visual Basic Programming III 3
CIS 220 F Web Server Programming 3
CIS 223 F Programming in C++ 3
CIS 226 F Java Programming I 3
CIS 228 F Java Programming II 3
CIS 257 F Dreamweaver III 3
CIS 229 F XML Programming 3

Choose one from the following

## for a total of 2－3 units：

Units
CIS 183 F Network Security Fundamentals
3
CIS 225 F Netware System Manager
CIS 281 F Introduction to Networking Hardware
CIS 285 F Windows Server
3

CIS 291 F Enterprise Networking
CIS 260 F Solaris System Administration
CIS 280 F Intro to Oracle：SQL and PL／SQL

## Database Applications Skills Certificate <br> PROGRAM CODE：2C00068

The Database Applications Skills Certificate prepares the student for a career using database applications software．This certificate requires a total of 8 units of which 8 units are in required courses．

| Required Courses（8 units） | Units |  |
| :--- | :--- | ---: |
| CIS 142 F | Database I | 2 |
| CIS 242 F | Database II | 2 |
| CIS 218 F | Visual Basic Programming III | 3 |
| CIS 090 F | Office Certification Preparation | 1 |

## E－Commerce Programming Skills Certificate PROGRAM CODE：2C00020

The E－Commerce Programming Skills Certificate requires the completion of 15－16 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．

Required Courses（5 units）Units
CIS 152 F Web Page Design II 3
CIS 180 F Introduction to Networking Concepts 3
Choose one of the following for a total of 2－3 units：Units
CIS 154 F JavaScript Programming I 2
CIS 211 F Basic Programming for Business 3
Choose one of the following for a total of 3 units：Units
CIS 217 F Visual Basic Programming I 3
CIS 220 F Web Server Programming 3
Choose one of the following for a total of 3 units：Units
CIS 226 F Java Programming I 3
CIS 230 F PHP and MySQL Programming 3
Choose one of the following for a total of 2 units：Units
CIS 252 F Web Page Design III 2
CIS 254 F JavaScript Programming II 2

## Enterprise Database Skills Certificate <br> PROGRAM CODE：2C00069

The Enterprise Database Skills Certificate Program prepares the student for a career using enterprise database software． Skills include developing a database design，implementing the design in various databases，and managing a database envi－ ronment．This certificate requires a total of 10 units of which 10 units are in required courses．

Required Courses（10 units）
CIS 142 F Database I
CIS 242 F Database II
CIS 270 F SQL Server Administration
CIS 280 F Intro to Oracle：SQL and PL／SQL

## Internet Skills Certificate

PROGRAM CODE: 2C00021
The Internet Skills Certificate requires the completion of 15 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.

| Required Courses (11 units) | Units |  |
| :--- | :--- | ---: |
| CIS 050 F | Web Page Design I | 2 |
| CIS 107 F | Intro to Operating Systems | 2 |
| CIS 149 F | Internet Entertainment | 3 |
| CIS 152 F | Web Page Design II | 3 |
| MKT 151 F | Internet Marketing and Promotion | 3 |

Choose one of the following for a total of 2 units Units
CIS $150 \mathrm{~F} \quad$ Introduction to the Internet 2

CIS 151 F Internet Research
2

Choose one of the following for a total of 2 units Units
CIS 153 F Business Web Graphics
3
CIS 155 F Web Page Multimedia Design I

## Networking Skills Certificate <br> PROGRAM CODE: 2C00034

The Networking Skills 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 15 units of which 12 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.

| Required Courses (12 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 |
|  |  | Units |
| Restricted Electives (3 units) | 3 |  |
| CIS 260 F | Solaris System Administration | 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 |  |

## PC Applications Skills Certificate <br> PROGRAM CODE: $2 C 00022$

The PC Applications Skills Certificate requires the completion of 16 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.

| Required Courses (10 units) |  | Units |
| :---: | :---: | :---: |
| CIS 104 F | Presentation Graphics | 2 |
| CIS 105 F | Spreadsheet I | 2 |
| CIS 107 F | Intro to Operating Systems | 2 |
| CIS 142 F | Database I | 2 |
| CIS 242 F | Database II | 2 |
| Choose one of the following for a total of 2 units |  | Units |
| CIS 050 F | Web Page Design I | 2 |
| CIS 150 F | Introduction to the Internet | 2 |
| Choose one of the following for a total of 2 units |  | Units |
| CIS 048 F | Introduction to PC Communications | 2 |
| CIS 109 F | Personal Computer Security | 2 |
| Choose one of the following for a total of 2 units |  | Units |
| CIS 205AF | Spreadsheet II | 2 |
| CIS 205BF | Macro Programming | 2 |

## Programming Skills Certificate <br> PROGRAM CODE: 2 C00023

The Programming Skills Certificate requires a total of 15 units of which 12 units are in required classes. An additional 3 units must be chosen from the restricted units 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.
Required Courses (12 units) ..... Units
CIS $211 \mathrm{~F} \quad$ Basic Programming for Business ..... 3
CIS 217 F Visual Basic Programming I ..... 3
CIS 218 F Visual Basic Programming III ..... 3
CIS 226 F Java Programming I or ..... 3
CIS 223 F Programming in C++ ..... 3
Restrictive Electives (3 units) ..... Units
CIS 212 F Robotic Programming or ..... 3
CIS 219 F Visual Basic Programming II or ..... 3
CIS 222 F CGI/Perl Scripting or ..... 3
CIS 228 F Java Programming II or ..... 3
CIS $229 \mathrm{~F} \quad$ XML Programming or ..... 3
3

## Spreadsheet Applications Skills Certificate <br> PROGRAM CODE: 2C00070

The Spreadsheet Applications Skills Certificate prepares the student for a career using spreadsheet applications software. This certificate requires a total of 7 units of which 7 units are in required courses.

Required Courses (7 units)
Units
CIS 105 F Spreadsheet I
2
CIS 205AF Spreadsheet II
2
CIS 205BF Macro Programming 2
CIS 090 F Office Certification Preparation 1

## Web Design Skills Certificate <br> PROGRAM CODE: 2C00024

The Web Design Skills Certificate requires the completion of 12-15 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.

Choose one of the following for a total of 2 units
Units
CIS 107 F Intro to Operating Systems
2
CIS 120AF Project Management I 2
CIS 120BF Project Management II
2
Choose one of the following for a total of 2-3 units Units
CIS 050 F Web Page Design I
2
CIS 157 F Dreamweaver I
Choose one of the following for a total of 2 units
Units
CIS 150 F Introduction to the Internet
2
CIS 152 F Web Page Design II
3
CIS 159 F Introduction to XML
Choose one of the following for a total of 2 units
Units
CIS 153 F Business Web Graphics
3
CIS 155 F Web Page Multimedia Design I
Choose one of the following for a total of 2-3 units
Units
CIS 154 F JavaScript Programming I
CIS 180 F Introduction to Networking Concepts
2
3
CIS 156AF WebMaster - Foundations
CIS 156BF WebMaster - Designer
CIS 156CF WebMaster - Administration
CIS 222 F CGI/Perl Scripting
CIS 252 F Web Page Design III
CIS 229 F XML Programming
Choose one of the following for a total of 2-3 units
Units
CIS 254 F JavaScript Programming II
CIS 255 F Web Page Multimedia Design II
CIS 157BF Dreamweaver II
CIS 257 F Dreamweaver III

## Web Scripting Skills Certificate <br> PROGRAM CODE: 2 C00062

The Web Scripting Skills 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 11 units of which 11 units are in required courses.

| Required Courses (11 units) | Units |  |
| :--- | :--- | ---: |
| CIS 152 F | Web Page Design II | 3 |
| CIS 252 F | Web Page Design III | 2 |
| CIS 154 F | JavaScript Programming I | 2 |
| CIS 254 F | JavaScript Programming II | 2 |
| CIS 230 F | PHP and MySQL Programming | 3 |

## COMPUTER SCIENCE

## Computer Science Associate in Science

## Degree

PROGRAM CODE: 2508408
The Computer Science Associate in Science Degree Program requires 24 units of which 20 units are in required courses. The additional 4 elective units must be chosen from the restricted electives listed below. A minimum of 8 CSCl units must be completed at Fullerton College. A minimum grade of "C" is required in all required courses and restricted electives.

Required Courses (20 units) Units
Suggested sequence
CSCI 123 F $\begin{aligned} & \text { Introduction to Programming Concepts } \\ & \text { in C++ }\end{aligned}$
CSCI 133 F Data Structures in C++ 4
MATH 150BF Calculus II 4
MATH 171 F Discrete Mathematics 4
MATH 172 F Graph Theory and Linear Algebra 4
Restricted Electives (4 units) Units
CSCI 223 F C Language for Math and Science 4
CSCI 241 F Computer Org. \& Assembly Lang. Prog. 4

## CONSTRUCTION

## Construction Estimating Skills Certificate PROGRAM CODE: 2C00045

The Construction Estimating Skills 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.
Required Courses (17 units) Units
CSTR 015 F Construction Management ..... 3
CSTR 030 F Construction Blueprint Reading ..... 3
CSTR 060 F Computer Estimating in Construction ..... 3
CSTR 065 F Construction Project Scheduling ..... 3
CSTR 110 F Residential Estimating ..... 3
CSTR 112 F Construction Matls., Specs., \& Purchasing ..... 2
Construction Inspection
Associate in Science Degree
PROGRAM CODE: 2S13208Curriculum leads to the Construction Inspection Associate inScience Degree and/or entry-level employment in the construc-tion industry.
Required Courses (18 units) ..... 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 Code: Comm./Industrial ..... 3
CSTR 038 F Uniform Mechanical Code ..... 3

## Construction Inspection Certificate PROGRAM CODE: 2 C21272

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.
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: Comm.Industrial ..... 3
CSTR 038 F Uniform Mechanical Code ..... 3
Restricted Electives (10 units) Units
CSTR 006 F Residential Plumbing/Mech. Systems ..... 3
CSTR 030 F Construction Blueprint Reading ..... 3
CSTR 104 F Concrete and Masonry ..... 3
CSTR 108 F Surveying for Builders ..... 2
TECH 081 F Technical Mathematics I ..... 3
TECH 088 F Technical Science ..... 3
TECH 127 F Industrial Safety ..... 1
Construction Management
Associate in Science Degree
PROGRAM CODE: 2S03844
Curriculum leads to the Associate in Science Degree and/oremployment in the construction industry. A total of 24 units arerequired. High School preparation: woodwork, drafting, andmathematics are recommended.
Complete $\mathbf{2 4}$ or more units from the following list: Units
ACCT 101AF Financial Accounting ..... 4
BUS 100 F Introduction to Business ..... 3
BUS 180 F Small Business Management ..... 3
CIS 100 F Introduction to Personal Computers ..... 3
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 Matls., Specs., \& Purchasing ..... 2
Construction Technology
Associate in Science Degree
PROGRAM CODE: $2 S 03839$
The Construction Technology Associate in Science Degree
requires 24 units from the following catalog list of classes.
Complete $\mathbf{2 4}$ or more units from the following list: Units
CSTR 006 F Residential Plumbing/Mech. Systems ..... 3
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 Construction ..... 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
CSTR 112 F Construction Matls., Specs., \& Purchasing ..... 2
CSTR 116 F Residential Construction Practice I ..... 4

## Construction Technology Certificate PROGRAM CODE: $2 C 21271$

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.

## Required Courses (17 units)

Units
CSTR 006 F Residential Plumbing/Mech. Systems
3
CSTR 100 F Beginning Residential Construction 4
CSTR 102 F Residential Finish Carpentry 4
CSTR 104 F Concrete and Masonry
CSTR 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 Business Admin. for Construction Industry 3
CSTR 018 F Residential Construction Practice II
CSTR 020 F Remodeling and Additions Construction I
CSTR 022 F Remodeling and Additions Construction II
CSTR 028 F Introduction to Alternate Energy
CSTR 030 F Construction Blueprint Reading
CSTR 031 F International Building Code
CSTR 032 F Uniform Plumbing Code
CSTR 033 F Comm. Construction Blueprint Reading
CSTR 034 F National Electrical Code
CSTR 035 F California Accessibility \& Energy Costs
CSTR 036 F Uniform Building Code: Residential
CSTR 037 F Uniform Building Code: Comm/Industrial
CSTR 038 F Uniform Mechanical Code 3
3
CSTR 039 F Commercial Mechanical Code 3
CSTR 040 F Building Design for Hazardous Materials 3
CSTR 041 F International Residential Code 3
CSTR 042 F Residential Steel Frame Construction 4
CSTR 050 F Computer Design Software/Contractor 2
CSTR 060 F Computer Estimating in Construction 3
CSTR 065 F Construction Project Scheduling 3
CSTR 108 F Surveying for Builders 2
CSTR 112 F Construction Matls., Specs., \& Purchasing 2
CSTR 116 F Residential Construction Practice I

## COSMETOLOGY

## Cosmetology Associate in Science Degree <br> PROGRAM CODE: $2 S 03887$

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 52 units in required courses.
Required Courses (52 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 ..... 11
COSM 055EF Cosmetology: Level 5 ..... 9

## Cosmetology Certificate

## PROGRAM CODE: 2 C21276

The Cosmetology Certificate requires the completion of 55 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.
Required Courses (55 units)
COSM 055AF Cosmetology: Level 1
Units
COSM 055CF Cosmetology: Level 3 ..... 11
COSM 055DF Cosmetology: Level 4 ..... 10
COSM 055EF Cosmetology: Level 5 ..... 9

## Cosmetology Instructor

## Associate in Science Degree

## PROGRAM CODE: $2 S 08439$

Curriculum leads to the Cosmetology Instructor Associate in Science Degree requires a total of 18-19 units of which 15 units are in required courses. An additional 3-4 units must be chosen from the restricted electives listed below. This program is designed to introduce and/or expand Pivot Point principles and advanced techniques.

| Required Courses (15 units) | Units |
| :--- | ---: |
| COSM 060 F Instruction Techs. in Cosmetology | 8 |
|  |  |
| Restricted Electives (3-4 units) | Units |
| COSM 061AF Pivot Point Instruction I | 3 |
| COSM 061BF Pivot Point Instruction II | 3 |
| COSM 061CF Pivot Point Instruction III | 3 |
| COSM 070 F | Cont. Ed. Instruction Techs./Cosmetology |

## Esthetician Certificate <br> PROGRAM CODE: 2C16658

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.

Required Courses (20 units)
Units
COSM 041 F Esthetician: Level 1
10
COSM 042 F Esthetician: Level 2

## DANCE

## Dance Associate in Arts Degree <br> PROGRAM CODE: 2A03851

The Dance Associate in Arts Degree Program requires a total of 18 units of which 14 units are in required courses. An additional 4 units must be chosen from the restricted units listed below.

| Required Courses (14 Units) | Units |
| :---: | :---: |
| DANC 103 F Dance Technique I or | 1 |
| DANC 104 F Dance Technique II | 1 |
| DANC 105 F Ballet I or | 1 |
| DANC 106 F Ballet II | 1 |
| DANC 107 F Modern Dance I or | 1 |
| DANC 108 F Modern Dance II | 1 |
| DANC 111 F Jazz I or | 1 |
| DANC 112 F Jazz II | 1 |
| DANC 120 F Dance History | 3 |
| DANC 202 F Dance Composition/Choreography | 2 |
| DANC 203 F Dance Production | 2 |
| DANC 204 F Dance Rehearsal and Performance | 1 |
| DANC 205 F Dance Ensemble | 2 |
| Restricted Electives (2 Units) |  |
| Select 2 Units from the following: | Units |
| DANC 110 F Ballet Folklorico | 1 |
| DANC 115 F Hip Hop Dance I | 1 |
| DANC 130 F Afro-Caribbean Dance | 1 |
| DANC 132 F Flamenco Dance I | 1 |
| Restricted Electives (2 units) |  |
| Select 2 Units from the following: | Units |
| DANC 102 F Conditioning for Dance | 1 |
| DANC 113 F Tap Dance I | 1 |
| DANC 114 F Tap Dance II | 1 |
| DANC 119 F Dance for Theatre | 1 |
| DANC 214 F Dance Repertory | 2 |

## Dance Technique Skills Certificate <br> PROGRAM CODE: 2 C00077

The Dance Technique Skills Certificate Program 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.
Required Courses (14 units) Units
DANC 120 F Dance History ..... 3
DANC 210 F Multicultural Dance in the U.S. Today ..... 3
DANC 105 F Ballet I ..... 1
DANC 106 F Ballet II ..... 1
DANC 107 F Modern Dance I ..... 1
DANC 108 F Modern Dance II ..... 1
DANC 111 F Jazz I ..... 1
DANC 112 F Jazz II ..... 1
DANC 150 F Commercial Dance ..... 1
DANC 113 F Tap Dance I ..... 1
Restricted Electives (3 units) ..... Units
DANC 130 F Afro-Caribbean Dance ..... 1
DANC 110 F Ballet Folklorico ..... 1
DANC 132 F Flamenco Dance I ..... 1
DANC 116 F Social Dance ..... 1
DANC 115 F Hip Hop Dance I ..... 1
DANC 122 F Middle Eastern Dance ..... 1
DANC 151 F Latin Jazz ..... 1

## DRAFTING

(see Industrial Drafting)

## EARTH SCIENCES

## Astronomy Associate in Arts Degree

PROGRAM CODE: 2A08436
Curriculum leads to the Associate in Arts Degree. This degree requires 18 units of which 17 are in required courses; an additional 1 unit must be chosen from the restricted electives listed below.
Required Courses (17 units) ..... Units
ESC 116 F Astronomy ..... 3
ESC 116LF Astronomy Lab ..... 2
PHYS 221 F General Physics I ..... 4
PHYS 222 F General Physics II ..... 4
PHYS 223 F General Physics III ..... 4
Restricted Electives (1 unit) ..... Units
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
MATH 150AF Calculus I ..... 4
MATH 150BF Calculus II ..... 4
MATH 250AF Multivariable Calculus ..... 4
MATH 250BF Linear Algebra and Differential Equations

## ECONOMICS

## Economics Associate in Arts Degree <br> PROGRAM CODE: $2 A 03882$

The Economics AA Degree 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.

| Required Courses (6 units) | Units |  |
| :--- | :--- | ---: |
| 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 | 3 |
| ECON 102HF | Honors Principles of Economics - Macro | 3 |
|  |  | Units |
| Restricted Electives (12 units) | 4 |  |
| ACCT 101AF | Financial Accounting | 4 |
| MATH 120 F | Introductory Probability and Statistics | 4 |
| MATH 130 F | Calculus for Business | 4 |
| MATH 150AF | Calculus I | 4 |
| MATH 150BF | Calculus II | 3 |
| PHIL 100 F | Introduction to Philosophy | 3 |
| PHIL 160 F | Introduction to Ethics | 3 |
| PHIL 165 F | Business and Professional Ethics | 3 |
| BUS 131 F | Principles of International Business | 3 |
| HIST 110 F | Western Civilization I | 3 |
| HIST 111 F | Western Civilization II | 3 |
| HIST 170 F | History of the United States I | 3 |
| HIST 171 F | History of the United States II | 3 |
| ENGL 102 F | Introduction to Literature | 4 |
| Foreign Language 203F Intermediate | 4 |  |
| Foreign Language 204F Intermediate |  |  |

## EDUCATIONAL DEGREES

(see Child Development and Educational Studies)

## ENGINEERING

## Engineering Associate in Science Degree <br> PROGRAM CODE: $2 S 03834$

Curriculum leads to the Associate in Science Degree. This degree requires a minimum of 22 units chosen from the courses listed below. The degree provides a sound foundation for students interested in the Engineering field. It serves as preparation for transfer to a 4-year university for Engineering majors.
22 Units Required Out of the Courses Listed Below: ..... Units
ENGR 101AF Surveying I ..... 4
ENGR 105 F Engineering CAD ..... 4
ENGR 110 F Introduction to Engineering ..... 3
ENGR 201 F Statics ..... 3
ENGR 203 F Electric Circuits ..... 4
ENGR 203LF Electric Circuits Lab ..... 1
MATH 150AF Calculus I ..... 4
MATH 150BF Calculus II ..... 4
MATH 250AF Multivariable Calculus ..... 4
MATH 250BF Linear Algebra and Differential Equations ..... 4
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
PHYS 221 F General Physics I ..... 4
PHYS 222 F General Physics II ..... 4
PHYS 223 F General Physics III ..... 4

## ENGLISH

## English Associate in Arts Degree <br> PROGRAM CODE: 2A03866

Curriculum leads to the Associate in Arts Degree. 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. The degree requires 18 units, of which 12 are in required courses. An additional six units must be selected from the restricted electives listed below.

| Required: |  | Units |
| :--- | :--- | ---: |
| ENGL 102 F | Introduction to Literature or | 3 |
| ENGL 102HF | Honors Introduction to Literature | 3 |
|  |  |  |
| And one survey sequence (6 units) | Units |  |
| from the following: | 3 |  |
| ENGL 211 F | English Literature to 1800 and | 3 |
| ENGL 212 F | English Literature since 1800 or | 3 |
| ENGL 221 F | American Literature to the Civil War and | 3 |
| ENGL 222 F | American Lit.: the Civil War to the Present or | 3 |
| HIST 154 F | Ancient Egypt and | 3 |
| ENGL 225 F | World Lit. since the Early Modern Period | 3 |

And one course (3 units) from the following: ..... Units
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
ENGL 208 F Introduction to Film Studies ..... 3
Restricted Electives:
6 additional units from any of the above coursesor 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 218 F California Writers ..... 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 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
ENGL 249 F Survey of Chicano/a Literature ..... 3
ENGL 250 F Survey of African American Literature ..... 3
ENGL 251 F Survey of Native American Literature ..... 3
ENGL 252 F Women's Literature ..... 3
ENGL 253 F Survey of Asian 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

## ENVIRONMENTAL SCIENCES

## Environmental Science

Associate in Arts Degree
PROGRAM CODE: 2A08435
The Environmental Science Associate in Arts Degree Program requires a total of 18 units of which 8 units are in required courses. An additional 10 units may be chosen from the restricted electives listed below.

| Required Courses (8) | Units |  |
| :--- | :--- | ---: |
| BIOL 274 F | General Ecology | 4 |
| ENVS 105 F | Environmental Biology | 3 |
| ENVS 105LF | Environmental Biology Lab | 1 |

Units
4 3 $\begin{array}{lll}\text { ENVS 105 F } & \text { Environmental Biology } & 3 \\ \text { ENVS 105LF } & \text { Environmental Biology Lab } & 1\end{array}$
Restricted Electives (10) ..... Units
AJ 100 F Introduction to Law Enforcement ..... 3
CHEM 111AF General Chemistry I ..... 5
CHEM 111BF General Chemistry II ..... 5
ESC 190 F Environmental Geology ..... 3
GEOG 102 F Physical Geography or ..... 3
SOC 101 F Introduction to Sociology ..... 3
GEOG 170 F Urban Geography: Introduction to the City or ..... 3
SOC 102 F Social Problems ..... 3
PSY 101 F General Psychology ..... 3
ECON 101 F Principles of Economics - Micro ..... 3
ETHNIC STUDIES
Ethnic Studies Associate in Arts Degree
PROGRAM CODE: 2A03881
The Ethnic Studies AA Degree Program 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.
Required Courses (16 units) ..... Units
ETHS 101 F American Ethnic Studies ..... 4
ETHS 140 F Introduction to Chicano/a Studies ..... 3
ETHS 170 F Introduction to Asian American Studies ..... 3
Restricted Electives (3 units) ..... Units
ENGL 249 F Survey of Chicano/a Literature ..... 3
ENGL 250 F Survey of African American Literature ..... 3
ENGL 251 F Survey of Native American Literature ..... 3
ETHS 110 F Introduction to Multicultural Studies ..... 3
ETHS 118 F Introduction to Bilingual-Crossculturalism ..... 3
ETHS 130 F African-American History I ..... 3
ETHS 141 F Chicana/Chicano History ..... 3
ETHS 142 F The Chicano-a/Latino-a in Contemp. Society ..... 3
ETHS 171 F Asian-American History ..... 3
HIST 160AF Asia: Basic Heritage or ..... 3
HIST 160BF Modern China and Japan ..... 3
HIST 162AF History of the Americas I or ..... 3
HIST 162BF History of the Americas II ..... 3
HIST 270 F Women in United States History ..... 3
WMNS 100 F Introduction to Women's Studies ..... 3

## Chicano/Chicana Studies

## Associate in Arts

## PROGRAM CODE: 2A16767

The Chicano/Chicana Studies AA Degree Program 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.

## Required Courses (12 units)

## Units

ETHS 140 F Introduction to Chicano/a Studies
3
ETHS 141 F Chicana/Chicano History 3
ETHS 142 F The Chicano-a/Latino-a in Contemp. Society 3
ENGL 249 F Survey of Chicano/a Literature

## Restricted Electives (6 units)

Units
ANTH 102 F Cultural Anthropology
3
ART 116 F Art History - Mexico 3
ETHS 101 F American Ethnic Studies 4
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 160 F History of the Native Americans 3
ETHS 170 F Introduction to Asian American Studies 3
ETHS 171 F Asian-American History
3
HIST 162AF History of the Americas I or
HIST 162BF 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

## FASHION

## Dressmaking-Alterations Certificate <br> PROGRAM CODE: 2 C08428

The Dressmaking-Alterations Certificate Program requires the completion of 36 units of which 27 are in required courses. An additional 9 units must be chosen from the restricted electives listed below.

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 and Fitting
FASH 107 F Apparel Analysis
FASH 108AF Flat Pattern Methods and Design I
FASH 150 F Introduction to the Fashion Industry
FASH 152 F Ready-To-Wear Evaluation
FASH 188 F Apparel Production
FASH 201 F Clothing II
FASH 205AF Tailoring
FASH 206 F Textiles
FASH 209AF Draping

| Restricted Electives (9 units) | Units |  |
| :--- | :--- | ---: |
| FASH 060 F | Professional Image | 2 |
| FASH 101 F | Clothing I | 2 |
| FASH 108BF | Flat Pattern Methods and Design II | 2 |
| FASH 145 F | Field Studies in Fashion | 1 |
| FASH 186 F | Workroom Sketching | 3 |
| PSY 110 F | Introduction to Applied Psychology | 3 |

## Fashion Design Associate in Arts Degree

PROGRAM CODE: 2A03862
Curriculum leads to the Associate in Arts Degree. For employment in the apparel industry, either in clothing design for manufacturing or for custom work. The student should also complete the requirements for a Fashion Design Certificate. This program does not fulfill requirements for transfer to any four-year State university.

## Complete 18 or more units from the following list: Units

FASH 108BF Flat Pattern Methods and Design II 2
FASH 150 F Introduction to the Fashion Industry 3
FASH 186 F Workroom Sketching 3
FASH 201 F Clothing II 2
FASH 206 F Textiles 3
FASH 209AF Draping 2
FASH 242 F History of Costume 3
FASH 284AF Fashion Design 2

## Fashion Design Certificate <br> PROGRAM CODE: 2C21273

The Fashion Design Certificate Program requires the completion of 36 units of which 32 are in required courses. An additional 4 units must be chosen from the restricted electives listed below: A minimum grade of " $C$ " is required for all courses.
Required Courses (32 units) ..... Units
FASH 050 F Careers in Fashion ..... 1
FASH 093 F Pattern Alteration and Fitting ..... 2
FASH 107 F Apparel Analysis ..... 3
FASH 108AF* Flat Pattern Methods and Design I ..... 2
FASH 108BF* Flat Pattern Methods and Design II ..... 2
FASH 145 F Field Studies in Fashion ..... 1
FASH 150 F Introduction to the Fashion Industry ..... 3
FASH 186 F Workroom Sketching ..... 2
FASH 188 F* Apparel Production $^{*}$ ..... 2
FASH 190 F* Pattern Grading ..... 1FASH 201 F Clothing IIFASH 206 F Textiles
FASH 209AF* Draping
FASH 242 F History of Costume
FASH 284AF* Fashion Design
FASH 297 F* $^{*}$ Fashion Design Portfolio

| Restricted Electives (4 units) | Units |  |
| :--- | :--- | ---: |
| ART 139 F | Fashion Sketching | 2 |
| ART 182 F | Basic Drawing | 3 |
| FASH 060 F | Professional Image | 2 |
| FASH 152 F | Ready-To-Wear Evaluation | 3 |
| FASH 183 F | Fashion Marketing | 3 |
| FASH 205AF | Tailoring | 2 |
| FASH 244 F | Ethnic Costume | 2 |
| FASH 284BF | Fashion Design - Advanced | 2 |
| FASH 975 F | Patternmaking: Collections | 2 |
| FASH 299 F | Fashion Industry Internship | $1-4$ |

*Prerequisite required

## Advanced Fashion Design Certificate PROGRAM CODE: 2C10627

The Advanced Fashion Design Certificate Program requires that the student complete the Fashion Design Certificate plus 24 units of which 22 are in required courses. An additional two units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required for all courses.

| Required Courses (22 units) | Units |  |
| :--- | :--- | ---: |
| ART 119 F | Design and Color for Non-Art Majors | 2 |
| ART 120 F | Basic Design | 3 |
| ART 139 F | Fashion Sketching | 2 |
| ART 182 F | Basic Drawing | 3 |
| FASH 975 F | Patternmaking: Collections | 2 |
| FASH 088 F | CAD for Apparel | 2 |
| FASH 186 F | Workroom Sketching | 2 |
| FASH 209BF | Draping - Advanced | 2 |
| FASH 284BF | Fashion Design - Advanced | 2 |
| FASH 244 F | Ethnic Costume | 2 |
|  |  |  |
| Restricted Electives (2 units) | 2 |  |
| ART 186AF | Beginning Life Drawing | 2 |
| FASH 020 F | Modeling | 2 |
| FASH 080AF | Designing and Sewing Leather | 2 |
| FASH 088 F | CAD for Apparel | 2 |
| FASH 205AF | Tailoring or | 2 |
| FASH 205BF | Tailoring - Advanced |  |

## Fashion Illustration Certificate <br> PROGRAM CODE: 2C08427

The Fashion Illustration Certificate Program 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.
Required Courses (26 units)ART 139 F Fashion Sketching2
ART 182 F Basic Drawing ..... 3
ART 183 F Representational Drawing ..... 2
ART 184 F Expressive Drawing ..... 2
ART 186AF Beginning Life Drawing ..... 3
ART 244 F Illustration ..... 3
FASH 107 F Apparel Analysis ..... 3
FASH 145 F Field Studies in Fashion ..... 1
FASH 150 F Introduction to the Fashion Industry ..... 3
FASH 186 F Workroom Sketching ..... 3
FASH 242 F History of Costume ..... 3
FASH 297 F Fashion Design Portfolio ..... 0
Restricted Electives (7 units) ..... Units
ART 144 F Fundamentals of Cartooning ..... 2
ART 186BF Intermediate Life Drawing ..... 3
ART 188 F Watercolor Painting ..... 3
FASH 050 F Careers in Fashion ..... 1
FASH 101 F Clothing I ..... 2
FASH 201 F Clothing II ..... 2
Fashion Journalism Associate in Arts Degree
PROGRAM CODE: $2 A 03861$
Curriculum leads to the Fashion Journalism Associate in
Arts Degree and/or employment in fashion journalism fieldssuch as fashion magazines, trade magazines, promotion writ-ing, radio and television program writer, advertising, and publicrelations. This degree requires completion of 18 units of which15 units are in required courses. An additional 3 units must bechosen from the restricted electives listed below.
Required Courses (15 units) ..... Units
JOUR 101 F Reporting and Writing ..... 3
JOUR 135 F 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

## Fashion Merchandising <br> 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 18 units of which 15 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below.

Required Courses (15 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
Restricted Electives (3 units)
Units
BUS 151 F Business Mathematics
3
BUS 267 F Principles of Supervision 3
CIS 105 F Spreadsheet I 2
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

## Fashion Merchandising Certificate <br> PROGRAM CODE: 2C21274

The Fashion Merchandising Certificate requires the completion of 26 units of which 24 are in required courses. An additional 2 units must be chosen from the restricted electives listed below. A minimum grade of " $C$ " is required for all courses.

## Required Courses (24 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 183 F Fashion Marketing 3
FASH 206 F Textiles 3
FASH 220 F Retail and Fashion Buying 3
FASH 250 F Fashion Promotion
BUS 131 F Principles of International Business or
BUS 132 F Principles of Import/Export
Restricted Electives (2 units)
Units
FASH 060 F Professional Image
FASH 101 F Clothing I
2

FASH 201 F Clothing II
2

FASH 242 F History of Costume
BUS 111 F Business Communications

## Image Consultant Certificate

PROGRAM CODE: 2 C08429
The Image Consultant Certificate Program requires the completion of 20 units of which 19 units are in required courses. An additional 1 unit must be chosen from the restricted electives listed below. The curriculum leads to a certificate that prepares students for a career as a wardrobe and color consultant. The demand for professional image consultants is quickly growing, and the program will prepare students for entry-level employment with major retailers, image consulting firms, or selfemployment. A minimum grade of "C" is required for all courses.
Required Courses (20 units) ..... Units
FASH 060 F Professional Image ..... 2
FASH 107 F Apparel Analysis ..... 3
FASH 150 F Introduction to the Fashion Industry ..... 3
FASH 183 F Fashion Marketing ..... 3
FASH 186 F Workroom Sketching ..... 3
FASH 206 F Textiles ..... 3
FASH 250 F Fashion Promotion ..... 3
Restricted Electives (1 unit) ..... Units
BUS 266 F Human Relations in Business ..... 3
FASH 050 F Careers in Fashion ..... 1
FASH 145 F Field Studies in Fashion ..... 1
IDES 130 F Applied Color and Design Theory ..... 4

## Patternmaker Skills Certificate <br> PROGRAM CODE: 2C00075

The Patternmaker Skills Certificate prepares students to work at an entry level position as a patternmaker in the apparel manufacturing industry. Courses taken can be applied to the more advanced Fashion Design Certificate to prepare students to enter the workforce at entry level as a Patternmaker in the apparel manufacturing industry. The Patternmaker requires a total of 17 units of which 15 units are in required courses. An additional 2 units must be chosen from the restricted units listed below. A minimum grade of " $C$ " is required for all courses.
$\begin{array}{llr}\text { Required Courses: (15 units) } & \text { Units } \\ \text { FASH 101 F } & \text { Clothing I } & 2 \\ \text { FASH 108AF } & \text { Flat Pattern Methods and Design I } & 2 \\ \text { FASH 188 F } & \text { Apparel Production } & 2 \\ \text { FASH 201 F } & \text { Clothing II } & 2 \\ \text { FASH 206 F } & \text { Textiles } & 3 \\ \text { FASH 209AF } & \text { Draping } & 2 \\ \text { FASH 975 F } & \text { Patternmaking: Collections } & 2 \\ & & \\ \text { Restricted Electives: (2 units) } & \text { Units } \\ \text { FASH 090 F } & \text { Creative Serging: Overlock Machine } & 2 \\ \text { FASH 201 F } & \text { Clothing II } & 2 \\ \text { FASH 209BF } & \text { Draping — Advanced } & 2 \\ \text { FASH 242 F } & \text { History of Costume } & 3\end{array}$


## Product Development Apparel Skills

## Certificate

## PROGRAM CODE: 2 C00076

The Product Development Apparel Skills 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 design 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.

Required Courses: (14 units) Units
FASH 107 F Apparel Analysis
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 2

## Textiles and Clothing

Associate in Arts Degree
PROGRAM CODE: 2A13210
Curriculum leads to the Associate in Arts Degree. This degree requires 18 units chosen from the courses listed below.

## Select 18 units from the following:

Units
FASH 101 F Clothing I 2
FASH 107 F Apparel Analysis 3
FASH 201 F Clothing II 2
FASH 206 F Textiles 3
IDES 105 F Interior Design Studio I 2
IDES 215 F Interior Design Studio II 2
IDES 130 F Applied Color and Design Theory 4
PHYS 130 F Elementary Physics 4

## FOODS AND NUTRITION

Nutrition and Foods<br>Associate in Arts Degree<br>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. This degree requires completion or 18 or more units of which 9 are in required courses. An additional 9 units must be chosen from the restricted electives listed below.
Required Courses (9 units) Units
FOOD 101AF Introduction to Foods ..... 3
FOOD 101BF Introduction to Food Management ..... 3
NUTR 210 F Human Nutrition ..... 3
Restricted Electives (9 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 ..... 3
MATH 142 F Trigonometry ..... 4
MICR 262 F General Microbiology ..... 5
PHYS 130 F Elementary Physics ..... 4
FOREIGN LANGUAGE
Humanities Division
Office: Bldg 500, Room 522-O714.992.7036
Dean: Dan WilloughbyWebsite: humanities.fullcoll.edu
Associate in Arts Degree
Foreign Language Associate in Arts Degree
PROGRAM CODE: 2A03853
Curriculum leads to the Associate in Arts Degree. This degreerequires 18 units chosen from the courses listed below.
Required Courses ..... Units
LANG 101 F Elementary I ..... 5
LANG 102 F Elementary II ..... 5
ANG 203 F* $^{*}$ Intermediate III or ..... 5
LANG 204 F Intermediate IV ..... 4

## 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 110AF Western Civilization
ENGL 102 F Introduction to Literature 3
HIST 154 F Ancient Egypt 3
ENGL 225 F World Literature since Early Modern Period 3
PHIL 100 F Introduction to Philosophy 3
PHIL 105 F World Religions 3
SPAN 205 F Introduction to Spanish Literature 3
SPAN 206 F Introduction to Latin-American Literature 3
*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 must be chosen from the restrictive electives listed.

## GEOGRAPHY

## Geography Associate in Arts Degree <br> PROGRAM CODE: 2A03884

The Geography Associate of Arts Degree 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.

| Required Courses (10 units) | Units |  |
| :--- | :--- | ---: |
| GEOG 100 F | Global Geography | 3 |
| GEOG 102 F | Physical Geography | 3 |
| GEOG 102LF | Physical Geography Lab | 1 |
| GEOG 160 F | Cultural Geography | 3 |
|  |  | Units |
| Restricted Electives (9 units) | 3 |  |
| 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 | 2 |
| GEOG 131 F | Introduction to Desktop GIS | 3 |
| GEOG 170 F | Urban Geography: Introduction to the City | 3 |
| GEOG 241 F | Basic Crime Mapping | 3 |
| GEOG 242 F | Advanced Crime Mapping | 3 |
| GEOG 281AF | Intro to Geographic Information Systems | 3 |
| GEOG 281BF | Advanced GIS Applications | $1-5$ |
| GEOG 295 F | GIS Internship | 3 |
| HIST 113 F | World Civilizations II | 3 |
| HIST 160BF | Modern China and Japan | 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 |

## GEOLOGY

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7105<br>Dean: Carol Mattson (Interim)<br>Website: natsci.fullcoll.edu<br>\section*{Associate in Arts Degree}

## Geology Associate in Arts Degree <br> PROGRAM CODE: 2A03874

The Geology Associate in Arts Degree Program requires a total of 18 units of which 8 units are in required courses. An additional 10 units must be chosen from the restricted units listed below.

| Required Courses (8 units) | Units |  |
| :--- | :--- | ---: |
| ESC 100 F | Physical Geology | 3 |
| ESC 100LF | Physical Geology Lab | 1 |
| ESC 103 F | Historical Geology | 4 |
|  |  |  |
| Restricted | Electives (10 units) | 4 |
| BIOL 266 F | General Zoology | 5 |
| CHEM 111AF | General Chemistry I | 5 |
| CHEM 111BF | General Chemistry II | 4 |
| ENGR 101AF | Surveying I | 3 |
| ESC 104 F | Geology of National Parks and Monuments | 3 |
| ESC 105 F | Elements of Meteorology | 3 |
| ESC 106 F | Geology of the Orange County Area | 3 |
| ESC 120 F | Geology of California | 3 |
| ESC 130 F | Introduction to Oceanography | 3 |
| ESC 130HF | Honors Introduction to Oceanography | 3 |
| ESC 190 F | Environmental Geology | 3 |
| MATH 150AF | Calculus I | 4 |
| MATH 150BF | Calculus II | 4 |
| PHYS 205 F | Physics for the Life Sciences I | 4 |
| PHYS 206 F | Physics for the Life Sciences II | 4 |
| PHYS 221 F | General Physics I | 4 |
| PHYS 222 F | General Physics II | 4 |
| PHYS 223 F | General Physics III | 4 |

## HISTORY

## History Associate in Arts Degree <br> PROGRAM CODE: 2A03883

This 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. The degree requires a total of 18 units of which 6 units are required courses. An additional 12 units must be chosen from the restricted units listed below.

| Required Courses: (6 units) | Units |  |
| :--- | :--- | ---: |
| HIST 110 F | Western Civilization I and | 3 |
| HIST 111 F | Western Civilization II or | 3 |
| HIST 110HF | Honors Western Civilization I and | 3 |
| HIST 111HF | Honors Western Civilization II or | 3 |
| HIST 110 F | Western Civilization I and | 3 |
| HIST 111HF | Honors Western Civilization II or | 3 |
| HIST 110HF | Honors Western Civilization I and | 3 |
| HIST 111 F | Western Civilization II or | 3 |
| HIST 112 F | World Civilizations I and | 3 |
| HIST 113 F | World Civilizations II or | 3 |
| HIST 112HF | Honors World Civilizations I and | 3 |
| HIST 113HF | Honors World Civilizations II or | 3 |
| HIST 112 F | World Civilizations I and | 3 |
| HIST 113HF | Honors World Civilizations II or | 3 |
| HIST 112HF | Honors World Civilizations I and | 3 |
| HIST 113 F | World Civilizations II or | 3 |
| HIST 160AF | Asia: Basic Heritage and | 3 |
| HIST 160BF | Modern China and Japan or | 3 |
| HIST 162AF | History of the Americas I and | 3 |
| HIST 162BF | History of the Americas II or | 3 |
| HIST 170 F | History of the United States I and | 3 |
| HIST 171 F | History of the United States II or | 3 |
| HIST 170HF | Honors History of the United States I and | 3 |
| HIST 171HF | Honors History of the United States or | 3 |
| HIST 170 F | History of the United States I and | 3 |
| HIST 171HF | Honors History of the United States or | 3 |
| HIST 170HF | Honors History of the United States I and | 3 |
| HIST 171 F | History of the United States II | 3 |
| Restricted Electives (3 units) |  |  |
| 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 165 F | Introduction to the Middle East | 3 |
| HIST 270 F | Women in United States History | 3 |
| HIST 275 F | History of California and the Pacific Coast | 3 |
|  |  | 3 |
| Hits |  |  |

Restricted Electives (9 units) ..... Units
ANTH 101 F Physical Anthropology ..... 3
ANTH 102 F Cultural Anthropology ..... 3
ECON 101 F Principles of Economics - Micro ..... 3
ECON 102 F Principles of Economics - Macro ..... 3
ETHS 101 F American Ethnic Studies ..... 3
ETHS 130 F African-American History I ..... 3
ETHS 141 F Chicana/Chicano History ..... 3
ETHS 160 F History of the Native Americans ..... 3
GEOG 100 F Global Geography ..... 3
GEOG 160 F Cultural Geography ..... 3
PHIL 100 F Introduction to Philosophy ..... 3
PHIL 105 F World Religions ..... 3
PHIL 160 F Introduction to Ethics ..... 3
PHIL 170 F Logic and Critical Thinking ..... 3
POSC 100 F American Government ..... 3
POSC 215 F Comparative Politics ..... 3
POSC 230 F Introduction to International Relations ..... 3
PSY 101 F General Psychology ..... 3
SOC 101 F Introduction to Sociology ..... 3
HORTICULTURE

## Greenhouse \& Nursery Production Certificate <br> PROGRAM CODE: 2C15845

The Greenhouse \& Nursery Production Certificate Program requires 30 units of which 12 units are in required courses. An additional 9 units must be chosen from restricted electives group $A$ and at least 9 units from restricted electives group $A$ or B.

| Required Courses (12 units) | Units |  |
| :--- | :--- | ---: |
| HORT 160 F | Plant Identification (Ornamental Trees) | 3 |
| HORT 161 F | Plant Identification (Ornamental Shrubs) | 3 |
| HORT 164 F | Plant Ident. (Annuals/Perennials/House) | 3 |
| HORT 173 F | Greenhouse and Nursery Production | 3 |

Restricted Electives - Group A (9 units) Units
HORT 155 F Soils ..... 3
HORT 156 F Plant Nutrition ..... 3
HORT 174 F Plant Propagation ..... 3
HORT 205 F Applied Entomology ..... 3
Restricted Electives - Group B (9 units) ..... Units
HORT 152 F Applied Botany ..... 4
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 ..... 3

## Landscape Management <br> Associate in Science Degree <br> PROGRAM CODE: $2 S 03817$

Curriculum leads to the Associate in Science Degree and/or employment in parks, golf courses, landscape contracting, and landscape gardening.

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
HORT 006 F Basic Landscape Plants II
HORT 152 F Applied Botany
5

BIOL 268 F General Botany
4

HORT 153 F Landscape Irrigation 3
HORT 155 F Soils 3
HORT 156 F Plant Nutrition
HORT 160 F Plant Identification (Ornamental Trees)
3
HORT 161 F Plant Identification (Ornamental Shrubs)
3

HORT 165 F Landscape Management 4
HORT 177 F Turf Grass Management 3
HORT 200 F Landscape Design 3

HORT 215 F Diseases/Pests of Ornamental Plants
Restricted Electives - Group B (7 units) Units
HORT 162 F Landscaping for Dry Climates ..... 4
HORT 164 F Plant Ident. (Annuals/Perennials/House) ..... 3
HORT 185 F Arboriculture ..... 2
HORT 205 F Applied Entomology ..... 3
HORT 207 F Plant Pathology ..... 4

## Landscape Irrigation Certificate

PROGRAM CODE: 2C08383
The Landscape Irrigation Certificate Program requires a total of 31 units of which 19 units are in required courses. An additional 12 units must be chosen from the restricted units listed below, 6 units from Category A, and 6 units from Category B.

| Required Courses (19 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 | 4 |
| HORT 218 F | Landscape Hydraulics | 3 |
|  |  |  |
| Restricted Electives - Group A (6 units) | Units |  |
| ACG 100 F | Intro: Computer Graphics/MAC | 3 |
| ARCH 113 F | Architectural Drawing I | 3 |
| CSTR 006 F | Residential Plumbing/Mech. Systems | 2 |
| HORT 177 F | Turf Grass Management | 3 |
| HORT 200 F | Landscape Design | 4 |
| HORT 219 F | CAD Applications in Horticulture | 3 |

Restricted Electives - Group B (6 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 4

## Nursery Management <br> Associate in Arts Degree

PROGRAM CODE: 2A03816
Curriculum leads to a Nursery Management Associate in Arts Degree and entry-level positions in retail and wholesale nurseries, parks departments, and landscape contracting.

Complete 18 units from the following list: Units
HORT 001 F Principles of Horticulture I
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 Identification (Ornamental Trees)
HORT 161 F Plant Identification (Ornamental Shrubs)
HORT 162 F Landscaping for Dry Climates
HORT 164 F Plant Ident. (Annuals/Perennials/House)
HORT 173 F Greenhouse and Nursery Production
HORT 174 F Plant Propagation
HORT 200 F Landscape Design
HORT 215 F Diseases and Pests of Ornamental Plants

## Ornamental Horticulture <br> Associate in Science Degree <br> PROGRAM CODE: $2 S 10606$

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.

Required Courses (9 units)
Units
HORT 153 F Landscape Irrigation 3
HORT 157 F Irrigation Principles 3
HORT 155 F Soils 3
HORT $160 \mathrm{~F} \quad$ Plant Identification (Ornamental Trees) 3
HORT 161 F Plant Identification (Ornamental Shrubs) 3
HORT 162 F Landscaping for Dry Climates 3
HORT 164 F Plant Ident. (Annuals/Perennials/House) 3
Restricted Electives (12 units)
Units
HORT 156 F Plant Nutrition 3
HORT 165 F Landscape Management 4
HORT 173 F Greenhouse and Nursery Production 3
HORT 174 F Plant Propagation 3
HORT 177 F Turf Grass Management 3
HORT 200 F Landscape Design 3
HORT 201 F Advanced Landscape Design 3
HORT 219 F CAD Applications in Horticulture 3

## Ornamental Horticulture Certificate PROGRAM CODE: 2C10606

The Ornamental Horticulture Certificate Program requires 30 units of which 9 units are in required courses. An additional 12 units must be chosen from restricted electives group A, and at least 9 units from restricted electives group A or B.

## Required Courses (9 units)

Units
HORT 005 F Basic Landscape Plants I
HORT 006 F Basic Landscape Plants II or 3
HORT 160 F Plant Identification (Ornamental Trees) 3
HORT 161 F Plant Ident. (Ornamental Shrubs) and 3
HORT 155 F Soils
Restricted Electives - Group A (12 units) Units
HORT 001 F Principles of Horticulture I 4
HORT 002 F Principles of Horticulture II 4
HORT 152 F Applied Botany 4
HORT 153 F Landscape Irrigation 3
HORT 156 F Plant Nutrition 3
HORT 164 F Plant Ident. (Annuals/Perennials/House) 3
HORT 173 F Greenhouse and Nursery Production 3
HORT 174 F Plant Propagation 3
HORT 177 F Turf Grass Management 3
HORT 200 F Landscape Design 3
HORT 205 F Applied Entomology 3
HORT 207 F Plant Pathology 3
HORT 215 F Diseases and Pests of Ornament Plants 4
Restricted Electives - Group B (9 units) Units
HORT 008AF Landscape Pruning Techniques ..... 1
HORT 008BF Basic Turf Care ..... 1
HORT 008CF Home Pest Control ..... 1
HORT 045 F Training Pest Control Professionals ..... 3
HORT 162 F Landscaping for Dry Climates ..... 3
HORT 165 F Landscape Management ..... 4
HORT 170 F Landscaping Contracting ..... 3
HORT 185 F Arboriculture ..... 2
HORT 201 F Advanced Landscape Design ..... 3

## Pest Management Certificate

## PROGRAM CODE: $2 C 03818$

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.
Required Courses (10 units) ..... Units
HORT 045 F Training Pest Control Professionals ..... 3
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 Identification (Ornamental Trees) ..... 3
HORT 161 F Plant Identification (Ornamental Shrubs) ..... 3
HORT 215 F Diseases and Pests of Ornamental Plants ..... 4
Restricted Electives - Group B Choose 0-12 Units Units
HORT 155 F Soils ..... 3
HORT 165 F Landscape Management ..... 4
HORT 177 F Turf Grass Management ..... 3
HORT 185 F Arboriculture ..... 2
HORT 200 F Landscape Design ..... 3

## 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.

Complete 25 units from the following list Units
DRAF 070 F Blueprint Reading/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 F 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
TECH 108 F Manufacturing Processes 3
WELD 121AF Introduction to Welding
*Optional - Can be taken twice for credit.

## Industrial Drafting - Level I Certificate PROGRAM CODE: $2 C 10622$

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.

## Required (18 units)

Units
DRAF 070 F Blueprint Reading/Metal Trades
2
DRAF 140 F AutoCAD for Industry 2
DRAF 173 F Geometric Dimensioning and Tolerancing 2
DRAF 171 F Fundamentals of Drafting 2
MACH 116 F Machine Tools
MACH 050 F CNC Programming Using Mastercam or
2

MACH 060 F CNC Programming Using SURFCAM
3
WELD 121AF Introduction to Welding
ARCH 124 F Architectural CAD I 3

## Industrial Drafting - Level II Certificate <br> PROGRAM CODE: 2C10623

The Industrial Drafting - Level II 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 plus a minimum of 19-20 units of required courses. 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.
Completion of Level I Certificate, 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 Programming w/ Mastercam or ..... 3
MACH 062 F Adv. CNC Programming Using SURFCAM ..... 3
METL 192 F Fundamentals of Metallurgy ..... 3
TECH 108 F Manufacturing Processes ..... 3
INDUSTRIAL ARTS

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7211

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

## Industrial Arts Associate in Arts Degree PROGRAM CODE: 2A03833 <br> Curriculum leads to the Associate in Arts Degree. This degree requires 18 units chosen from the courses listed below.

Select 18 units from the following: 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
PRNT 130 F Graphics 2
TECH 127 F Industrial Safety 1
WELD 121AF Introduction to Welding
WOOD 110 F Fundamentals of Woodwork 4

## Industrial Laboratory Technician (Chemistry) Associate in Arts Degree <br> PROGRAM CODE: 2A08415

Curriculum leads to an Industrial Laboratory Technician Associate in Arts Degree for employment in the research and product-testing departments of petroleum companies, soil laboratories, food processing plants, chemical plants, etc. It is not intended to fulfill requirements to transfer for a Bachelors Degree in Chemistry.

High School Preparation: Three years of college-preparatory mathematics, chemistry, further mathematics, biology, and physics recommended. This degree requires completion of 18 units of which 10 units are in required courses. An additional 8 units must be chosen from the restricted electives listed below.

## Required Courses (10 units)

Units
CHEM 111AF General Chemistry I
5
CHEM 111BF General Chemistry II
5

## Restricted Electives (8 units)

Units
CHEM 211AF Organic Chemistry I
5
CHEM 211BF Organic Chemistry II
5
PHYS 205 F Physics for the Life Sciences I
4
PHYS 206 F Physics for the Life Sciences II
4

## INDUSTRIAL TECHNOLOGY

Technology and Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7211<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu

## Industrial Technology

## Associate in Arts Degree

PROGRAM CODE: 2A13207
Curriculum leads to the Associate in Arts Degree. This degree requires 18 units from the courses listed below.

## Required Courses (18)

Units
MATH 150AF Calculus I
4
PHYS 205 F Physics for the Life Sciences I 4
PHYS 206 F Physics for the Life 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
CHEM 107 F Elementary Chemistry or 5
CHEM 111AF General Chemistry I 5

CHEM 111BF General Chemistry II

## INTERDISCIPLINARY STUDIES

## Associate in Arts Degree


#### Abstract

Interdisciplinary Studies with an Emphasis in Science and Mathematics PROGRAM CODE: 2A18163 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.


## Interdisciplinary Studies with an Emphasis in Arts and Human Expression <br> PROGRAM CODE: 2A18164

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.

## Interdisciplinary Studies with an Emphasis in Social Sciences <br> 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.

## Interdisciplinary Studies with an Emphasis in <br> Social Behavior and Self-Development <br> 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.

## INTERDISCIPLINARY STUDIES FULLERTON COLLEGE 2011-2012 Curriculum leads to the Associate in Arts Degree Counselor Advising Form

Curriculum leads to the Associate in Arts Degree. These degree options are designed to give students a broad introduction to an area of knowledge represented by related disciplines and topics, as well as to prepare transfer students for a field of study at a university. Students will select an "Area of Emphasis" from the following four options based on their interests and their educational and career goals.

- Science and Mathematics
- Social Sciences
- Arts and Human Expression
- Social Behavior and Self-Development


## Interdisciplinary Studies with an Emphasis in Science and Mathematics

These courses emphasize the natural sciences, which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on human experience. This emphasis includes lower division coursework that prepares students for majors in science, math, and health related fields.
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.
A) Sciences

```
    ANAT \(231 \mathrm{~F}, 240 \mathrm{~F}\)
    ANTH 101 F or 101HF, 101LF
    BIOL 100 F, 101 F or 101HF, 102 F, 102LF, 104 F, 108 F, 109 F, 141 F, 170 F, 222 F, 266 F, 268 F, 272 F, 274 F
    CHEM 100 F, 101 F, 103 F, 107 F, 111AF, 111BF
    ESC 100 F, 100LF, 101 F, 101LF, 103 F, 104 F, 105 F, 106 F, 116 F or 116HF, 116LF, 120 F, 130 F or 130HF, 130LF, 190 F
    ENVS 105 F, 105LF, 106 F, 126 F
    GEOG 102 F, 102LF
    HED 140 F, 150 F
    HORT 152 F, 205 F, 207 F
    MICR 220 F, 262 F
    NUTR 210 F
    PHSC 102 F, 103AF, 103BF
    PHYS \(130 \mathrm{~F}, 205 \mathrm{~F}, 206 \mathrm{~F}, 210 \mathrm{~F}, 211 \mathrm{~F}, 221 \mathrm{~F}, 222 \mathrm{~F}, 223 \mathrm{~F}\)
B) Mathematics
    BUS 151 F
    MATH \(100 \mathrm{~F}, 120 \mathrm{~F}\) or \(120 \mathrm{HF}, 129 \mathrm{~F}, 130 \mathrm{~F}, 141 \mathrm{~F}\) or 141HF, \(142 \mathrm{~F}, 150 \mathrm{AF}, 150 \mathrm{BF}, 171 \mathrm{~F}, 172 \mathrm{~F}, 250 \mathrm{AF}, 250 \mathrm{BF}\)
    PSY 161 F
    SOSC 120 F
```


## 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.
Choose 18 units of coursework, including two or more disciplines, from the following list:

## Restricted Electives

ART 110 F, 112 F, 113 F, 114 F, 115 F, 116 F, 117 F, 118 F, 119 F, 120 F, 121 F, 127 F, 150AF, $150 B F, 160$ F, 174AF, 179 F, 182 F, 184 F, 186AF, 187 F, 188 F, 189AF, 196HF, 210 F, 212 F, 213 F
CDES 242 F
CRTV 120 F, 121 F, 126AF, 126BF, 131 F
DANC $100 \mathrm{~F}, 101 \mathrm{~F}, 103 \mathrm{~F}, 105 \mathrm{~F}, 107 \mathrm{~F}, 111 \mathrm{~F}, 120 \mathrm{~F}, 210 \mathrm{~F}$
ENGL 102 F or 102HF, 105 F, 203 F, 204 F, 205 F, 206 F, 207 F, 208 F, 210 F, 211 F, 212 F, 214 F, 218 F, 221 F, 222 F, 224 F, 225 F, 234 F or $234 \mathrm{HF}, 239 \mathrm{~F}, 243 \mathrm{~F}$ or $243 \mathrm{HF}, 245 \mathrm{~F}, 246 \mathrm{~F}, 247 \mathrm{~F}, 248 \mathrm{~F}, 249 \mathrm{~F}, 250 \mathrm{~F}, 251 \mathrm{~F}, 252 \mathrm{~F}, 253 \mathrm{~F}, 254 \mathrm{~F}, 255 \mathrm{~F}$
ETHS 130 F
FASH 242 F, 244 F
Foreign Language 101 F or 101HF, 102 F or 102HF, 201 F, 203 F, 204 F, 205 F, 206 F, 207 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 $113 \mathrm{HF}, 127 \mathrm{~F}, 154 \mathrm{~F}, 170 \mathrm{~F}$ or $170 \mathrm{HF}, 171 \mathrm{~F}$ or $171 \mathrm{HF}, 270 \mathrm{~F}$
IDES 180 F
MUS 101 F, 102 F, 104AF, 106 F, 107AF, 110 F, 113 F, 114 F, 116 F, 117 F, 118 F, 119 F, 120 F, 123 F, 135AF, 180 F, $196 \mathrm{HF}, 271$ F, 273 F, 274 F, 281 F, 282 F
PHIL 100 F or 100HF, 101 F, 105 F or 105HF, 135 F, 160 F, 195 F, 200 F, 201 F, 202 F, 210 F, 250 F, 270 F
PHOT 100 F, 101 F, 111 F
SPCH 100 F, 105 F, 124 F, 135 F
THEA 100 F, 104 F, 105 F, 109 F, 127 F, 138 F, 150 F, 160 F, 161 F, 162 F, 196HF
WOOD 110 F

## INTERDISCIPLINARY STUDIES FULLERTON COLLEGE 2011-2012 <br> Curriculum leads to the Associate in Arts Degree Counselor Advising Form

Curriculum leads to the Associate in Arts Degree. These degree options are designed to give students a broad introduction to an area of knowledge represented by related disciplines and topics, as well as to prepare transfer students for a field of study at a university. Students will select an "Area of Emphasis" from the following four options based on their interests and their educational and career goals.

- Science and Mathematics
- Social Sciences
- Arts and Human Expression
- Social Behavior and Self-Development


## Interdisciplinary Studies with an Emphasis in Social Sciences

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. Student 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.
Choose 18 units of coursework, including two or more disciplines, from the following list:
Restricted Electives
ANTH 101 F or 101HF, 101LF, 102 F or 102HF, 103 F, 105 F, 107 F, 209 F, 211 F
BUS 242 F
CDES 120 F
COUN 151 F, 163 F
ECON 101 F or 101HF, 102 F or 102HF
ETHS 101 F, 129 F, 130 F, 131 F, 140 F, 141 F, 142 F, 160 F, 170 F, 171 F
GEOG 100 F or $100 \mathrm{HF}, 120 \mathrm{~F}, 160 \mathrm{~F}$
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 $113 \mathrm{HF}, 127 \mathrm{~F}, 151 \mathrm{~F}, 152 \mathrm{~F}, 154 \mathrm{~F}, 160 \mathrm{AF}, 160 \mathrm{BF}, 162 \mathrm{AF}$, 162BF, $165 \mathrm{~F}, 170 \mathrm{~F}$ or $170 \mathrm{HF}, 171 \mathrm{~F}$ or $171 \mathrm{HF}, 270 \mathrm{~F}, 275 \mathrm{~F}$
JOUR 110 F
POSC 100 F or 100HF, 110 F, 120 F, 150 F, 200 F, 215 F, 216 F, 220 F, 230 F, 275 F
PSY 101 F or $101 \mathrm{HF}, 131 \mathrm{~F}, 145 \mathrm{~F}, 202 \mathrm{~F}, 221 \mathrm{~F}, 222 \mathrm{~F}, 251 \mathrm{~F}$ or 251 HF
SOC 101 F or 101HF, 102 F, 133 F, 201 F, 225 F or 225HF, 275 F or $275 \mathrm{HF}, 277$ F or $277 \mathrm{HF}, 285 \mathrm{~F}, 292 \mathrm{~F}$
WMNS 100 F

## Interdisciplinary Studies with an Emphasis in Social Behavior and Self-Development

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.

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 total 18 units.

```
A) Theory and Knowledge
    ANTH 102 F or 102HF, 103 F, 105 F
    BUS \(101 \mathrm{~F}, 266 \mathrm{~F}\)
    CDES 120 F, 140 F, 201 F
    ETHS 101 F, 129 F, 130 F, 131 F, 140 F, 141 F, 142 F, 160 F, 170 F, 171 F
    GEOG 160 F
    HIST \(127 \mathrm{~F}, 170 \mathrm{~F}\) or \(170 \mathrm{HF}, 171 \mathrm{~F}\) or \(171 \mathrm{HF}, 270 \mathrm{~F}, 275 \mathrm{~F}\)
    POSC 100 F or 100HF
    PSY 101 F or \(101 \mathrm{HF}, 110 \mathrm{~F}, 120 \mathrm{~F}, 131 \mathrm{~F}, 139 \mathrm{~F}, 145 \mathrm{~F}, 202 \mathrm{~F}, 221 \mathrm{~F}, 222 \mathrm{~F}, 251 \mathrm{~F}\) or 251 HF
    SOC 101 F or \(101 \mathrm{HF}, 102 \mathrm{~F}, 133 \mathrm{~F}, 201 \mathrm{~F}, 225 \mathrm{~F}\) or \(225 \mathrm{HF}, 275 \mathrm{~F}\) or \(275 \mathrm{HF}, 277 \mathrm{~F}\) or \(277 \mathrm{HF}, 285 \mathrm{~F}, 292 \mathrm{~F}\)
    SPCH 100 F, 105 F, 120 F, 124 F, 135 F
    WMNS 100 F
B) Growth and Purpose
    COUN 101 F, 110 F, 135 F, 136 F, 140 F, 141 F, 143 F, 144 F, 148 F, 151 F, 163 F, 199 F
    STSV 223 F
C) Health and Wellness
    HED 140 F
    NUTR 210 F
    PE 248 F, 266 F, any Physical Education activity course
    WELL 230 F
    "Equivalent Disclaimer" - Courses taken at another college must be equivalent to courses offered at Fullerton College.
```


## INTERIOR DESIGN

## Interior Design

## Commercial Design Certificate

PROGRAM CODE: 2C10626
Curriculum leads to employment as an Interior Design Assistant. The Commercial Design Certificate Program requires the completion of not less than 48 units of which 35 units are in required courses. An additional 13 units must be chosen from the restricted electives listed below.

## Required Courses (35 units)

Units
ARCH 113 F Architectural Drawing I
ARCH 124 F Architectural CAD I
IDES 100 F Fundamentals of Interior Design
IDES 105 F Interior Design Studio I
IDES 130 F Applied Color and Design Theory
IDES 147 F Office Planning
IDES 150 F Interior Materials and Products
IDES 190 F History of Interior Architecture II
IDES 210 F Fundamentals of Lighting
IDES 215 F Interior Design Studio II
IDES 230 F Business and Professional Practice
IDES 240 F Interior Design Internship
Restricted Electives (13 units)
Units
ARCH 924 F Architectural CAD II
CSTR 030 F Construction Blueprint Reading
IDES 120 F Interior Design Careers
IDES 130 F Applied Color and Design Theory
IDES 180 F History of Interior Architecture I
IDES 200 F Interior Illustration
IDES 215 F Interior Design Studio II
IDES 248AF Restaurant/Hotel Design
3
3
2

IDES 248BF Medical/Health Design 2

IDES 249AF Studies in Internat'l. Architecture \& Design
IDES 249BF Studies in Internat'l. Architecture \& Design
IDES 249CF Studies in Internat'l. Architecture \& Design

## Interior Design Assistant <br> Associate in Science Degree <br> 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. This program does not fulfill requirements for transfer to any four-year state university.
Completion of Interior Merchandising - Level I Certificate (27 units) Plus the following 21 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 2

## Interior Merchandising - <br> Level I Certificate <br> 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.
Required Courses: (27 units) Units
ARCH 124 F Architectural CAD I ..... 3
ARCH 924 F Architectural CAD II ..... 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 ..... 3
IDES 120 F Interior Design Careers ..... 2
IDES 130 F Applied Color and Design Theory ..... 4
IDES 150 F Interior Materials and Products ..... 4

## Residential Design Certificate <br> PROGRAM CODE: 2C13209

The Residential Design Certificate Program requires a completion of not less than 48 units of which 31 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.

## Required Courses (31 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 2
IDES 130 F Applied Color and Design Theory 4
IDES 150 F Interior Materials and Products 4
IDES 170 F Space Planning
IDES 180 F History of Interior Architecture I
IDES 190 F History of Interior Architecture II
IDES 215 F Interior Design Studio II
IDES 240 F Interior Design Internship
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 and Medieval 3
ART 113 F Art History: Renaissance to Modern or 3
ART 114 F Art History: Impressionism to the 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 Introduction to Residential Plumbing/ Mech. Systems
FASH 202 F Visual Merchandising 2
IDES 085 F Kitchen and 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 and Professional Practice 3
IDES 249AF Studies in Internat'l. Architecture \& Design 1
IDES 249BF Studies in Internat'l. Architecture \& Design 2

## JOURNALISM

## Journalism Associate in Arts Degree <br> PROGRAM CODE: 2A03829

The Journalism AA 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 weekly newspaper or local magazine publisher.

| 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 225 F | Newspaper 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 |

## Advertising Certificate

PROGRAM CODE: 2 C08396
The Advertising Certificate Program totals 26 units of which 20 are in required courses. An additional 6 units must be chosen from restricted units below.
Required Courses (20 units) Units
JOUR 101 F Reporting and Writing ..... 3
JOUR 140 F Public Relations and Publicity ..... 3
ACG 100 F Intro: Computer Graphics/MAC ..... 3
ART 140 F Intro to Advertising and Graphic Design ..... 3
MKT 103 F Principles of Advertising ..... 3
MKT 152 F Internet Advertising ..... 2
Restricted Electives (6 units) ..... Units
JOUR 135 F Magazine Production ..... 3
JOUR 225 F Newspaper Production ..... 3
PHOT 101 F Introduction to Photography ..... 3
PRNT 130 F Graphics ..... 2
MKT 100 F Introduction to Marketing ..... 3
MKT 208 F Principles of Selling ..... 3

## Journalism Certificate <br> 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.

## Required Courses (24 units) <br> Units

JOUR 101 F Reporting and Writing 3
JOUR 102 F Advanced Reporting and Writing 3
JOUR 110 F Mass Media Survey 3
ACG 100 F Intro: Computer Graphics/MAC 3
JOUR 135 F Magazine Production 3
JOUR 140 F Public Relations/Publicity 3
JOUR 225 F Newspaper Production 3
CRTV 129 F Broadcast News or 3
JOUR 210 F Multimedia Reporting 3
Restricted Electives (6 units) Units
ART 145 F Publication Design 3
JOUR 135 F Magazine Production 3
JOUR 225 F Newspaper Production 3
JOUR 199 F Journalism Independent Study 1-3
PHOT 111 F Introduction to Photography from Analog to Digital
JOUR 219 F Photojournalism

## Public Relations Certificate

## PROGRAM CODE: $2 C 08403$

The Public Relations Certificate Program requires the completion of 27 units, of which 21 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.

## Required Courses (21 units)

Units
ACG 100 F Intro: Computer Graphics/MAC
3
JOUR 101 F Reporting and Writing 3
JOUR 102 F Advanced Reporting and Writing 3
JOUR 110 F Mass Media Survey
JOUR 135 F Magazine Production
JOUR 140 F Public Relations and Publicity
JOUR 225 F Newspaper Production

## Restricted Electives (6 units)

Units
JOUR 240 F Advanced Public Relations
MKT 100 F Introduction to Marketing
MKT 103 F Principles of Advertising
MKT 201 F Small Business Promotions
MKT 208 F Principles of Selling
PHOT 101 F Introduction to Photography
PRNT 130 F Graphics

## LATIN-AMERICAN STUDIES

## Social Sciences Division

Office: Bldg 1400, Room 1415
714.992.7011

Dean: Dan Tesar
Website: socsci.fullcoll.edu

## Latin-American Studies

## Associate in Arts Degree

PROGRAM CODE: 2A08438
Curriculum leads to the Associate in Arts Degree. Latin American Studies 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 US have produced an increasing need for trained persons with a knowledge of the region to work in government, teaching, business and other fields. This degree includes 13 units of required courses and an additional 6 units of restricted electives.

| Required Courses (13 units): | Units |  |
| :--- | :--- | ---: |
| HIST 162AF | History of the Americas I and | 3 |
| HIST 162BF | 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 |
|  |  | Units |
| Restricted Electives: (6 units) | 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 |
| 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 | 3 |
| ECON 102HF | Honors Principles of Economics - Macro | 3 |
| SOC 101 F | Introduction to Sociology or | 3 |
| SOC 101HF | Honors Introduction to Sociology | 3 |
| POSC 215 F | Comparative Politics | 3 |
| BUS 131 F | Principles of International Business | 3 |
| SPAN 206 F | Introduction to Latin American Literature | 3 |

## MACHINE TECHNOLOGY

## CNC Operator Skills Certificate <br> PROGRAM CODE: 2C00060

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.

| Required Courses (14 units) | Units |
| :--- | ---: |
| MACH 091 F | Introduction to Machine Tools |

## Computer Numerical Control (CNC) Certificate

PROGRAM CODE: 2 C08416
The Computer Numerical Control (CNC) Certificate Program requires the completion of 43-44 units of which 34-35 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.

## Required Courses (34-35 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 Programming w/ Mastercam or 3
MACH 062 F Adv. CNC Programming Using SURFCAM 3
MACH 086 F CNC Machine Set-up and Operation 3
MACH 087 F CNC Parts Programming 3
MACH 091 F Introduction to Machine Tools or 5
MACH 116 F Machine Tools 2-4
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 \& Operation 3
MACH 052 F Adv. CNC Programming w/ Mastercam or 3
MACH 062 F Adv. CNC Programming Using SURFCAM 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

## Machine Technology - Level I Certificate PROGRAM CODE: 2C03843

The Machine Technology - Level I Certificate Program requires the completion of 17-18 units 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.

| Required Courses (17-18 units) | Units |  |
| :--- | :--- | ---: |
| MACH 086 F | CNC Machine Set-up and Operation | 3 |
| MACH 091 F | Introduction to Machine Tools | 5 |
| MACH 116 F | Machine Tools | 2 |
| MACH 092 F | Intermediate Machine Tools | 5 |
| MACH 093 F | Advanced Machine Tools | 5 |

## Machine Technology - Level II Certificate

PROGRAM CODE: 2C10624
The Machine Technology - Level II Certificate Program requires the completion of 33-34 units of which 24-25 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.
Required Courses (24-25 units) Units
DRAF 070 F Blueprint Reading/Metal Trades ..... 2
DRAF 173 F Geometric Dimensioning and Tolerancing
DRAF 173 F Geometric Dimensioning and Tolerancing ..... 2 ..... 2
MACH 086 F CNC Machine Set-up and Operation ..... 3
MACH 091 F Introduction to Machine Tools or ..... 5
MACH 116 F Machine Tools ..... 2-4
MACH 092 F Intermediate Machine Tools ..... 5
MACH 093 F Advanced Machine Tools ..... 5
TECH 081 F Technical Mathematics I ..... 3
Restricted Electives (9 units) ..... Units
DRAF 171 F Fundmentals of Drafting ..... 2
MACH 010 F Machining Skills Lab ..... 1
MACH 040 F CNC Wire EDM: Programming \& Operation ..... 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
May be taken twice for a total of 4 units.

## Mastercam Skills Certificate

## PROGRAM CODE: 2C00046

The Mastercam Skills Certificate requires a total of 6 units. Both classes must be completed with a grade of "B" or better.

| Required Courses (6 units) | Units |
| :--- | ---: |
| MACH 050 F | CNC Programming Using Mastercam |
| MACH 052 F | Adv. CNC Programming Using Mastercam |

## Surfcam Skills Certificate <br> PROGRAM CODE: $2 C 00047$

The Surfcam Skills Certificate Program requires a total of 6 units. Both classes must be completed with a grade of "B" or better.

Required Courses (6 units)<br>Units<br>MACH 060 F CNC Programming Using SURFCAM<br>3<br>MACH 062 F Adv. CNC Programming Using SURFCAM

## MANUFACTURING TECHNOLOGY

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7211

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

## Manufacturing Technology <br> Associate in Science Degree <br> PROGRAM CODE: $2 S 03842$

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.

Required Courses: (9 units)
Units
DRAF 171 F Fundamentals of Drafting
2
MACH 116 F Machine Tools
2
TECH 108 F Manufacturing Processes
WELD 121AF Introduction to Welding

## Additional (15 units)

Units
Drafting Courses - Any drafting courses
Machine Technology Courses - Any machine technology course except MACH 086 B CNC Machine Set-Up and Operation.
Welding Courses - Any welding courses except
WELD 095ABCD Welding Skills Lab.
Technology-Related Courses -
METL 192 F Fundamentals of Metallurgy
TECH 127 F Industrial Safety

## MARKETING MANAGEMENT

Marketing Management<br>Associate in Science Degree<br>PROGRAM CODE: $2 S 03825$

The Associate in Science Degree in Marketing Management requires a total of 30-31 units, all of which are required courses. Completion of ths degree will provide the skills necessary to obtain employment in a marketing capacity at an organization.
MKT 100 F Introduction to Marketing and 3
CIS 100 F Introduction to Personal Computers or 3
CIS 111 F Introduction to Information Systems ..... 3
Choose one course from the following for a total of 3-4 units:ACCT 001 F Accounting for Small Business3
ACCT 100BF Financial Accounting Principles ..... 3
ACCT 101AF Financial Accounting ..... 4
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:BUS 100 F Introduction to Business3
BUS 180 F Small Business Management ..... 3
Choose one course from the following for a total of 3 units:BUS 162 F Business Economics3
ECON 101 F Principles of Economics - Micro ..... 3
BUS 170 F Principles of E-Business ..... 3
Choose one course from the following for atotal of 3 units: (See counselor for determinationof 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:
MKT 103 F Principles of AdvertisingMKT 151 F Internet Marketing and Promotion
MKT 201 F Small Business Promotions ..... 3
3
MKT 205 F Understanding Multicultural Markets in U.S. ..... 3MKT 208 F Principles of SellingBUS 224 F International Marketing

## Marketing Management Certificate <br> PROGRAM CODE: 2C03825

The Certificate in Marketing Management requires a total of 28-30 units.
Required Courses (5 units)
CIS 100 F Introduction to Personal Computers ..... Units
MKT 151 F Internet Marketing and Promotion ..... 3
One course from the following
for a total of 3-4 units:Units
ACCT 001 F Accounting for Small Business ..... 3
ACCT 100BF Financial Accounting Principles ..... 3
ACCT 101AF Financial Accounting ..... 4
One course from the following
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: ..... Units
BUS 162 F Business Economics ..... 3ECON 101 F Principles of Economics - Micro
BUS 170 F Principles of E-Business ..... 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
MKT 100 F Introduction to Marketing ..... 3
BUS 224 F International Marketing ..... 3
One course from the following
for a total of 3 units:Units
MKT 103 F Principles of Advertising ..... 3
MKT 205 F Understanding Multicultural Markets in U.S. ..... 3
One course from the followingfor a total of 2-3 units:Units
MKT 201 F Small Business Promotions ..... 3
MKT 208 F Principles of Selling ..... 3
MKT 090 F Current Issues in Marketing ..... 0.5-3
BUS 269 F Managing Business Projects ..... 2

## MATHEMATICS

## Mathematics Associate in Arts Degree <br> PROGRAM CODE: $2 A 03871$

The Mathematics Associate in Arts Degree prepares students to transfer to colleges and universities that offer Bachelors 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 Arts Degree requires 18 units of which 12 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below. A minimum of 10 units in the major must be completed at Fullerton College. 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*.
Required Courses: (12 units) ..... Units
MATH 150AF Calculus I ..... 4
MATH 150BF Calculus II ..... 4
MATH 250AF Multivariable Calculus ..... 4
Restricted Electives: (6 units) ..... Units
CSCI 123 F Intro to Programming Concepts in C++ ..... 4
MATH 120 F Introductory Probability and Statistics ..... 4
MATH 171 F Discrete Mathematics ..... 4
MATH 172 F Graph Theory and Linear Algebra ..... 4
MATH 250BF Linear Algebra and Differential Equations ..... 4
MATH 250CF Additional Topics in Linear Algebra ..... 2
PHYS 221 F General Physics I ..... 4
*For detailed information about the new AA-T and AS-T degrees designed to facilitate transfer to the California State University System, please go to www.fullcoll.edu, click to access the dropdown menu for "Quicklinks" and select "College Catalog" to locate the "Online Catalog Addendum" beginning Fall 2011.

## MEDICAL TECHNOLOGY

Natural Sciences Division
Office: Bldg 400, Room 411
714.992.7105

Dean: Carol Mattson (Interim)
Website: natsci.fullcoll.edu

## 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.

## 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 Introduction to Chemistry 5
CHEM 107 F Elementary Chemistry 5
CHEM 111AF General Chemistry I 5
CHEM 111BF General Chemistry II 5
MATH 141 F College Algebra 4
MATH 142 F Trigonometry
MICR 220 F Medical Microbiology
4
MICR 262 F General Microbiology
PHYS 205 F Physics for the Life Sciences I
PHYS 206 F Physics for the Life Sciences II

## MICROBIOLOGY

## Microbiology Associate in Arts Degree PROGRAM CODE: 2A03821

The Microbiology Associate in Arts 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 electives listed below.

Required Courses (9-10 units) Units
BIOL 266 F General Zoology
Units
5
BIOL 268 F General Botany
5
BIOL 272 F Cell and Molecular Biology
MICR 262 F General Microbiology
MICR262 F Geral
Select remaining units from the following:
(8-9 units)
Units
CHEM 107 F Elementary Chemistry
5
CHEM 111AF General Chemistry I
5
CHEM 111BF General Chemistry II
CHEM 211AF Organic Chemistry I
CHEM 211BF Organic Chemistry II
MATH 141 F College Algebra
MATH 142 F Trigonometry
PHYS 205 F Physics for the Life Sciences I
PHYS 206 F Physics for the Life Sciences II 4
PHYS 205 F Physics for the Life Sciences I 4

## MUSIC

## Music Associate in Arts Degree <br> PROGRAM CODE: 2A03848

Curriculum leads to the Associate in Arts Degree. This degree requires a total of 32-38 units of which 31 units are in required courses. An additional 3-7 units must be chosen from the restricted electives listed below.
Required Courses (29*-31 units) Units
MUS 108 F Introduction to Music Technology ..... 2
MUS 106 F Introduction to Music Theory ..... 3
MUS 104AF Beginning Musicianship ..... 1
MUS 104BF Intermediate Musicianship ..... 1
MUS 107AF Harmony I ..... 3
MUS 107BF Harmony II ..... 3
MUS 204AF Advanced Musicianship ..... 1
MUS 135AF* Beginning Piano ..... 1
MUS 135BF* Piano ..... 1
MUS 120 F Survey of Music History ..... 3
MUS 225 F Applied Music - Private Study or ..... 1
MUS 228 F Advanced Voice or ..... 1
MUS 237 F Advanced Piano or ..... 1
MUS 244 F Advanced Strings or ..... 1
MUS 247 F Advanced Woodwinds or ..... 1
MUS 250 F Advanced Brass or ..... 1
MUS 253 F Advanced Percussion ..... 1
MUS 123 F Concert Hour ..... 1
Major performance group each semester ..... $1,1,1,1$
Applied Music - Private study or Advanced Instrument study
each semester ..... 1, 1, 1, 1
Music 123 F Concert Hour each semester

$$
1,1,1,1
$$

Restricted Electives (3-7 units) ..... Units
MUS 030 F Music Notation Software ..... 2
MUS 203 F Counterpoint ..... 3
MUS 204BF Pop/Commercial Musicianship ..... 1
MUS 205 F Pop/Commercial Music Theory ..... 3
MUS 207 F Pop/Commercial Arranging/Composing ..... 3
*Proficiency examination or equivalent course work will be accepted for this requirement.

## Music: Commercial <br> Associate in Arts Degree <br> PROGRAM CODE: 2A03849

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.

## Required Courses (19 units) <br> 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
Performance group each semester (1, 1, 1, 1)
3
Applied music class each semester

## 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 Beg. Jazz Improvisation: Instrumental or 1
MUS 157 F Beg. Vocal Styling and Improvisation 1
MUS 208 F Music Copying and Notation 2
MUS 256 F Adv. Jazz Improvisation — Instrumental or 1
MUS 257 F Adv. Vocal Styling and Improvisation 1

## Certificate in Piano Teaching <br> PROGRAM CODE: 2 C08419

The Certificate in Piano Teaching 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. This certificate requires completion of $23 / 24$ units. MUS 021 F and MUS 022 F Teaching of Piano must be completed at Fullerton College. The Certificate in Piano Teaching Program requires a total of $23 / 24$ units of which $23 / 24$ units are in required courses.
Required Courses (23/24 units) ..... Units
CDES 120 F Child Development or ..... 3
CDES 123DF Early Childhood Music Education ..... 2
MUS 021 F The Teaching of Piano I ..... 3
MUS 022 F The Teaching of Piano II ..... 3
MUS 107AF Harmony I ..... 3
MUS 107BF Harmony II ..... 3
MUS 104AF Beginning Musicianship ..... 1
MUS 104BF Intermediate Musicianship ..... 1
MUS 120 F Survey of Music History ..... 3
MUS 225 F Applied Music: Private Study ..... 1-2
MUS 265 F Piano Ensemble ..... 1-2

## Music Recording/Production Certificate

## PROGRAM CODE: 2C08420

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 recording/production field. The certificate requires a total of 39 units of which 38 units are in required courses with a minimum grade of " $C$ " in each course taken.

| Required Courses (38 units) | Units |  |
| :--- | :--- | ---: |
| MUS 106 F | Introduction to Music Theory | 3 |
| MUS 108 F | Introduction to Music Technology | 2 |
| MUS 110 F | Electronic Music I | 3 |
| MUS 12 F | The Music Business | 2 |
| MUS 122 F | Advanced Music Business | 2 |
| MUS 113 F | Jazz History: An Appreciation or | 3 |
| MUS 119 F | History of Rock Music | 3 |
| MUS 116 F | Music Appreciation | 3 |
| MUS 124 | Recording Studio I | 3 |
| MUS 135AF* | Beginning Piano or | 1 |
| MUS 135BF* | Piano | 1 |
| MUS 224 F | Recording Studio II | 3 |
| MUS 910 |  |  |
| MUS 123 | F*** | Coctronic Music II Hour |

*Proficiency examination or equivalent curriculum will be
accepted for this requirement.

**This class to be taken twice for credit.

${ }^{* * *}$ This course must be taken 4 times for credit.
Restricted Electives (1 unit)
MUS 227 F Intermediate Voice 1
MUS 234 F Intermediate Rock Guitar ..... 1
MUS 236 F Intermediate Piano ..... 1
MUS 238 F Pop/Commercial Piano ..... 1

## 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.

## OFFICE TECHNOLOGY

## Administrative Office Assistant

## Associate of Science Degree

PROGRAM CODE: $2 S 03827$
Curriculum leads to the Administrative Office Assistant Associate of Science Degree and/or employment in the office management position. This degree requires 31-33 units of which 26-27 units must be chosen from the required courses listed below. An additional 5-6 units must be chosen from the restricted electives listed below. *See this catalog for options for the Associate of Science Degree general education requirements.

Required Courses: (26-27 units)
Units
ACCT 100BF Financial Accounting Principles or
ACCT 101AF Financial Accounting
BUS 111 F Business Communications
BUS 266 F Human Relations in Business
CIS 104 F Presentation Graphics
CIS 105 F Spreadsheet I
CIS 109 F Personal Computer Security
CIS 123AF Word Processing I
CIS 123BF Word Processing II
CIS 142 F Database I
OT 070 F Business Protocol and Ethics
OT 080 F Keyboarding - Beginning
OT 081 F Keyboarding - Speed and Accuracy
Restricted Electives: (5-6 units)
BUS 151 F Business Mathematics
CIS 048 F Introduction to PC Communications
CIS 120AF Project Management I
CIS 120BF Project Management II
CIS 150 F Introduction to the Internet
CIS 151 F Internet Research

## Administrative Office Assistant Certificate

PROGRAM CODE: 2 C21261
The Administrative Office Assistant Certificate requires the completion of 31-33 units of which 26-27 must be chosen from the required courses. An additional 5-6 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.

Required Courses: (26-27 units)

Units

ACCT 100BF Financial Accounting Principles or 3

ACCT 101AF Financial Accounting 4
BUS 111 F Business Communications 3
BUS 266 F Human Relations in Business 3
CIS 104 F Presentation Graphics 2
CIS 105 F Spreadsheet I 2
CIS 109 F Personal Computer Security 2
CIS 123AF Word Processing I 2
CIS 123BF Word Processing II 2
CIS 142 F Database I 2
OT 070 F Business Protocol and Ethics 2
OT $080 \mathrm{~F} \quad$ Keyboarding - Beginning 1.5
OT 081 F Keyboarding — Speed and Accuracy 1.5
Restricted Electives (5-6 units)
Units
BUS 151 F Business Mathematics 3
CIS 048 F Introduction to PC Communications 2
CIS 120AF Project Management I 2
CIS 120BF Project Management II 2
CIS 150 F Introduction to the Internet 2
CIS 151 F Internet Research 2
OT 010 F Basic Computer Concepts 1
OT 011 F College Keyboarding Skills 1
OT 012 F College Keyboard Formatting Skills 1
OT 013 F College Keyboard Speed and Accuracy 1
OT 020 F Business Career Success Skills 1
OT 021 F Business Resume Writing Skills 1
OT 025 F Basic Internet Skills 1
OT 026 F Basic HTML Skills 1
OT 027 F Basic Adobe Pagemaker 1
OT 028 F Basic Adobe Illustrator 1
OT 035 F Basic WordPerfect Skills 1
OT 036 F Basic Microsoft Word Skills 1
OT 037 F Basic Microsoft Excel Skills
OT 038 F Basic Microsoft Access Skills
OT 039 F Basic MS PowerPoint Skills
OT 040 F Basic MS Publisher Skills
OT 041 F MS Word for Academic Papers
OT 042 F MS Word for Academic Papers
OT 043 F Creating Promotional Pieces

## Legal Office Administration

## Associate in Science Degree

PROGRAM CODE: $2 S 08392$
Curriculum leads to the Associate in Science Degree and/or employment in a legal office, governmental agency, or private industry. This degree requires $33-34$ units of which 29 are in required courses listed below. An additional 4-5 units must be chosen from the restricted electives listed below.

Required Courses: (29 units) Units
BUS 111 F Business Communications 3
BUS 266 F Human Relations in Business 3
CIS 123AF Word Processing I 2
OT $080 \mathrm{~F} \quad$ Keyboarding - Beginning 1.5
OT 081 F Keyboarding - Speed and Accuracy 1.5
PLEG 101 F Introduction to Paralegal Studies 3
PLEG 104 F 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 of the following for a total of 3 units: Units
CIS 100 F Introduction to Personal Computers 3
CIS 102 F Introduction to Open Source Software
Restricted Electives: (4-5 units)
Units
BUS 290 F Managerial Communications
3
CIS 104 F Presentation Graphics
2
CIS 105 F Spreadsheet I
CIS 109 F Personal Computer Security
CIS 123BF Word Processing II
CIS 142 F Database I
CIS 150 F Introduction to the Internet
PLEG 105 F Introduction to Legal Writing

## Legal Office Administration Certificate PROGRAM CODE: 2C21263

The Legal Office Administration Certificate requires completion of 32 units of which 29 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. At least one half of the units toward the certificate must be completed at Fullerton College.

## Required Courses (29 units)

Units
BUS 111 F Business Communications
3
BUS 266 F Human Relations in Business 3
CIS 123AF Word Processing I 2
OT 080 F Keyboarding — Beginning 1.5
OT 081 F Keyboarding - Speed and Accuracy 1.5
PLEG 101 F Introduction to Paralegal Studies 3
PLEG 104 F 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

One of the following for a total of 3 units: Units
CIS 100 F Introduction to Personal Computers 3
CIS 102 F Introduction to Open Source Software 3
Restricted Electives (6 units) Units
BUS 290 F Managerial Communications 3
CIS 104 F Presentation Graphics 2
CIS 105 F Spreadsheet I 2
CIS 123BF Word Processing II 2
CIS 142 F Database I 2
CIS 150 F Introduction to Internet 2
PLEG 105 F Introduction to Legal Writing 3

## Word Processing Associate in Science Degree

PROGRAM CODE: 2S08407
Curriculum leads to the Associate in Science Degree and/or employment in an office where a knowledge of word processing/ office technology is required. This degree requires 32 units of which 26 are in required courses. An additional 6 units must be chosen from the restricted electives listed below.

| Required Courses: (26 units) | Units |  |
| :--- | :--- | ---: |
| BUS 111 F | Business Communications | 3 |
| BUS 266 F | Human Relations in Business | 3 |
| CIS 104 F | Presentation Graphics | 2 |
| CIS 105 F | Spreadsheet I | 2 |
| CIS 107 F | Intro to Operating Systems | 2 |
| CIS 123AF | Word Processing I | 2 |
| CIS 123BF | Word Processing II | 2 |
| CIS 142 F | Database I | 2 |
| CIS 150 F | Introduction to the Internet | 2 |
| OT 080 F | Keyboarding — Beginning | 1.5 |
| OT 081 F | Keyboarding - Speed and Accuracy | 1.5 |
|  |  |  |
| Choose from the following for a total of 3 units: | Units |  |
| CIS 100 F | Introduction to Personal Computers | 3 |
| CIS 102 F | Intro to Open Source Software | 3 |
|  |  |  |
| Restricted Electives (6 units) with at least one | Units |  |
| ACCT course: | 3 |  |
| ACCT 100BF | Financial Accounting Principles | 4 |
| ACCT 101AF | Financial Accounting | 3 |
| BUS 290 F | Managerial Communications | 3 |
| CIS 152 F | Web Page Design II | 2 |
| CIS 205AF | Spreadsheet II |  |

BUS 111 F Business Communications 3
BUS 266 F Human Relations in Business 3
CIS 104 F Presentation Graphics 2
CIS 105 F Spreadsheet I 2
CIS 107 F Intro to Operating Systems 2
CIS 123AF Word Processing I 2
CIS 123BF Word Processing II 2
CIS 142 F Database I 2
OT 080 F Keyboarding - Beginning 1.5
OT 081 F Keyboarding — Speed and Accuracy 1.5
Choose from the following for a total of 3 units: Units
CIS 100 F Introduction to Personal Computers 3
CIS 102 F Intro to Open Source Software 3
Restricted Electives ( 6 units) with at least one
ACCT course:
ACCT 100BF Financial Accounting Principles 3
ACCT 101AF Financial Accounting 4
BUS 290 F Managerial Communications 3
CIS 152 F Web Page Design II 3
CIS 205AF Spreadsheet II 2

## Word Processing Certificate <br> PROGRAM CODE: 2C21262

The Word Processing Certificate requires the completion of 35 units, of which 26 must be chosen from the required courses listed below. An additional 9 units must be chosen from the restricted electives listed below.

| Required Courses: (26 units) | Units |  |
| :--- | :--- | ---: |
| BUS 111 F | Business Communications | 3 |
| BUS 266 F | Human Relations in Business | 3 |
| CIS 100 F | Introduction to Personal Computers | 3 |
| CIS 104 F | Presentation Graphics | 2 |
| CIS 105 F | Spreadsheet I | 2 |
| CIS 107 F | Intro to Operating Systems | 2 |
| CIS 109 F | Personal Computer Security | 2 |
| CIS 150 F | Introduction to the Internet | 2 |
| CIS 123AF | Word Processing I | 2 |
| CIS 123BF | Word Processing II | 2 |
| OT 080 F | Keyboarding - Beginning | 1.5 |
| OT 081 F | Keyboarding - Speed and Accuracy | 1.5 |

Restricted Electives (9 units) with at least one
ACCT course:
ACCT 100BF Financial Accounting Principles
3
ACCT 101AF Financial Accounting 4
BUS 290 F Managerial Communications 3
CIS 142 F Database I
2
CIS 152 F Web Page Design II 3
CIS 205AF Spreadsheet II 2
CIS 205BF Macro Programming

## 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 18 units of required courses for the major at Fullerton College.

## Paralegal Studies Associate in Science Degree <br> PROGRAM CODE: 2S08434

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).

## Required Courses: (24 units)

## Units

PLEG 101 F Introduction to Paralegal Studies
PLEG 104 F Legal Research and Terminology
PLEG 105 F Introduction to Legal Writing
PLEG 116 F Computers in the Law Office
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
3

## Restricted Electives: (3 units)

PLEG 090 F Contemporary Issues in the Law
Units
PLEG 204 F Family Law 1-3

PLEG 205 F Probate, Wills and Trusts 3

PLEG 206 F Bankruptcy Law and Procedure 3
PLEG 207 F Computer-Assisted Legal Research 3
PLEG 208 F Workers' Compensation Law 3
PLEG 209 F Criminal Law and Procedures 3
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 and Labor Law 3
PLEG 214 F Contract Law/Procedure 3
PLEG 215 F Discovery in the Electronic Age 3
PLEG 225 F Law Office Management 3
PLEG 216 F Computers in the Law Office II 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
PLEG 203 F Personal Injury

## Paralegal Studies Certificate PROGRAM CODE: 2C21275

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. At least one half of the units toward the certificate must be completed at Fullerton College. The Paralegal Studies Certificate will be awarded to those students possessing an Associate of Science Degree, an Associate of Arts Degree, a Bachelors 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 of Science degree in Paralegal Studies. The Paralegal Studies Program is approved by the American Bar Association (ABA).

## Required Courses: (24 units)

Units
PLEG 101 F Introduction to Paralegal Studies
3
PLEG 104 F Legal Research and Terminology 3
PLEG 105 F Introduction to Legal Writing 3
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
Restricted Electives: (6 units) ..... Units
PLEG 090 F Contemporary Issues in the Law ..... 1-3
PLEG 204 F Family Law ..... 3
PLEG 205 F Probate, Wills and Trusts ..... 3
PLEG 206 F Bankruptcy Law and Procedure ..... 3
PLEG 207 F Computer-Assisted Legal Research ..... 3
PLEG 208 F Workers' Compensation Law ..... 3
PLEG 209 F Criminal Law and Procedure ..... 3
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 F Contract Law/Procedure ..... 3
PLEG 215 F Discovery in the Electronic Age ..... 3
PLEG 216 F Computers in the Law Office II ..... 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
PLEG 203 F Personal Injury ..... 3

## PHILOSOPHY AND RELIGIOUS STUDIES

## Philosophy Associate in Arts Degree <br> PROGRAM CODE: 2A03868

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.

## Required Courses: (15 units) <br> Units

PHIL 100 F Introduction to Philosophy 3
PHIL 160 F Introduction to Ethics 3
PHIL 170 F Logic and Critical Thinking or 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 3
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 250 F The Religion of Islam 3
PHIL 270 F Introduction to the Asian Religions 3

## Religious Studies Associate in Arts Degree PROGRAM CODE: 2A03869

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 the restricted electives listed below.

## Required Courses (12 units)

Units
PHIL 101 F Introduction to Religious Studies 3
PHIL 105 F World Religions or 3
PHIL 105HF Honors World Religions 3
PHIL 200 F Introduction to Christianity 3
PHIL 270 F Introduction to Asian Religions 3
Restricted Electives (6 units)
Units
ENGL 243 F Folklore and Mythology
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 165 F 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 198AF The Holocaust 3
PHIL 201 F History of Philosophy: Ancient and Medieval
3
PHIL 202 F History of Philosophy: Modern
3
PHIL 210 F Introduction to Judaism
PHIL 225 F The American Religious Experience
PHIL 250 F The Religion of Islam 3

## PHOTOGRAPHY

## Photography Associate in Arts Degree PROGRAM CODE: 2A19452

Curriculum leads to the Associate in Arts Degree. 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.

## Required Courses (9 units)

Units
PHOT 101 F Introduction to Photography
3
PHOT 221 F Studio Specialties I
PHOT 290 F Internship in Photography2-4
*Students must complete a minimum of 3 units in PHOT 290 F for this degree
and one course (3 units) from the following: Units
$\begin{array}{lll}\text { PHOT } 111 \mathrm{~F} & \text { Introduction to Photography from } \\ & \text { Analog to Digital or }\end{array}$
$\begin{array}{lll}\text { PHOT } 112 \text { F } & \begin{array}{l}\text { Introduction to Professional } \\ \\ \text { Digital Photography }\end{array}\end{array}$
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

## Professional Photography Certificate

PROGRAM CODE: 2C19453
The Photography Certificate Program requires the completion of 18 units. All courses must be completed with a grade of "C" or better. This certificate is designed to prepare the student for entry-level occupational positions in photo studios, public relation firms, entertainment industry, service bureaus, print shops, and marketing firms.


## PHYSICAL EDUCATION

## Physical Education

## Associates in Arts Degree <br> 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 Bachelors 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 a respective university transfer representatives to confer program requirements and transferable work. The Program requires a total of 18 units of which 14-15 units are in required courses. An additional 2-3 units must be chosen from the restricted units listed below.

## Required Courses: (14-19 units) <br> Units

PE 235 F First Aid, CPR, and Safety Education 2
PE 236 F Prevention and Care of Athletic Injuries 3
PE 248 F Psychology of Sport 3
PE 252 F Introduction to Physical Education 2
ANAT 231 F General Human Anatomy or 4
ANAT 240 F Human Physiology 5
Restricted Electives: (2-3 units) Units
2-3 Different Activity Courses

## Physical Education

## Fitness Associate in Science Degree PROGRAM CODE: $2 S 03832$

The Physical Education - Fitness Associate in Science Degree requires a total of 18 units of which 13 units are in required courses. An additional 5 units must be chosen from the restricted units listed below.

Required Courses: (13 Units) Units
ANAT 231 F General Human Anatomy 4
PE 154 F Fitness Testing with Exercise Prescription 2
PE 235 F First Aid, CPR, and Safety Education 2
PE 248 F Psychology of Sport 3
WELL 200 F Applied Exercise Physiology 2
Restricted Electives: (5 Units) Units
ACCT 001 F Accounting for Small Business 3
FOOD 060 F Foods for Fitness 2
PE 150 F Rhythmic Aerobic Exercise 1
PE 182 F Body Building/Development \& Weight Lifting 1
PE 236 F Prevention and Care of Athletic Injuries 3
WELL 020 F Fitness Assessment 0.5
WELL 230 F The Body-Mind Connection 3

## Aquatic Specialist Certificate

PROGRAM CODE: 2C10615
The Aquatic Specialist Certificate Program requires the completion of 20 units, 19 of which are in required courses. An additional one unit must be chosen from restricted electives below; minimum grade of "C" required.

| Required Courses (19 units) | Units |  |
| :--- | :--- | ---: |
| PE 235 F $^{*}$ | First Aid, CPR, and Safety Education | 2 |
| PE 236 F | Prevention and Care of Athletic Injuries | 3 |
| PE 238 F | Water Safety Instruction | 3 |
| PE 239 F | Open Water Scuba Diving | 3 |
| PE 245 F | Lifesaving, Basic Rescue/CPR | 2 |
| PE 199 F | Physical Education Independent Study or | $1-2$ |
| PE 299 F | Physical Education Independent Study | $1-2$ |
| PE 154 F | Fitness Testing with Exercise Prescription | 2 |

Restricted Elective (1 unit) Units
PE 134 F Swimming 1
PE 149 F Swim for Fitness 1
PE 151 F Water Aerobics/Pool Exercise 1
PE 165 F Lifetime Fitness 1
PE 192 F Water Polo 1
PE 248 F Psychology of Sport 3
*American Red Cross certification can be substituted at the discretion of the division. Student must take an additional two units from restricted electives.

## Athletic Coach Certificate

PROGRAM CODE: 2C10616
The Athletic Coach Certificate Program requires the completion of 19 units, of which 17 are in required courses. An additional two units must be chosen from the restricted electives shown below.

| Required Courses (17 units) | Units |  |
| :--- | :--- | ---: |
| PE 235 F $^{*}$ | First Aid, CPR, and Safety Education | 2 |
| PE 236 F | Prevention and Care of Athletic Injuries | 3 |
| PE 240 F | Sports Officiating for Men or | 2 |
| PE 241 F | Sports Officiating for Women | 2 |
| PE 247 F | Sports Management | 3 |
| PE 248 F | Psychology of Sport | 3 |
| PE 199 F | Physical Education Independent Study or | 2 |
| PE 299 F | Physical Education Independent Study | 2 |
| PE 154 F | Fitness Testing with Exercise Prescription | 2 |
| PE 243 F | Stress Mgmt. Through Physical Activity | 2 |

PE 235 F $^{*}$ First Aid, CPR, and Safety Education 2
PE 236 F Prevention and Care of Athletic Injuries 3
PE 240 F Sports Officiating for Men or 2
PE 241 F Sports Officiating for Women 2
PE 247 F Sports Management 3
Pychology of Spor

PE 299 F Physical Education Independent Study 2
PE 154 F Fitness Testing with Exercise Prescription
2

## Restricted Electives (2 units)

Units
PE 152 F Fitness Training Lab (Circuit)
PE 159 F Strength Training (Olympic Weights)
PE 165 F
Lifetime Fitness
PE 280 F
PE 281 F
PE 282 F
Professional Activ. - Theory of Baseball 2

Professional Activ. - Theory of Softball
PE 283 F Professional Activ. - Theory of Football
PE 284 F Professional Activ. - Theory of Soccer
PE 285 F Professional Activ. - Theory of Volleyball
PE 202 F Baseball
PE 203 F Basketball - Men
PE 204 F Basketball - Women
PE 205 F Cross Country - Men and Women
PE 207 F
PE 208 F
PE 209 F
Football
2

PE 210 F

## Soccer

PE
PE 211 F Swimming - Men
PE 212 F Swimming - Women
PE 214 F Intercollegiate Tennis
PE 215 F Track - Men/Women
PE 221 F Intercollegiate Volleyball - Men
PE 219 F Intercollegiate Water Polo
PE 222 F Badminton - Women
*American Red Cross certification can be substituted at the discretion of the Division. Student must take an additional two units from restricted electives.

## Group Fitness Instructor Certificate PROGRAM CODE: 2C10614A

The Group Fitness Instructor Certificate Program requires a total of 19 units of which 15 units are in required courses. An additional 4 units must be chosen from the restricted units listed below.

Required Courses: 15 Units
Units
NUTR 210 F Human Nutrition
PE $110 \mathrm{~F} \quad$ Pilates (Alignment and Correctives)
PE 129 F Step Aerobics
PE 130 F Advanced Fitness Training
PE 150 F Rhythmic Aerobic Exercise
PE 154 F Fitness Testing with Exercise Prescription
PE 235 F* First Aid, CPR, and Safety Education
PE 236 F Prevention and Care of Athletic Injuries
Restricted Electives: (4 units)
Units
PE 102 F Yoga
1
PE 147 F Relaxation and Flexibility Fitness
PE 151 F Water Aerobics/Pool Exercise
1
PE 161 F Body Conditioning and Fitness
PE 163 F Kick Boxing
PE 266 F Physical Fitness as a Lifelong Concept
WELL 230 F The Body-Mind Connection
*American Red Cross Certification can be substituted at the discretion of the division

## Personal Trainer Certificate

PROGRAM CODE: 2C10617
The Personal Trainer Certification Program requires a total of 21 units of which 17 units are in required courses. An additional 4 units must be chosen from the restricted units listed below.
Required Courses: (17 units) ..... Units
ANAT 231 F General Human Anatomy or ..... 4
BIOL 102 F Human Biology ..... 3
BIOL 102LF Human Biology Laboratory ..... 1
NUTR 210 F Human Nutrition ..... 3
PE 154 F Fitness Testing with Exercise Prescription ..... 2
PE 235 F First Aid, CPR, and Safety Education ..... 2
WELL 119 F Applied Biomechanics ..... 2
PE $229 \quad$ Pilates Clinic ..... 2-4
WELL 200 F Applied Exercise Physiology ..... 2
WELL 221 F Personal Training Internship ..... 1-2
Restricted Electives: (4 units)
PE 147 F Relaxation/Flexibility Fitness ..... 1
PE 152 F Fitness Training Lab (Circuit) ..... 1
PE 159 F Strength Training (Olympic Weights) ..... 1
PE 165 F Lifetime Fitness ..... 1
PE 266 F Physical Fitness as a Lifelong Concept ..... 2
WELL 230 F The Body-Mind Connection ..... 3

## 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 30 units ( 612 hours) of which are all in required courses. This certificate is designed to prepare students with the necessary entry level professional skills for employment in the field of massage therapy. All classes must be completed with a " C " or better. Students must present current CPR and First Aid cards to receive certificate.

| Required Courses (30 Units) These courses |  |
| :--- | ---: |
| must be taken at Fullerton College | Units |
| BIOL 102 F | Human Biology |

*2 units required from WELL 239 F
*Students must present current CPR and First Aid cards to receive certificate.

## PHYSICS

## Physics Associate in Arts Degree <br> PROGRAM CODE: $2 A 03872$

The Associate in Arts Degree in Physics Program requires a total of 18 units of which 12 are in required courses. An additional 6 units must be chosen from the restricted electives listed below.
Required Courses (12 units) ..... Units
PHYS 221 F General Physics I ..... 4
PHYS 222 F General Physics II ..... 4
PHYS 223 F General Physics III ..... 4
Restricted Electives (6 units) ..... Units
MATH 150AF Calculus I ..... 4
MATH 150BF Calculus II ..... 4
MATH 250AF Multivariable Calculus ..... 4
MATH 250BF Linear Algebra and Differential Equations ..... 4
CHEM 111AF General Chemistry I ..... 5
CSCl 123 F Intro to Programming Concepts in C++ ..... 4

## POLITICAL SCIENCE

## Political Science Associate in Arts Degree PROGRAM CODE: 2A03885

The Political Science Associate in Arts Degree Program 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. 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 current events.

## Required Courses (12 units)

Required Course - 3 Units Units
POSC 100 F American Government
Category A - 6 Units from the following: Units
POSC 110 F Contemporary American Politics 3
POSC 120 F Introduction to Political Theory 3
POSC 150 F California Government and Politics 3
POSC 275 F Introduction to Public Law 3
Category B - 3 Units from the following: Units
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 230 F Introduction to International Relations 3

Restricted Electives (6 units)
Select two of the following categories and choose one course from each category:
Category A Units
ETHS 101 F American Ethnic Studies ..... 4
ETHS 130 F African-American History I ..... 3
ETHS 141 F Chicana/Chicano History ..... 3
HIST 270 F Women in United States History ..... 3
SOC 225 F Sociology of Women ..... 3
Category B ..... Units
HIST 111 F Western Civilization II ..... 3
HIST 113 F World Civilizations II ..... 3
HIST 127 F Survey of American History ..... 3
HIST 152 F Survey of British History II ..... 3
HIST 160BF Modern China and Japan ..... 3
HIST 170 F History of the United States I ..... 3
HIST 171 F History of the United States II ..... 3
Category C ..... Units
ANTH 102 F Cultural Anthropology ..... 3
GEOG 100 F Global Geography ..... 3
GEOG 160 F Cultural Geography ..... 3
POSC 180 F Capital Field Trip: Sacramento Seminar ..... 3
Category D ..... Units
ECON 102 F Principles of Economics - Macro ..... 3
PHIL 160 F Introduction to Ethics ..... 3

## PRE-NURSING

## Natural Sciences Division

Office: Bldg 400, Room 411
714.992.7043

Dean: Carol Mattson (Interim)
Website: natsci.fullcoll.edu

## Pre-Nursing Associate in Arts Degree <br> PROGRAM CODE: 2A18800

The Pre-Nursing Associate in Arts Degree Program requires a total of $18-19$ units to be chosen from the courses listed below.

Required Courses (18-19 units) Units
ANAT 231 F General Human Anatomy 4
ANAT 240 F Human Physiology 5
CHEM 201 F Basic Concepts of Organic \& Biochemistry 5
MICR 220 F Medical Microbiology or 4
MICR 262 F General Microbiology 5

## PRINTING TECHNOLOGY

## Printing Technology

## Associate in Science Degree <br> \section*{PROGRAM CODE: $2 S 03837$}

Curriculum leads to the Associate in Science Degree and/or employment in the printing industry.

Complete 24 or more units from the following list: Units
PRNT 021 F Survey of Graphic Communications 0.5-2
PRNT 056 F Digital Printing
2.5

PRNT 075 F Electronic and Conventional Pre-Press 6
PRNT 085 F Introduction to Flexography 4
PRNT 086 F Advanced Flexography
PRNT 101 F Introduction to Printing
PRNT 161 F Sheetfed Offset Presswork
PRNT 162 F Intermediate Sheetfed Offset Presswork 4
PRNT 963 F Advanced Sheetfed Offset Presswork 4
PRNT 070 F Quick Printing and In-Plant Graphics 2
PRNT 072AF Screen Printing I 2
PRNT 072BF Screen Printing II
PRNT 072CF Screen Printing III
PRNT 075 F Electronic and Conventional PrePress
PRNT 171 F
Intermediate Offset Presswork
PRNT 973 F Advanced Offset Presswork 6
PRNT 151 F Intro to Pre-Press 4
PRNT 152 F Introduction to Electronic Pre-Press 4
PRNT 953 F Advanced Electronic Pre-Press

## Advanced Offset Presswork Certificate PROGRAM CODE: 2C10619

The Advanced Offset Presswork Certificate Program requires completion of 22 units of which 12 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. This certificate provides the skills needed to operate large offset presses and enter the commercial printing industry.

## Required Courses (12 units)

Units
PRNT 161 F Sheetfed Offset Presswork 4
PRNT 162 F Intermediate Sheetfed Offset Presswork
PRNT 963 F Advanced Sheetfed Offset Presswork or 4

## PRNT 171 F Offset Presswork or

PRNT 172 F Intermediate Offset Presswork

## Restricted Electives (10 units)

PRNT 070 F Quick Printing and In-Plant Graphics
Units
PRNT 075 F Electronic and Conventional Pre-Press
PRNT 090 F Printing Skills Lab
PRNT 101 F Introduction to Printing
PRNT 130 F Graphics
2
6

PRNT 151 F Introduction to Pre-Press
PRNT 973 F Advanced Offset Presswork

## Customer Service Training Skills Certificate PROGRAM CODE: $2 C 00048$

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.

| 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 | Intro to Advertising and Graphic Design | 3 |
| ACG 100 F | Intro: Computer Graphics/MAC | 3 |

## Digital Printing Certificate <br> PROGRAM CODE: 2C00032

The Digital Printing Certificate Program requires a total of 19.5 units of which 9.5 units are in required courses. An additional 10 units must be chosen from the restricted electives listed below.

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

PRNT 056 F Digital Printing
2.5

PRNT 070 F Quick Printing and In-Plant Graphics 2
PRNT 101 F Introduction to Printing 3
Restricted Electives (10 units) Units
PRNT 070 F Quick Print and In-Plant Graphics 2
PRNT 075 F Electronic and Conventional Pre-Press 6
PRNT 151 F Introduction to Pre-Press 4
PRNT 161 F Sheetfed Offset Presswork 4
PRNT 171 F Offset Presswork 6

## Electronic Imaging Certificate <br> PROGRAM CODE: 2C10618

The Electronic Imaging Certificate Program requires completion of 22 units of which 12 units are in required courses. An additional 10 units must be chosen from the restricted electives listed below with a minimum grade of " C " in each course. At least one half of the units toward the certificate must be completed at Fullerton College. This certificate provides students with practical knowledge of the electronic imaging section of the printing industry.

Required Courses (12 units)
Units
PRNT 075 F Electronic and Conventional Pre-Press
PRNT 151 F Introduction to Pre-Press
PRNT 152 F Introduction to Electronic Pre-Press
PRNT 953 F Advanced Electronic Pre-Press
Restricted Electives (10 units)

Units
PRNT 075 F Electronic and Conventional Pre-Press ..... 6
PRNT 085 F Introduction to Flexography ..... 4
PRNT 090 F Printing Skills Lab ..... 2
PRNT 101 F Introduction to Printing ..... 3
PRNT 130 F Graphics ..... 2
PRNT 161 F Sheetfed Offset Presswork ..... 4
PRNT 171 F Offset Presswork ..... 6

## Flexography Skills Certificate PROGRAM CODE: 2C00055

The Flexography Skills 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.

Required Courses (11 units)
Units
PRNT 101 F Introduction to Printing
3
PRNT 085 F Introduction to Flexography 4
PRNT 086 F Advanced Flexography

## Graphic Communications Skills Certificate PROGRAM CODE: 2C00049

The Graphic Communications Skills 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.

| Required Courses (15 units) | Units |  |
| :--- | :--- | ---: |
| ART 140 F | Intro to Advertising and Graphic Design | 3 |
| ACG 100 F | Intro: Computer Graphics/MAC | 3 |
| PRNT 101 F | Introduction to Printing | 3 |
| BUS 111 F | Business Communications | 3 |
| BUS 151 F | Business Mathematics | 3 |

## Offset Duplicator Training Skills Certificate PROGRAM CODE: 2C00050

The Offset Duplicator Training Skills Certificate requires a total of 11 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.

## Required Courses (11 units)

Units
PRNT 101 F Introduction to Printing
3
PRNT 070 F Quick Printing and In-Plant Graphics 2
BUS 055 F Business English 3
BUS 051 F Basic Business Mathematics 3

## Printing Technology (General) Certificate <br> 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.
Required Courses (19 units) ..... Units
PRNT 085 F Introduction to Flexography ..... 4
PRNT 072AF Screen Printing I ..... 2
PRNT 171 F Offset Presswork ..... 6
Restricted Electives (8 units) ..... Units

Any classes offered by the Printing Department can be used for restrictive electives.

## Quick Print/In-Plant Graphics Certificate <br> PROGRAM CODE: 2C10620

The Quick Print/In-Plant Graphics Certificate requires the completion of 22 units of which 8 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.
Required Courses (8 units) ..... Units
PRNT 070 F Quick Printing and In-Plant Graphics ..... 8
Restricted Electives (14 units) ..... Units
PRNT 085 F Introduction to Flexography ..... 4
PRNT 090 F Printing Skills Lab ..... 2
PRNT 101 F Introduction to Printing ..... 3
PRNT 161 F Sheetfed Offset Presswork ..... 4
PRNT 171 F Offset Presswork ..... 6
PRNT 075 F Electronic and Conventional Pre-Press ..... 6

## Screen Printing Certificate <br> PROGRAM CODE: 2C10621

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.
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 and Conventional Pre-Press ..... 6
Restricted Electives (12) units Units
PRNT 070 F Quick Printing and In-Plant Graphics ..... 2
PRNT 075 F Electronic and Conventional Pre-Press ..... 6
PRNT 101 F Introduction to Printing ..... 3
PRNT 152 F Introduction to Electronic Pre-Press ..... 4PRNT 171 F Offset Presswork
PRNT 161 F Sheetfed Offset Presswork
PRNT 171 F ..... 46

## PSYCHOLOGY

## Psychology Associate in Arts Degree <br> PROGRAM CODE: 2A03875

The field of psychology examines the biological and experiential factors that influence human behavior. The Psychology Associate in Arts (A.A.) 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. 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 fullfill 9 of the 18 units required for this degree. An additional 9 units must be chosen from the restricted units listed below. 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*.

## Required Courses (9 units)

Units
PSY 101 F General Psychology or 3
PSY 101HF Honors General Psychology and 3
PSY 161 F Elem. Statistics for Behavioral Science and 3
PSY 202 F Research Methods in Psychology 3

| Restricted Electives (9 units) |  | Units |
| :---: | :---: | :---: |
| Select three of the following categories (A, B, C and/or D) and choose one 3 unit course from 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 |

*For detailed information about the new AA-T and AS-T degrees designed to facilitate transfer to the California State University System, please go to www.fullcoll.edu, click to access the dropdown menu for "Quicklinks" and select "College Catalog" to locate the "Online Catalog Addendum" beginning Fall 2011.

## REAL ESTATE

## Real Estate Management Associate in Science Degree <br> PROGRAM CODE: 2S03826

The Associate in Science Degree in Real Estate Management requires a total of 35-36 units of which all 35-36 units are required courses.

Required Courses: (18 units) Units
CIS 100 F Introduction to Personal Computers 3
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 3-4 units:
Units
ACCT 001 F Accounting for Small Business
ACCT 100BF Financial Accounting Principles
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
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
BUS 241AF Business Law
One course from the following
for a total of 2 units:
Units
CIS 150 F Introduction to the Internet
2
MKT 151 F Internet Marketing and Promotion 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

## 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' Licensure. This certificate requires the completion of 35-36 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.

Required Courses: (35-36 units)
All courses below are required
for a total of 18 units:
Units
CIS 100 F Introduction to Personal Computers
3
RE 101 F Principles of Real Estate
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 3-4 units:
Units
ACCT 001 F Accounting for Small Business 3
ACCT 100BF Financial Accounting Principles 3
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 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 2 units: Units
CIS 150 F Introduction to the Internet 2
MKT 151 F Internet Marketing and Promotion 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

## Real Estate Skills Sales Certificate <br> PROGRAM CODE: 2C00033

The Certificate in Real Estate Sales requires the completion of 16-17 units of which 13-14 must be chosen from the required courses listed below. An additional 3 units must be chosen from the restricted electives listed below.

| Required Courses: (13-14 units) | Units |  |
| :--- | :--- | ---: |
| ACCT 001 F | Accounting for Small Business or | 3 |
| ACCT 100BF | Financial Accounting Principles or | 3 |
| ACCT 101AF | Financial Accounting | 4 |
| CIS 050 F | Web Page Design I | 2 |
| CIS 150 F | Introduction to the Internet or | 2 |
| MKT 151 F | Internet Marketing and Promotion | 3 |
| RE 101 F | Principles of Real Estate | 3 |
| RE 102 F | Legal Aspects of Real Estate | 3 |

Restricted Electives: (3 units) Units
BUS 162 F Business Economics 3
ECON 101 F Principles of Economics - Micro 3
RE 090 F Current Issues in Real Estate 0.5-3
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 3
RE 205 F Property Management 3
RE 206 F Real Estate Economics 3

## RECREATION

## Outdoor Recreation and Safety Skills

## Certificate

## PROGRAM CODE: $2 C 00058$

The Outdoor Recreation and Safety Skills Certificate 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 15 units, of which 12-13 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: (12-13 units)
Units
PE 122 F Surfing or
PE 123 F Outrigger Canoeing
2

PE 124 F Kayaking
Kayaking
PE $132 \mathrm{~F} \quad$ Skiing or 1
PE 133 F Snowboarding 1
PE 235 F First Aid, CPR, and Safety Education 2
PE 238 F Water Safety Instruction or 3
PE 246 F Advanced/Master SCUBA Diver 2
REC 109 F Camping and Our Surfing Environment or 1
REC 111 F Camping and Our Bodyboarding Envirnmt. 1
Restricted Electives: (2-3 units) Units
PE 132 F $^{*} \quad$ Skiing
PE $133 \mathrm{~F}^{*} \quad$ Snowboarding
PE 142 F Mountaineering/Rock Climbing
PE 149 F Swim for Fitness
PE 199 F $^{* *}$ PE: Independent Study
REC 105 F Survival Arts
REC 107 F Wilderness Survival
REC 110 F Camping and Our Kayaking Environment

## SOCIOLOGY

## Sociology Associate in Arts Degree <br> PROGRAM CODE: 2A03886

Sociology is the scientific study of human interaction. As such, any topic related to how or why people treat each other in the ways that they do is a legitimate question for sociology. One major concern of sociology is with modern social problems, which include topics such as racism, sexism, poverty, health care, deviance, population and the environment. An associate's degree is intended to lead to transfer to colleges and universities which offer Bachelors degrees in sociology. This degree is an excellent general preparation for careers in social work, personnel and human resources, the criminal justice system, education, marketing research, law firms, political campaigns and journalism. The Sociology Associate in Arts Degree 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.

NOTE: Students planning to transfer to a local CSU may also want to consider the Sociology AA-T Degree*.

Required Courses: (10 units) Units
SOC 101 F Introduction to Sociology or 3
SOC 101HF Honors Introduction to Sociology 3
SOC 102 F Social Problems 3
SOSC 120 F Introduction to Probability and Statistics I 4
Restricted Electives: (9 units) Units
SOC 133 F Introduction to Gerontology 3
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 $275 \mathrm{~F} \quad$ 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 292 F Introduction to Criminology 3
SOC 299 F Sociology Independent Study 1
*For detailed information about the new AA-T and AS-T degrees designed to facilitate transfer to the California State University System, please go to www.fullcoll.edu, click to access the dropdown menu for "Quicklinks" and select "College Catalog" to locate the "Online Catalog Addendum" beginning Fall 2011.

## SPEECH

## Speech Associate in Arts Degree <br> PROGRAM CODE: $2 A 03867$

Curriculum leads to the Associate in Arts Degree. This degree requires 18.5-22 units of which 13.5-17 is in required courses. An additional 3-6 units must be chosen from the restricted electives listed below.

NOTE: Students planning to transfer to a local CSU may also want to consider the Communication Studies AA-T Degree*.

## Required Courses (14-17 units)

## Units

SPCH 100 F Public Speaking 4
SPCH 105 F Interpersonal Communication 3
PHIL 170 F Logic and Critical Thinking
Units
Plus select two of the following:
SPCH 120 F Intercultural Communication
3
SPCH 124 F Small Group Communication 3
SPCH 135 F Essentials of Argumentation 4
SPCH 138 F Forensics 0.5-1
THEA 127 F Oral Interpretation 3
THEA 129 F Beginning Voice for Actors 3
CRTV 135 F Broadcast TV and Radio Announcing 3
Restricted Electives (3-6units) Units
ENGL 100 F College Writing
3
HIST 110AF Western Civilization 3
HIST 110BF Western Civilization 3
THEA 100 F Introduction to the Theatre 3
CRTV 118 F Introduction to Radio, TV and Film 3
Foreign Language (Level I through Level IV) 4-5
*For detailed information about the new AA-T and AS-T degrees designed to facilitate transfer to the California State University System, please go to www.fullcoll.edu, click to access the dropdown menu for "Quicklinks" and select "College Catalog" to locate the "Online Catalog Addendum" beginning Fall 2011.

## THEATER ARTS (DRAMA)

## Theatre Arts (Drama)

## Associate in Arts Degree

PROGRAM CODE: 2A03850
This curriculum leads to an Associate in Arts Degree. The Theatre Arts Drama AA Degree program requires 18.5-24 units of which 17.5-21 units are in required courses. An additional $1-3$ units must be chosen from the restricted units listed below.
Required Courses: (17.5-21 units) ..... Units
THEA 100 F Introduction to the Theatre or ..... 3
THEA 104 F Introduction to Theatre Appreciation or ..... 3
THEA 105 F Musical Theatre History or ..... 3
THEA 108 F Multicultural Perspectives/American Theatre ..... 3
THEA 120BF** Intermediate Principles of Acting ..... 3
THEA 130 F* $^{*}$ Acting Workshop or ..... 3
THEA $133 \mathrm{~F}^{*}$ Theatre Practicum or ..... 2
THEA 135 F Resident Theatre Company or ..... 3
THEA 136 F Touring Theater Productions ..... 2
THEA 141 F Introduction to Technical Theatre ..... 3
THEA 143 F Stagecraft ..... 3
THEA $144 \mathrm{~F}^{*}$ Lighting or ..... 3
THEA $145 \mathrm{~F}^{*}$ Theatrical Costuming or ..... 3
THEA 146 F* $^{*}$ Scene Painting or ..... 3
THEA 147AF* Stage Makeup ..... 3
THEA 149 F Stage Crew Activity ..... 0.5-3
*Corequisite of THEA 149 F Stage Crew Activity required
**Prerequisite and corequisite (Technical Theatre class) required
Restricted Electives: (1-3 units) ..... Units
THEA 075 F Theatrical City Tours: New York ..... 2
THEA 076 F Theatrical City Tours: London ..... 2
THEA 106 F Principles of Playwriting ..... 3
THEA 109 F Modern Dramatic Literature ..... 3
THEA 120CF**Advanced Principles of Acting I ..... 3
THEA 121 F Movement for Actors ..... 3
THEA 122 F Improvisation for Television, Film \& Theatre ..... 2
THEA 125 F Musical Theatre Performance Techniques ..... 2
THEA 127 F Oral Interpretation ..... 3
THEA 129 F Beginning Voice for Actors ..... 3
THEA 142 F Theatre Crafts Lab ..... 1-2
THEA 151 F Properties: Design Construction ..... 3
THEA 160 F Introduction to Sound Technology ..... 2
THEA 161 F Sound Reinforcement Techniques ..... 2
THEA 162 F Sound Design for the Theatre ..... 3
THEA $222 \mathrm{~F}^{* * *}$ Acting for the Camera ..... 2
THEA 225 F Stage Directing ..... 3
THEA 235 F Experimental Theatre ..... 2
THEA 255 F Theatrical Costume Construction ..... 2
THEA 265 F Theatre Management ..... 2

[^3]
## Assistant Costume Designer Certificate PROGRAM CODE：2C19660

This high level 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 utilize the skills acquired in the Cutter／Draper and Stitcher certificates，be able to illustrate fashion and implement design skills and practices．This certifi－ cate 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 comple－ tion of 40.5 to 43 units of which 34.5 to 37 units are in required courses．All courses must be completed with a grade of＂ C ＂or better

Required Courses：（34．5－37 units）Units
ART 139 F Fashion Sketching 2
FASH 101 F Clothing I
FASH 108AF Flat Pattern Methods and Design I
2
FASH 188 F Apparel Production 2
FASH 190 F Pattern Grading 1
FASH 201 F Clothing II 2
FASH 209AF Draping 2
FASH 242 F History of Costume 3
FASH 975 F Patternmaking：Collections 2
THEA 100 F Introduction to the Theatre 3
THEA 130 F＊Acting Workshop 3
THEA $133 \mathrm{~F}^{*}$ Theatre Practicum 2
THEA 145 F Theatrical Costuming 3
THEA 147AF Stage Makeup
THEA 149 F Stage Crew Activity
THEA 255 F Theatrical Costume Construction
＊One semester is required－may be repeated as a restricted elective

## Restricted Electives：（6 units）

Units
ART 180 F Perspective Drawing and Rendering 3
ART 186AF Beginning Life Drawing
3
FASH 205AF Tailoring 2
FASH 206 F Textiles 3
FASH 299 F Fashion Industry Internship 1－4
THEA 075 F Theatrical City Tours：New York 2
THEA 076 F Theatrical City Tours：London 2
THEA 130 F Acting Workshop
THEA 149 F Stage Crew Activity 0．5－3
THEA 255 F Theatrical Costume Construction 2
THEA 133 F Theatre Practicum

## Costume Cutter／Draper Certificate <br> PROGRAM CODE：2C19663

This course of study provides the student with training in order to create patterns for costumes using both flat－pattern and draping methods，in addition to cutting and assembling cos－ tumes 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 33．5－36 units of which 27．5－30 units are in required courses．All courses must be completed with a grade of＂$C$＂or better．

| Required Courses：（27．5－30 units） | Units |  |
| :--- | :--- | ---: |
| FASH 101 F | Clothing I | 2 |
| FASH 201 F | Clothing II | 2 |
| FASH 108AF | Flat Pattern Methods and Design I | 2 |
| FASH 188 F | Apparel Production | 2 |
| FASH 190 F | Pattern Grading | 1 |
| FASH 209AF | Draping | 2 |
| FASH 242 F | History of Costume | 3 |
| THEA 100 F | Introduction to the Theatre | 3 |
| THEA 130 F | Acting Workshop | 3 |
| THEA 133 F | Theatre Practicum | 2 |
| THEA 145 F | Theatrical Costuming | 3 |
| THEA 149 F | Stage Crew Activity | $0.5-3$ |
| THEA 255 F | Theatrical Costume Construction | 2 |

Restricted Electives：（6 units）Units
FASH 088 F CAD for Apparel 2
FASH 108BF Flat Pattern Methods and Design II 2
FASH 206 F Textiles 3
FASH 975 F Patternmaking：Collections 2
FASH 976 F Advanced Patternmaking：Collections 2
THEA 149 F Stage Crew Activity 0．5－3
THEA 255 F Theatrical Costume Construction 2

## Costume Stitcher Certificate

PROGRAM CODE：2C19661
This course of study provides the student with training in spe－ cialized 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 25．5－28 units，of which 19．5－22 units are in required courses．All courses must be completed with a grade of＂C＂or better．

Required Courses: (19.5-22)

Units

FASH 101 F Clothing I
2
FASH 188 F Apparel Production 2
FASH 201 F Clothing II 2
THEA 100 F Introduction to the Theatre 3
THEA 130 F Acting Workshop 3
THEA 133 F Theatre Practicum 2
THEA 145 F Theatrical Costuming 3
THEA 149 F Stage Crew Activity 0.5-3
THEA 255 F Theatrical Costume Construction 2
Restricted Electives: (6 units) Units
FASH 045 F Swim and Active Wear 1
FASH 080AF Designing and Sewing Leather 2
FASH 085 F Bridal and Special Occasion Wear 2
FASH 090 F Creative Serging: Overlock Machine 2
FASH 205AF Tailoring 2
FASH 975 F Patternmaking: Collections 2
FASH 976 F Adv. Patternmaking: Collections 2
THEA 149 F Stage Crew Activity 0.5-3
THEA 255 F Theatrical Costume Construction

## Costume Wardrobe Certificate PROGRAM CODE: 2C18759

This course of study provides the student with the practical knowledge and experience necessary to work backstage preparing, changing and maintaining costumes before and during 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 23.5-26 units of which 19.5-22 units are in required courses. All course work must be completed with a grade of " $C$ " or better.

| Required Courses: (19.5-22 units) | Units |  |
| :--- | :--- | ---: |
| FASH 101 F | Clothing I | 2 |
| THEA 100 F | Introduction to the Theatre | 3 |
| THEA 145 F* | Theatrical Costuming | 6 |
| THEA 149 F | Stage Crew Activity | $0.5-3$ |
| THEA 130 F | Acting Workshop | 3 |
| THEA 133 F | Theatre Practicum | 2 |
| THEA 147AF | Stage Makeup | 3 |
|  |  |  |
| Restricted Electives: (4 units) | 2 |  |
| FASH 201 F | Clothing II | 3 |
| THEA 130 F | Acting Workshop | 2 |
| THEA 133 F | Theatre Practicum | $0.5-3$ |
| THEA 149 F | Stage Crew Activity | 2 |
| THEA 255 F | Theatrical Costume Construction |  |

*Class is a 3 unit course, must be taken twice.

## Lighting Technician Certificate

## PROGRAM CODE: 2C18746

The Lighting Technician Certificate is designed to prepare the student for occupational competency as a Lighting Technician in educational, community and residents theatre venues as well as theme parks, television and motion picture studios. This certificate program requires a total of 23.5-26 units of which 17.5-20 units are in required courses. All courses must be completed with a grade of "C" or better.

Required Courses: (17.5-20 units) Units
ART 110 F Introduction to Art 3
THEA 100 F Introduction to the Theatre 3
THEA 130 F Acting Workshop 3
THEA 133 F Theatre Practicum 2
THEA 141 F Introduction to Technical Theatre 3
THEA 144 F Lighting 3
THEA 149 F Stage Crew Activity 0.5-3
Restricted Electives: (6 units) Units
ACG 106 F Introduction: Dimensional Design/Mac 3
DANC 120 F Dance History 3
DRAF 171 F Fundmentals of Drafting 2
IDES 210 F Fundamentals of Lighting 3
MUS 116 F Music Appreciation 3
MUS 118 F Introduction to Opera 3

## Musical Theatre Certificate

PROGRAM CODE: 2 C08422
The Musical Theatre Certificate Program requires a total of 29 units of which 27 are in required courses. An additional 2 units must be chosen from the restricted electives shown below.
Required Courses: (27 units) UnitsDANC 105 F Ballet I1
DANC 111 F Jazz I ..... 1
DANC 113 F Tap Dance I ..... 1
MUS 104AF Beginning Musicianship and ..... 1
MUS 104BF Intermediate Musicianship ..... 1
MUS 135AF Beginning Piano and ..... 1
MUS 135BF Piano ..... 1
MUS 126 F Beginning Voice or ..... 1
MUS 228 F Advanced Voice ..... 1
THEA 120AF Beginning Principles of Acting ..... 3
THEA 120BF Intermediate Principles of Acting ..... 3
THEA 121 F Movement for Actors ..... 3
THEA 125 F Musical Theatre Performance Techniques ..... 2
THEA 133 F Theatre Practicum ..... 2
Restricted Courses: (2 units) ..... Units
MUS 180 F Collegiate Chorale ..... 1
MUS 281 F Concert Choir ..... 1
MUS 282 F Fullerton Master Chorale ..... 1
THEA 075 F Theatrical City Tours: New York ..... 1
THEA 076 F Theatrical City Tours: London ..... 1

## Advanced Musical Theatre Certificate PROGRAM CODE: 2C16013

The Advanced Musical Theatre Certificate Program requires a total of 28 units listed below. Completion of the Musical Theatre Certificate Program is required before the Advanced Musical Theatre Certificate will be granted.

Required Courses: (28 units) Units
DANC 105 F Ballet I
1
DANC 111 F Jazz I 1
DANC 113 F Tap Dance I 1
DANC 119 F Dance for Theatre 1
Two dance classes required from the above to fullfill requirement.
MUS 135AF Beginning Piano
1
MUS 135BF Piano 1
MUS 236 F Intermediate Piano 1
MUS 237 F Advanced Piano 1
Two piano classes required from the above to fullfill requirement.
MUS 126 F Beginning Voice
1
MUS 227 F Intermediate Voice 1
MUS 228 F Advanced Voice 1
Two voice classes required from the above to fullfill requirement.
MUS 288 F Bravo Song/Dance Ensemble
1
MUS 288 must be taken twice to fullfill the requirement.
THEA 105 F Musical Theatre History
3
THEA 120BF Intermediate Principles of Acting 3
THEA 121 F Movement for Actors 2
THEA 133 F Theatre Practicum 2
THEA 143 F Stagecraft 3
THEA 147AF Stage Makeup 3
THEA 150 F Performance Laboratory 2
THEA 225 F Stage Directing

## Scenic Artist Certificate <br> PROGRAM CODE: 2C18747

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 park, television and motion pictures studios. This certificate program requires a total of 24.5-29 units of which 19.5-23 units are in required courses. All courses must be complete with a grade of "C" or better.

Required Courses: (19.5-23 units)
Units
ART 118 F Color Theory
3
ART 182 F Basic Drawing 3
THEA 100 F Introduction to the Theatre 3
THEA 141 F Introduction to Technical Theatre
THEA 142 F Theatre Crafts Lab
3
THEA 143 F Stagecraft
1-2
THEA 146 F Scene Painting
THEA 149 F Stage Crew Activity

| Restricted Electives: (5-6 units) | Units |  |
| :--- | :--- | ---: |
| ART 110 F | Introduction to Art | 3 |
| ART 180 F | Perspective Drawing and Rendering | 3 |
| ART 189AF | Beginning Painting | 3 |
| ART 197 F | Mural and Faux Painting | 3 |
| THEA 151 F | Properties: Design Construction | 3 |

## Sound Technician Certificate

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 25-27 units of which 20-21 units are in required courses. All courses must be completed with a grade of " $C$ " or better.

| Required Courses: (20-21 units) | Units |  |
| :--- | :--- | ---: |
| MUS 101 F | Music Fundamentals or | 3 |
| MUS 106 F | Introduction to Music Theory or | 3 |
| MUS 108 F | Introduction to Music Technology | 2 |
| THEA 100 F | Introduction to the Theatre | 3 |
| THEA 130 F | Acting Workshop | 3 |
| THEA 133 F | Theatre Practicum | 2 |
| THEA 141 F | Introduction to Technical Theatre | 3 |
| THEA 160 F | Introduction to Sound Technology | 2 |
| THEA 161 F | Sound Reinforcement Techniques | 2 |
| THEA 162 F | Sound Design for the Theatre | 3 |
|  |  |  |
| Restricted Electives: (5-6 units) | 3 |  |
| CRTV 122 F | Audio Production Techniques | 3 |
| MUS 124 F | Recording Studio I | 3 |
| MUS 224 F | Recording Studio II | 2 |
| THEA 136 F | Touring Theater Productions | 3 |
| THEA 137 F | Summer Theatre Workshop |  |

## Stage Management Certificate

PROGRAM CODE: 2C18749
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 27.5-30 units of which 21.5-24 units are in required courses. All courses must be completed with a grade of "C" or better.

## Required Courses: (21.5-24 units)

ART 110 F Introduction to Art
3
3
3
3
2
3
$0.5-3$
2
2

| Restricted Electives: (6 units) | Units |  |
| :--- | :--- | ---: |
| BUS 262 F | Principles of Management | 3 |
| CIS 111 F | Introduction to Information Systems | 3 |
| MUS 101 F | Music Fundamentals | 3 |
| MUS 116 F | Music Appreciation | 3 |
| MUS 118 F | Introduction to Opera | 3 |
| THEA 104 F | Introduction to Theatre Appreciation | 3 |
| THEA 136 F | Touring Theater Productions | 2 |
| THEA 137 F | Summer Theatre Workshop | 3 |
| THEA 235 F | Experimental Theatre | 2 |

## Technical Theatre Certificate

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 27.5-32 units of which 22.526 units are in required courses. All courses must be completed with a grade of "C" or better.

## Required Courses: (22.5-26)

## Units

THEA 100 F Introduction to the Theatre 3
THEA 133 F Theatre Practicum 2
THEA 141 F Introduction to Technical Theatre 3
THEA 142 F Theatre Crafts Lab 1-2
THEA 143 F Stagecraft 3
THEA 149 F Stage Crew Activity 0.5-3
THEA 144 F Lighting 3
THEA 160 F Introduction to Sound Technology 2
THEA 161 F Sound Reinforcement Techniques 2
THEA 162 F Sound Design for the Theatre
Restricted Electives: (5-6 units) Units
ART 110 F Introduction to Art
DRAF 171 F Fundmentals of Drafting 2
THEA 151 F Properties: Design Construction 3
WELD 121AF Introduction to Welding 2
WOOD 110 F Fundamentals of Woodwork 4

## Theatrical Costumer Certificate <br> PROGRAM CODE: 2C10612

The Theatrical Costumer Certificate requires the completion of 34 units of which 28 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below. This certificate leads to employment with regional theatre and performing groups as a technician.
Required Courses: (28 units) ..... Units
FASH 101 F Clothing I ..... 2
FASH 108AF Flat Pattern Methods and Design I ..... 2
FASH 188 F Apparel Production ..... 2
FASH 190 F Pattern Grading ..... 1
FASH 206 F Textiles ..... 3
FASH 209AF Draping ..... 2
FASH 242 F History of Costume ..... 3
THEA 100 F Introduction to the Theatre ..... 3
THEA 145 F Theatrical Costuming ..... 3
THEA 149 F Stage Crew Activity ..... 1
THEA 255 F Theatrical Costume Construction ..... 2
ART 139 F Fashion Sketching ..... 2
Restricted Electives: (6 units) ..... Units
FASH 085 F Bridal and Special Occasion Wear ..... 2
FASH 107 F Apparel Analysis ..... 3
FASH 108BF Flat Pattern Methods and Design II ..... 2
FASH 186 F Workroom Sketching ..... 2
FASH 205AF Tailoring ..... 2
FASH 244 F Ethnic Costume ..... 2
THEA 145 F Theatrical Costuming ..... 3
THEA 147AF Stage Makeup ..... 3
THEA 075 F Theatrical City Tours: New York ..... 2
THEA 076 F Theatrical City Tours: London ..... 2

## Advanced Theatrical Costumer Certificate PROGRAM CODE: 2C08421

In addition to the basic 34 unit requirements of the Theatrical Costumer Certificate, the student must complete 19 more units for an Advanced Theatrical Costumer Certificate, 13 of which are in required courses and an additional 6 units restricted electives.

Required Courses: (13 units)<br>Units<br>FASH 107 F Apparel Analysis 3<br>FASH 108BF Flat Pattern Methods and Design II 2<br>THEA 147AF Stage Makeup 3<br>FASH 085 F Bridal and Special Occasion Wear<br>FASH 244 F Ethnic Costume<br>FASH 297 F Fashion Design Portfolio<br>Restricted Electives: (6 units)<br>Units<br>FASH 186 F Workroom Sketching<br>FASH 201 F Clothing II<br>FASH 205AF Tailoring<br>THEA 255 F Theatrical Costume Construction<br>3

## WELDING

## Welding Technology Certificate PROGRAM CODE: 2 C08417

The Welding Technology Certificate Program requires the completion of not less than 24 units of which 19 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.

## Required Courses (19 units)

Units
WELD 091AF Industrial Welding Fundamentals 5
WELD 121AF Introduction to Welding 2
WELD 121BF Fundamentals Inert Gas Welding 2
WELD 091BF Semi-Automatic Welding Applications 5
WELD 091CF Manual Arc Welding Fundamentals 5
WELD 091DF Structural Welding Certification

## Restricted Electives (5 units)

Units
DRAF 070 F Blueprint Reading for the Metal Trades 2
DRAF 171 F Fundamentals of Drafting
2
MACH 116 F Machine Tools
METL 192 F Fundamentals of Metallurgy
TECH 081 F Technical Mathematics I
2

TECH 108 F Manufacturing Processes 3
TECH 127 F Industrial Safety 1

## WOOD TECHNOLOGY

## Cabinetmaking and Millwork Technology

## Certificate

PROGRAM CODE: 2 C08413
The Cabinetmaking and Millwork Technology Certificate requires the completion of 35 units of which 26 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.
Required Courses: (26 units) ..... Units
CSTR 102 F Residential Finish Carpentry ..... 4
WOOD 012 F Cabinetmaking/Millwork ..... 4
WOOD 014 F Cabinetmaking/Millwork (House Project) ..... 4
WOOD 016 F Machine Woodworking/Furniture ..... 4
WOOD 018 F Advanced Machine Woodworking/Furniture ..... 4
WOOD 025 F Cabinet Vision/Planit Solutions ..... 2
WOOD 110 F Fundamentals of Woodwork ..... 4
Restricted Electives: (9 units) ..... Units
BUS 180 F Small Business Management ..... 3
BUS 241AF Business Law ..... 3
CSTR 110 F Residential Estimating ..... 3
IDES 110 F Beginning Drafting/Interior Design ..... 3
IDES 180 F History of Interior Architecture I ..... 3
IDES 190 F History of Interior Architecture II ..... 3
PE 235 F First Aid, CPR, and Safety Education ..... 2
PHOT 101 F Introduction to Photography ..... 3
TECH 127 F Industrial Safety ..... 1
WOOD 013 F Introduction to 32mm Cabinetmaking ..... 4
WOOD 032 F Advanced Skills Lab ..... 0.5-4
Wood Technology: Woodcarving Specialist Skills Certificate
The Wood Technology: Woodcarving Specialist Skills Cer- tificate requires a total of 8 units. All 8 units must be taken from the list of required courses below, and a minimum grade of "C" is required each course taken. This certificate is designed to provide the skills and practical experience for the student who wishes to specialize in woodcarving.
Required Courses: (8 units) UnitsWOOD 041 F Introduction to Woodcarving2
2
2WOOD 042 F Intermediate WoodcarvingWOOD 043 F Advanced WoodcarvingWOOD 044 F In-the-Round Woodcarving


## Course Descriptions

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. Nondegree courses do apply toward: residency, athletic eligibility, work study and financial aid, veterans benefits, associated student body office, and full-time status.

## 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:

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.

198 A-Z Special Topics Courses formerly known as 198 Special Topics will now be designated Special Topics 198 A-Z. These courses are designed to allow faculty to teach transfer level courses in their particular areas of interest and expertise. These courses can also address special interests and needs of students. The letter following the 198 does not represent repeatability but rather identifies each unique course with a specific title.

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.

001-099 Courses numbered less than 100 are not designed for transfer. Courses numbered 001-099 are precollegiate, 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.

## Course Prefixes

| ACCT | Accounting |
| :--- | :--- |
| ACG | Art Computer Graphics |
| 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 |
| 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 |
| ITAL | Italian |
| JAPN | Japanese |
| JOUR | Journalism |
| LIB | Library |
|  |  |


| MACH | Machine Technology |
| :--- | :--- |
| MATH | Mathematics |
| METL | Metallurgy |
| MICR | Microbiology |
| MKT | Marketing Management |
| MUS | Music |
| NUTR | Nutrition |
| OT | Office Technology |
| PE | Physical Education |
| PHIL | Philosophy and Religious Studies |
| PHOT | Photography |
| PHSC | Physical Sciences |
| PHYS | Physics |
| PLEG | Paralegal Studies |
| PORT | Portuguese |
| POSC | Political Science |
| PRNT | Printing Technology |
| PSY | Psychology |
| RE | Real Estate |
| READ | Reading |
| REC | Recreation |
| RUSS | Russian |
| SOC | Sociology |
| SOSC | Social Sciences |
| SPAN | Spanish |
| SPCH | Speech |
| STSV | Student Support Services |
| TECH | Technology-Related Courses |
| THEA | Theatre Arts |
| VIET | Vietnamese |
| 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 48 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 Activity Courses

A student may enroll more than once in an activity, performance, and/or studio art course that is designated as repeatable in the schedule or catalog. Courses that have a designated skills level (beginning, intermediate, advanced) may be taken for a combined total of four times. Example: A student who has taken beginning volleyball three times and intermediate volleyball once has completed the maximum number of repetitions allowed for the course, despite the different skills level.

## 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 $\quad=$ These courses meet the Fullerton College General Education Requirement for the Associate degree.

CSU GE $\quad=$ These courses meet the lower division General Education requirements to the California State University (CSU) System.

IGETC $\quad=$ 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, beginning Fall semester 1996 meet the Multicultural Education Requirement for the Associate degree.

## Accounting (ACCT)

Business/CIS Division
Office: Bldg 300
714.992.7032

Dean: Ann Hovey
Website: http://bizdiv.fullcoll.edu

Associate in Science Degree<br>Accounting Certificate

## Accounting Courses

## ACCT 001 F Accounting for Small Business (3)

Three hours lecture per week. 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 (2)

Prerequisite: ACCT 100AF or ACCT 101AF with a grade of "C" or better.
Three hours of lecture per week. 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 (.5-3)

Variable hours of lecture and/or lab. 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. May be taken for credit four times. (Degree Credit)

## ACCT 100AF Financial Accounting Principles (3)

Four hours lecture per week. This course is the first part of a two-part 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 Principles (3)

Prerequisite: ACCT 100AF with a grade of "C" or better
Four hours lecture per week. 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 101AF with a grade of "C" or better. (CSU) (UC Credit Limitation) (Degree Credit)

## ACCT 101AF Financial Accounting (4)

Five hours lecture per week. A course in beginning accounting meeting all transfer requirements to most four-year colleges and universities and providing a foundation for advanced work in vocational accounting or in other branches of business administration. This course covers accounting concepts and techniques fundamental to the administration of a business enterprise by analyzing and recording financial transactions, measuring and communicating economic information and the preparing, analyzing and interpreting of financial statements. Computer applications are integrated into the homework. This course is required of all accounting and business administration majors. (CSU) (UC) (Degree Credit)

## ACCT 101BF Managerial Accounting (4)

Prerequisite: $A C C T$ 101AF or $A C C T$ 100BF with a grade of " $C$ " or better
Five hours lecture per week. This course provides a foundation for advanced courses in managerial accounting. The nature of the management process and the essential role of managerial accounting in this process are emphasized. Instructional topics include the application of managerial accounting to a manufacturing environment, job and process accounting systems, cost allocation, common cost classifications and estimation, cost-volume-profit analysis, absorption and variable costing, differential analysis for decision making, capital investment analysis, inventory management and analysis, budgeting, standard costing, responsibility accounting in a decentralized operation, and transfer pricing. Computer applications are integrated into the homework. This course is required of all accounting and business administration majors. (CSU) (UC) (Degree Credit)

## ACCT 104 F Computerized Accounting (2)

Prerequisite: ACCT 100AF with a grade of " $C$ " or better Corequisite: ACCT 101AF
One and one-half hour lecture and one and one-half hour lab per week. 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)

One and one-half hour lecture and one and-one half hour lab per week. 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)

Three hours lecture per week. This course offers a simple and nontechnical 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 201 AF Intermediate Accounting (4)

Prerequisite: ACCT 101BF with a grade of "C" or better
Five hours lecture per week. A course in second-year accounting dealing with adjustments, working papers, cash and receivables, inventories, plant and equipment, intangibles, deferred charges, liabilities, income tax allocation and accounting for premiums. Required of all vocational accounting majors. (CSU) (Degree Credit)

## ACCT 201BF Intermediate Accounting (4)

Prerequisite: ACCT 101BF with a grade of "C" or better Five hours lecture per week. This course is a continuation of ACCT 201AF, involving a study of 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. (CSU) (Degree Credit)

## ACCT 202 F Introduction to Cost Accounting (4)

Prerequisite: ACCT 101BF with a grade of "C" or better
Five hours lecture per week. 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 four-year colleges. Required of all vocational accounting majors. (CSU) (Degree Credit)

## ACCT 203 F Auditing (3)

Prerequisite: ACCT 101BF with a grade of "C" or better
Three hours lecture per week. 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)
Prerequisite: ACCT 101AF with a grade of "C" or better
Three hours lecture per week. 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)

# Administration of Justice (AJ) 

Technology \& Engineering Division<br>Office: Bldg 3000, Room 3023<br>714.992.7115<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu<br>Associate in Arts Degree<br>Associate in Science Degree<br>Administration of Justice Certificate<br>Crime Scene Investigation Certificate<br>P.O.S.T. Law Enforcement Skills Dev Certificate<br>\section*{Administration of Justice Courses}

AJ 059AF Basic Police Academy, Extended Format I (26)
Prerequisite: AJ 094 F with a grade of " $C$ " or better or pre-service status with a law enforcement agency. No felony convictions. Valid California Driver's license.

## Advisory: AJ 080 F

Twenty-four hours of lecture and six hours of lab per week. 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 (26)

 Prerequisite: AJ 059AF with a grade of "C" or better.Twenty-fours hours of lecture and six hours of lab per week. 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)

## AJ 067 F Current Issues in Administration of Justice (.5-3)

 Pass/No Pass onlyVariable hours of lecture and/or lab. This course offers timely and current topics in the field of Justice Administration to enhance job skills, expand student knowledge, and increase employment opportunities. Unit credit may range from .5 to 3 units in any given semester. Consult the class schedule to verify specific topic area and credit offered in a particular semester. Course may be taken four times for credit.

## AJ 068 F Parolee Contacts (1.5)

## Pass/No Pass only

## Prerequisite: Peace Officer Status

Twenty-four hours lecture per semester. 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 H\&S 11550 Drug Influence (.5)

## Pass/No Pass only

Eight hours lecture per semester. 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)

## Pass/No Pass only

Twenty-four hours lecture per semester. 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)

Pass/No Pass only
Eight hours lecture per semester. 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 noncombative methods of carrying out law enforcement duties in a racially and culturally diverse environment. (Degree Credit)

## AJ 072 F Investigating Domestic Terrorism (1)

## Pass/No Pass only

Sixteen hours lecture per semester. 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 073 F Interview and Interrogation Update (1.5)

Pass/No Pass only
Twenty-four hours lecture per semester. This course is designed to improve a police investigator's ability to legally gather testimonial evidence from victims, witnesses and suspects. It covers basic communication theory, interview/interrogation preparation, behavioral analysis and investigative tactics. The curriculum emphasizes a legal centered approach to the taking of statements from suspects and witnesses by analyzing current state and federal law. It is intended for the full-time investigator. (Degree Credit)

## AJ 074 F Conflict Resolution for Police Officers (.5)

## Pass/No Pass only

Eight hours lecture per semester. The class will prepare law enforcement officers, and those interested in a career in law enforcement, to recognize the types of conflict encountered in law enforcement, communication styles that enhance and hinder conflict resolution, various methods of conflict resolution, and the resources available to law enforcement officers to assist in resolving conflict. (Degree Credit)

## AJ 075 F Cultural Diversity (1)

Pass/No Pass only
Sixteen hours lecture per semester. 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 076 F Community-Oriented Policing and Problem Solving (.5)

## Pass/No Pass only

Eight hours lecture per semester. This course examines the communityoriented policing and problem solving (COPPS) philosophy and its impact on current law enforcement practices. The course explores the concept of police officers and private citizens working together in creative ways to help solve contemporary community problems related to crime, fear of crime and neighborhood decay. Emphasis is placed on how the implementation of the COPPS philosophy influences police planning and operations. (Degree Credit)

## AJ 077 F Organized Crime (1)

## Pass/No Pass only

Sixteen hours lecture per semester. 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. The class will review cooperative efforts between the United States and foreign governments to impact those organizations, the pitfalls encountered, and the success and failures that result. It will also examine the secret world of the "Men of Honor." (Degree Credit)

## AJ 078 F Multi-Agency Task Forces (.5)

Pass/No Pass only
Eight hours lecture per semester. This course will analyze the need, benefits, and procedures in the establishment of federal, state, and local task forces. Emphasis will be placed on working together in a multiagency environment and achieving desired outcomes. (Degree Credit)

## AJ 079 F Law Enforcement Career Preparation (.5)

Pass/No Pass only
Eight hours lecture per semester. This class will assist the student in identifying and utilizing effective performance strategies toward entrylevel 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 Enforcement (2)

 Pass/No Pass onlyTwo hours lecture and two hours lab per week. 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. Course may be taken four times for credit. Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers. (Degree Credit)

## AJ 081 F Use of Force (.5)

Pass/No Pass only
Eight hours lecture per semester. This class will make each student aware of use of force situations in field police activities and demonstrate the necessity for detailed follow-up investigations. In addition the class will cover the involved officer's responsibility when using force and the supervisor's follow-up responsibilities. (Degree Credit)

## AJ 082 F Tactical Awareness (.5)

Pass/No Pass only
Eight hours lecture per semester. The class will aid the student in developing the positive mental awareness together with the physical consideration to handle tactical police situations. The realization is that in most situations officers respond and function as individuals, however, the importance of team work, control and supervision is reinforced. (Degree Credit)

## AJ 083 F Narcotics Training for Field Officers (.5)

Pass/No Pass only
Eight hours lecture per semester. This class will allow the student to be able to identify PCP and cocaine, recognize the objective symptoms of a suspect under the influence, understand the law and what is required in reporting to gain a filing and conviction of the suspect. (Degree Credit)

## AJ 084 F Domestic Violence (.5)

Pass/No Pass only
Eight hours lecture per semester. This class 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)

Pass/No Pass only
Two hours lecture per week. 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 086 F Values, Principles, and Ethics (.5)

## Pass/No Pass only

Eight hours lecture per semester. This class will discuss the principles of honesty and morality within an organization and for the individual. Discussion on the acceptable rules of conduct as they relate to a police department are stressed. Practical guidelines will be given to the student concerning their professional on-duty conduct and their personal off-duty conduct. (Degree Credit)

## AJ 087 F Supervisory Response to Officer Involved Shooting (1)

Pass/No Pass only
Prerequisite: Peace Officer status or approval of Department Coordinator with completion of AJ 110AF, AJ 110BF, AJ 137 F, AJ 151 F, AJ 220 F, AJ 223 F, and AJ 252 F required
Sixteen hour lecture per semester. The class will prepare the supervisor to handle the necessary steps to ensure a proper at scene investigation, officer interview, completed report and review process. (Degree Credit)

## AJ 088 F Gang Awareness Update (1.5)

Pass/No Pass only
Prerequisite: Peace Officer status or approval of Department Coordinator with completion of AJ 110AF, AJ 220 F, AJ 223 F, AJ 226 F, AJ 252 F, and AJ 278 F required
Twenty-four hours lecture per semester. The class will prepare the officer or student to understand the history, dynamics and the problems associated with today's gangs. This class will help the student identify certain gang characteristics and activities. (Degree Credit)

## AJ 089 F Child Abuse/Child Pornography (.5)

Pass/No Pass only
Eight hour lecture per semester. The class will prepare the student to identify, arrest and investigate child abuse and child pornography crimes. (Degree Credit)

## AJ 090 F Weaponless Defense/Baton Training (.5)

Pass/No Pass only
Eight hour lecture per semester. The class will give the officer/student an understanding of the proper methods on use of weaponless defense and baton training. Also, the civil liabilities attached to the use of force will be discussed. (Degree Credit)

## AJ 091 Law Enforcement Instructor Development (2)

Pass/No Pass only
Two hours lecture per week. 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)

## Pass/No Pass only

Twelve hours lecture and twelve hours lab per semester. 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 (.5)

## Pass/No Pass only

Eight hours lecture per semester. 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 (1)

## Pass/No Pass only

Sixteen hours lecture and eight hours lab. 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)

## Pass/No Pass only

Eight hours lecture per semester. 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)

## Pass/No Pass only

Eight hours lecture and sixteen hours lab per week. A twenty-four 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. This course is certified by Peace Officer Standards and Training (POST) for continuing education for peace officers.

## AJ 097 F Law Enforcement Supervisory Update (1.5)

Letter Grade or Pass/No Pass option
Twenty-four hours lecture to provide the student with basic skills utilized in supervising law enforcement personnel. (Degree Credit)

## AJ 100 F Introduction to Law Enforcement (3)

Three hours lecture per week. 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 (3)

Three hours lecture per week. 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 (3)

Three hours lecture per week. A legal orientation of crime and the nature of criminal responsibility. Legal philosophy, processes and institutions are examined. Leading principles of law are explored with special emphasis given to laws of arrests, including an examination of the United States Constitution and the Bill of Rights. (CSU) (UC Credit Limitation) (Degree Credit)

## AJ 110BF Advanced Criminal Law (3)

Corequisite: Completion of AJ 100AF or taken concurrently
Three hours lecture per week. 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 111 F Traffic Enforcement (3)

Three hours lecture per week. A study of the California Vehicle Code with emphasis on those sections which are most violated. Special study is made of traffic enforcement procedures, policies and issues which affect highway safety in today's society. (CSU) (Degree Credit)

## AJ 128 F Police-Community Relations (3)

Three hours lecture per week. Relationship between law enforcement agencies, ethnic groups, news media, and other segments of the public. Areas of conflict and cooperation are explored. Public-relations programs and their effect upon law enforcement are studied. (CSU) (UC Credit Limitation) (Degree Credit)

## AJ 135 F Weaponless Defense (1)

One hour lecture and one hour lab per week. 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. Meets one semester of physical education requirement. Course may be taken four times for credit. (CSU) (Degree Credit)

## AJ 137 F Firearms (1)

Prerequisite: AJ 110AF with a grade of "C" or better
One hour lecture and one hour lab per week. The moral aspects, legal provisions, safety precautions and restrictions covering the use of firing of the sidearm and shotgun. Course may be taken four times for credit. (CSU) (Degree Credit)

## AJ 140 F Juvenile Procedures (3)

Three hours lecture per week. 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 Report Writing (3)

Three hours lecture and three hours lab per week. 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)

Three hours lecture per week. 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 (3)

Three hours lecture per week. 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 officers' skills in courtroom evidentiary presentation. (CSU) (Degree Credit)

## AJ 223 F Criminal Investigation (3)

Three hours lecture per week. Involves preliminary investigation, followup 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 (3)

Three hours lecture per week. 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)

Three hours lecture per week. This class 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)

Three hours lecture per week. 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)

Three hours lecture per week. 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 277 F PC832 Arrest, Control and Firearms Training (4.5) Pass/No Pass only
Sixty-four lecture and twelve lab hours are required in professional orientation, law, evidence, investigation, community relations, communications, arrest and control and firearms safety and range training. This training is certified by the Commission on Peace Officer Standards and Training and will lead to employment in both the public and private sector. Such jobs as safety and security officers are available to those that satisfactorily complete the training. (CSU) (Degree Credit)

## AJ 278 F Multicultural Issues Within Administration of Justice (3)

Three hours lecture per week plus a series of practical exercises. 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 Credit Limitation) (Degree Credit) MULT CULT REQ

## AJ 279 F Contemporary Issues in Law Enforcement (3)

Three hours lecture per week. 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 (3)

Three hours lecture per week. 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<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

## Anatomy and Physiology Courses

## ANAT 231 F General Human Anatomy (4)

Three hours lecture and three hours lab per week. 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 physical education and allied health majors, but is also available for interested students of various liberal arts majors who desire or require an understanding of basic anatomy. (CSU) (UC) (Degree Credit) CSU GE, IGETC


#### Abstract

ANAT 240 F Human Physiology (5) Prerequisite: ANAT 231 F and CHEM 101 F or equivalent, both with a grade of "C" or better Three hours of lecture and six hours of lab per week. 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) CSU GE, IGETC


## Anthropology (ANTH)

Social Sciences Division<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/<br>Anthropology Associate in Arts Degree<br>\section*{Anthropology Courses}

## ANTH 101 F Physical Anthropology (3)

Three hours lecture per week. 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 four-year 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)

Three hours lecture per week. 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 colleges and other four-year institutions, this course may be used for social sciences or biological science credit. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ANTH 101LF Physical Anthropology Lab (1) <br> Corequisite: ANTH 101 F

Three hours lab per week. 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 (3)

Three hours lecture per week. 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)

Three hours lecture per week. 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. 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)

Three hours lecture per week. Anthropological archaeology is 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) CSU GE, IGETC

## ANTH 105 F Language and Culture (3)

Three hours lecture per week. Students explore 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 The Anthropology of Magic, Witchcraft and

 Religion (3)Three hours lecture per week. 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)

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 analyzation 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)

One hour lecture or scheduled conference per week. 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. Course may be taken four times for credit. (CSU) (UC credit limitation depending upon course content; UC review required.) (Degree Credit)

## ANTH 209 F Cultures of Latin America (3)

Three hours lecture per week. 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 would be done by integrating an anthropological holistic approach using all five fields of anthropology. The study of ancient Latin American cultures will be based on fields of anthropology. The study will be based on archeological 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 Mesoamerican 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 will be on Mesoamerican civilization as well as the Inca and other indigenous groups from South America. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ANTH 211 F Celtic Cultures (3)

Three hours lecture per week. 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)

Thirty-six hours plus fifty-four hours lab per semester. First five weeks of lecture in the classroom; remainder of lecture and lab hours in the field at a selected archaeological site. This class 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). Course may be taken twice for credit. (CSU) (Degree Credit)

# Arabic (ARAB) 

Humanities Division<br>Office: Bldg 500, Room 522-O<br>714.992.7036<br>Dean: Dan Willoughby<br>Website: www.humanities.fullcoll.edu

## Arabic Courses

## ARAB 101 F Elementary Arabic I (5)

Advisory: Reading clearance is recommended
Five hours lecture plus one arranged hour lab per week. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE

ARAB 102 F Elementary Arabic II (5)
Prerequisite: ARAB $101 F$ with a grade of "C" or better OR one year of high school Arabic with a grade of " $C$ " or better.
Five hours lecture per week plus one arranged lab hour per week. 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. A continued emphasis on the acquisition of vocabulary, structures and grammatical patterns necessary for comprehension of classical Arabic in conjunction with Modern Standard Arabic as spoken in the Eastern Arabic countries and in Egypt. This course includes an expanded discussion of Arabic world, culture and daily life. This course is conducted primarily in Arabic. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## Architecture (ARCH)

Technology \& Engineering Division
Office: Bldg 1000, Room 1005
714.992.7578

Dean: Scott McKenzie
Website: techneng.fullcoll.edu
Architecture Associate in Science Degree
Architectural CAD Technology Certificate

## Architecture Courses

## ARCH 111 F Introduction to Architecture (3)

Three hours lecture per week. 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)

Two hours lecture and four hours lab per week. An introductory course 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 twodimensional 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 124 F Architectural CAD I (3)

Two hours lecture and three hours lab per week. 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)

Prerequisite: ARCH 113 F with a grade of "C" or better
Three hours lecture and three hours lab per week. This course introduces the student to the formal and spatial language of architecture. Assignments will be explored in the form of studio 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 (4)

Prerequisite: ARCH 125 F with a grade of " $C$ " or better
Three hours lecture and three hours lab per week. The 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 (4)

Prerequisite: ARCH 215 F with a grade of "C" or better
Three hours lecture and three hours lab per week. This course is a continuation of Design Studio II 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 (1-4)

One hour lecture per week and five hours of supervised employment per week in an architectural office. 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 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 (3)

Prerequisite: ARCH 124 F with a grade of "C" or better
Two hours lecture and three hours lab per week. 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 2-D and 3-D design problems. (Degree Credit)

## ARCH 934 F Architectural CAD III (3)

Prerequisite: ARCH 924 F with a grade of " $C$ " or better
Two hours lecture and three hours lab per week. 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. (Degree Credit)

## ARCH 944 F Architectural CAD IV (3)

Prerequisite: $A R C H 934 F$ with a grade of " $C$ " or better
Two hours lecture and three hours lab per week. This course covers applied usage of computer-assisted drafting (CAD) to special problems in architecture. The student will learn various techniques in the generation of architectural projections such as isometric, oblique, one and two point perspective. Three-dimensional solids modeling will also be explored. (Degree Credit)

# Art Computer Graphics (ACG) 

Fine Arts Division<br>Office: Bldg 1100, Room 1115<br>714.992.7034<br>Website: acg2.fullcoll.edu

## 3D Animation Skills Certificate - Level II <br> Computer Animation/Multimedia Certificate <br> Computer Graphics Certificate <br> Desktop Publishing Certificate

## Art Computer Graphics Courses

## ACG 100 F Intro: Computer Graphics/MAC (3)

Two hours lecture and three hours lab per week. This class teaches the fundamentals of computer graphics to input, create, manipulate and output a variety of images. Students learn 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)

## ACG 102 F Intro: Web Graphics/MAC (3)

Two hours lecture and three hours lab per week. This 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 web site and a personal Web site. This class is intended as a gateway to a web certificate. Students can pursue additional in-depth study on the topics(s) that most attracted them during the semester. (CSU) (Degree Credit)

## ACG 104 F Intro: 3-D Graphics/Mac (3)

Two hours lecture and three hours lab per week. The course emphasis is on the introduction of three dimensional computer modeling and animation with a program that uses standard industry tools and techniques. The course evolves from typical three-dimensional concepts, varied modeling techniques, texture mapping, lighting, basic motion control, parenting, to the use of FK and IK structures, and other modeling and animation skills. Additional open lab work may be needed to complete assignments. (CSU) (Degree Credit)

ACG 105 F 2-D Computer Graphics and Paint for DOS (3)
Two hours lecture and three hours lab per week. This course focuses on computer generated 2-D drafting and design techniques, employed as a tool by graphic designers, through use of micro-computer based design and paint programs. Open lab work may be required to complete assignments. (CSU) (Degree Credit)

## ACG 106 F Intro: Dimensional Design/MAC (3)

Two hours lecture and three hours lab per week. An introduction to 3D modeling and drafting where the final result is scaled drawings. A focus on design presentation techniques includes colored output in static, animated, and virtual reality forms, making this an ideal course for scene designers, architects and other dimensional designers whose final presentation must be of the highest quality. Open lab work may be required to complete assignments. (CSU) (Degree Credit)

## ACG 108 F Survey of Graphics Software (3)

Two hours lecture and three hours lab per week. This is a survey of the many uses of computer multimedia. Lectures and demonstrations show how to use a number of computer programs to create Internet-ready works. In the course of the semester, the students build a personal web page enriched with such audiovisual elements as animation, sound, video, 3-D and different types of still images. This class is intended as a gateway into the varied offerings of the Art Computer Graphics program where students can pursue more in-depth study on the topic(s) that most attracted them during this initial exploration. (CSU) (Degree Credit)

## ACG 112 F Electronic Illustration (3)

Two hours lecture and three hours lab per week. The study of digital tools to make visual art intended for publication. Demonstrates the resolution of artistic and conceptual problems faced by professional illustrators, using vector graphics programs as visual medium. Vector graphics is the technology of choice for adaptable artwork suitable for traditional print formats as well as new electronic media such as Web pages on the Internet. Vector images are often characterized by a stylized, hard-edge appearance. These programs are less appropriate for photographic or painterly material. The course covers leading vector graphics 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)

## ACG 120 F 3-D Modeling (3)

Two hours lecture and three hours lab per week. This course is a study of digital tools to represent objects in 3D space. Learn the basics of 3D computer graphics. This is the foundation for special effects in movies and computer games. The course covers leading 3D graphics 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)

## ACG 132 F Electronic Paint for Macintosh (3)

Two hours lecture and three hours lab per week. This course teaches students how to make pictures using raster graphics programs. Raster graphics is the technology of choice for continuous-tone artwork, suitable for traditional print formats as well as new 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. The course covers leading raster graphics 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)

ACG 140 F Desktop Publishing I for Macintosh (3)
Two hours of lecture and three hours of lab per week. This course focuses on the use of computers as a design aid to general "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)

## ACG 146 F Desktop Publishing II (3)

Two hours of lecture and three hours of lab per week. This course focuses on the use of advanced options of desktop publishing programs 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)

ACG 150 F 3-D Computer Animation for Macintosh (3-3)
Two hours of lecture and three hours of lab per week. This course is a study of digital tools to represent moving objects in 3-D space. Learn the basics of 3-D computer animation. This is the most widely used technique for special effects in movies and computer games. The course covers leading 3-D graphics software, with plenty of hands-on use of the computer to build a demo reel and acquire the experience levels demanded by employers and clients. Course may be taken twice for credit. (CSU) (Degree Credit)

ACG 162 F Multi Media for Macintosh (3)
Two hours of lecture and three hours of lab per week. This course is a study of digital tools to represent moving objects in 2D space. Learn how to create 2D computer animation. Final output may integrate additional media (sound, text, graphics and video), and find distribution as CD-ROMs, web pages, complete websites, videos, cartoons, animated shorts, games, education, instructional training and creative selfexpression. (CSU) (Degree Credit)

ACG 164 F Multimedia Authoring (3)
Two hours lecture and three hours lab per week. 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)

## ACG 170 F Digital Photography (3)

Two hours lecture and three hours lab per week. This course will focus on digital photography and the advanced 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, color separations and service bureaus. (CSU) (Degree Credit)

## ACG 180 F Digital Video (3)

Two hours of lecture and three hours of lab per week. The course includes the study and hands-on use of computers, assorted software, CD-ROMs, video cameras, and other tools and techniques used for digitizing, editing, and composition of video and audio sources. The course provides an in-depth introduction to the world of desktop video used in the fields of multimedia, video editing (both online and offline) and the creation of engrossing websites. (CSU) (Degree Credit)

## Art (ART)

Fine Arts Division<br>Office: Bldg 1000, Room 1021<br>714.992.7034<br>Dean: Bob Jensen<br>Website: finearts.fullcoll.edu

## Art - Associate in Arts Degree Illustration Certificate

## Art Courses

## ART 090 F Advanced Topics in Art (1-3)

Advisory: 3-6 units of commercially related art or computer graphics courses, or professional equivalent.
One to three hours lecture and one to nine hours lab per week. 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 studio 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. Course may be taken four times for credit. (Degree Credit)

## ART 110 F Introduction to Art (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. This course provides an introduction to art from prehistoric times to the present. While examining the role that the visual arts have played in the development of the world's cultures, the student is exposed to a wide variety of artistic media. Classroom presentations are supplemented by gallery and museum visits. In a full semester course an additional 15 minutes per week will be spent in the art gallery, pro-rated per semester for short-term courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 112 F Art History - Ancient and Medieval (3)

Three hours lecture per week. This course presents 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. In a full semester course an additional 15 minutes per week will be spent in the art gallery, prorated per semester for short-term courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 113 F Art History - Renaissance to Modern (3)

Three hours lecture per week. This course is a survey of architecture, sculpture and painting from the Renaissance through the Twentieth 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 (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ART 114 F Art History - Impressionism to the Present (3) Three hours lecture per week. 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 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)

Three hours lecture per week. 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 - Mexico (3)

Three hours lecture per week. 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 History of American Art (3)

Three hours lecture per week. 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 Post-Modern developments. Emphasis will be placed on discovering what is American in American art. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ART 118 F Color Theory (3)

Two hours lecture and 4 hours lab per week. 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 studio 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) CSU GE

## ART 119 F Design and Color for Non-Art Majors (2)

One hour lecture and three hours lab per week. This course covers the elements of art, principles of design and color theory with emphasis on creative experiences in two-dimensional design. Media include pencil, ink, paint, and collage. Recommended for non-art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 120 F Basic Design (3)

Two hours lecture and four hours lab per week. This course includes an introduction to the art elements of line, shape, value, texture, pattern, color, and the principles of composition. These design elements and principles will be used to create two-dimensional visual images. Various media are used. (CSU) (UC credit) (Degree Credit) AA GE, CSU GE

## ART 121 F Three-Dimensional Design (3)

Advisory: ART 120 F
Two hours lecture and four hours lab per week. An introduction to three-n 360 degree design, in materials selected to best depict this contrast. This course involves the use of hand tools and some power equipment. Course may be taken one time for credit. (CSU) (UC) (Degree Credit) CSU GE

## ART 122 F Gallery Design and Exhibition (3)

Two hours lecture and four hours lab per week. This course provides an introduction to all elements of designing and installing art exhibitions in the Fullerton College Art Gallery. This course includes the basic skills of installing art, lighting, labeling, advertising and includes field trips to museums and galleries. In a full semester course, an additional 15 minutes per week will be spent in the art gallery, prorated per semester for short-term courses. Recommended for Art Majors. Course may be taken three times for credit. (CSU) (Degree Credit)

## ART 123 F Business Practices in Art (3)

Three hours lecture per week with field trips and guest speakers. 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 127 F Painting Concepts - Floral (2)

One hour lecture and three hours studio per week. This course covers a conceptual approach to organic form including floral compositions and various visual plant elements. The students will deal with classic symbolism and contrasts, employing fundamentals of color harmony and structure. Work is from nature, still life and photography in various painting media. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 128 F Oil Portrait Painting (2)

Prerequisite: ART 129 F with a grade of " $C$ " or better
One hour lecture and three hours studio per week. The development of 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 oil portrait paintings. Costume, setting, color harmony and historic and contemporary portraiture concepts to be studied. Production hours outside of class time are required. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## ART 129 F Portrait Drawing and Painting (2)

Advisory: ART 182 F and 186AF
One hour lecture and three hours studio per week. An exploration course in portrait drawing and painting based upon the study of the human head. Facial structure and the representation of many types of people in various art media are explored. Growth of individual expression and development of personal style is encouraged. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## ART 131 F Printmaking (3)

Advisory: ART 120 F or ART 182 F, both with a grade of "C" or better Two hours lecture and four hours lab per week. This course provides experience with materials and processes involved in non-toxic 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. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## ART 139 F Fashion Sketching (2)

One hour lecture and three hours studio per week. 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. Course may be taken three times for credit. (CSU) (Degree Credit)

## ART 140 F Introduction to Advertising and <br> Graphic Design (3)

Two hours lecture and three hours lab per week. This is a basic course in advertising and graphic design with an emphasis on communication through use of concepts, type and images. Includes development of layout and computer skills, style and an introduction to logotype design. (CSU) (Degree Credit)

## ART 144 F Fundamentals of Cartooning (2)

Advisory: ART 182 F or ART 179 F
One hour lecture and three hours lab per week. An introduction to basic cartooning techniques. 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. May be taken two times for credit. (CSU) (Degree Credit)

## ART 145 F Publication Design (3)

Advisory: ART 140 F and ACG 100 F
Two hours lecture and three hours lab per week. This is an advanced course with emphasis on the design of publications such as brochures and magazines 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. (CSU) (Degree Credit)

## ART 146 F Advertising Design (3)

Advisory: ART 140 F and ACG 100 F
Two hours lecture and three hours lab per week. This is an advanced 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. (CSU) (Degree Credit)

## ART 147 F Production Techniques for Graphic Designers (3)

 Advisory: ART 140 FTwo hours lecture and three hours of lab per week. 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. (CSU) (Degree Credit)

## ART 148 F Packaging Design (3)

Advisory: ART 140 F and ACG 100 F
Two hours lecture and three hours lab per week. 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. (CSU) (Degree Credit)

## ART 150AF Ceramics, Beginning Handbuilding (3)

Two hours lecture and four hours lab plus one hour arranged per week. This class is a survey course dealing with three-dimensional design in clay as an entry in appreciation of the creative process and its physical execution using ceramic handbuilding 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, glazing techniques, kiln loading, and basic technology of clay, glazes and firing are included. Approximately 100 hours class time. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 150BF Ceramics, Beginning Throwing (3)

Prerequisite: ART 150AF with a grade of " $C$ " or better
Two hours lecture and four hours lab plus one hour arranged per week. Developing technique in the use of the potter's wheel is emphasized. An introduction to design, decoration, and glazing of wheel-thrown utilitarian forms. Kiln loading and basic technology of clay, glazes, and firing are included. (CSU) (UC) (Degree Credit) CSU GE

## ART 150CF Ceramics, Advanced (3)

Prerequisite: ART 150AF or ART 150BF with a grade of "C" or better Two hours lecture and four hours lab plus one hour arranged per week. This course is advanced study of handbuilding and/or 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. Approximately 100 hours class time. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## ART 151 F Technical Ceramics (2)

One hour lecture and three hours studio and one hour open studio per week. An investigation of clay, glazes, and oxides commonly used in the craft of ceramics. Materials covered will include sources of base, neutral and acid oxides, and an investigation of colorants for clays and glazes of various types. Basic glaze calculation will be stressed. FIRST SEMESTER: emphasizes clay materials and formulation. SECOND SEMESTER: emphasizes glaze material and formulation. Course may be taken three times for credit. (CSU) (UC) (Degree Credit)

## ART 152 F Ceramics Lab (1)

Pass/No Pass only
Corequisite: ART 150AF, ART 150BF, ART 150CF, ART 151AF, ART 261 F, or completion of ART 150AF, ART 150BF, ART 150CF
Forty-eight hours lab per unit in the Ceramics Lab doing studio ceramics activities including handbuilding techniques, slab, coil, pinch construction, glaze preparation and application, throwing on the potters wheel, sculptural and combined building techniques and other studio activities. For each 48 hours that the student spends working in the Ceramics Lab beyond the Ceramics Lab requirements of the concurrent course, one unit of credit will be granted. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## ART 156 F Animal Drawing (3)

Prerequisite: ART 182 F with a grade of " $C$ " or better
Two hours lecture and four hours lab per week. This course covers the principles and pratices of classical animal drawing skills, including comparative anatomy, form construction, gesture and motion. Course may be taken four times for credit. (CSU) (Degree Credit)

ART 157 F Sketching for Animators and Illustrators (3)
Advisory: ART 182 F and ART 186AF
Two hours lecture and four hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 159 F Master Potters (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours studio per week. This course offers the experienced student an expanded knowledge of the Ceramic Arts through an in-depth study of the work of a featured Master Potter. Each semester the work of a different Master Potter will provide inspiration for the students to analyze and emulate in their own work. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 160 F Fundamentals of Sculpture (3)

Two hours lecture and four hours studio and one hour arranged per week. 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. May be taken twice for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 161 F Advanced Sculpture (3)

Advisory: ART 160 F
Two hours lecture and analysis and four hours studio and one hour arranged per week. 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 on individual style and the ability to plan and direct a semester of sculpture. May be taken twice for credit. (CSU) (UC) (Degree Credit)

## ART 162 F Sculpture - Cast Metal (3)

Advisory: ART 160 F or ART 185 F
Two hours lecture and analysis and four hours studio per week plus one hour open studio per week. An introduction to the 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. In consecutive semesters, the complexity of the projects require alternative skills, techniques and materials. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 163 F Sculpture Open Studio (1)

Pass/No Pass only
Corequisite: Enrollment or completion of any one of these courses: ART 160AF, ART 160BF, ART 161AF, ART 161BF, ART 162AF, ART 162BF, ART 162CF, ART 162DF, ART 173AF, ART 173BF, ART 173CF, ART 173DF, ART 174AF, ART 174BF, ART 174CF, ART 174DF, ART 176AF, ART 176BF, ART 176CF, ART 176DF or ART 121 F
Fifty-four hours of studio time in the sculpture and three-dimensional design facility. The lab course gives access to the facility and equipment. For each 54 hours that students spend in the studio beyond their class hours, one unit of credit will be earned. A sign-in sheet must verify all hours. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 164 F Sculpture: Metal Fabrication (3)

Two hours lecture and four hours studio and one hour arranged per week. An introduction to the support processes of sculpture, to expand the development of techniques, materials and processes. This course will focus on basic techniques and processes used for fabricating metal sculpture. The primary methods that will be explored for the purpose of sculpture are oxyacetylene and MIG welding. This course is not a substitute for any welding course. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 166 F Contemporary Art Studio (3)

Advisory: Any art studio or art history course


## with a grade of "C" or better

Two hours lecture and four hours lab per week. This course is an introduction to the issues and practices of contemporary art including current approaches to painting and sculpture, installation art, performance art, video, sound and digital technologies. Students use traditional and digital processes to create contemporary works of art. This course is designed for art majors. (CSU) (UC) (Degree Credit)

## ART 173 F Jewelry Casting (3)

Two hours lecture and four hours studio per week. 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 class is originality in jewelry design relating to contemporary and historical aesthetics. The additional semesters involve advanced problems in jewelry casting. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 174AF Jewelry: Fabrication (3)

Two hours lecture and four hours studio per week. This class 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 metals. The focus of this course is on original design in fine art jewelry in previous metals. (CSU) (Degree Credit) CSU GE

## ART 174BF Jewelry: Fabrication (3)

Prerequisite: ART 174AF with a grade of " $C$ " or better
Two hours lecture and four hours studio per week. This class is a continuation of ART 174AF. Further development of jewelry fabrication techniques are explored which include hollow form, articulation, surface treatment, repousse, patina and inlay. This class discusses advanced 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 metals. The focus of this course is on original design of fine art jewelry in previous metals. (CSU) (Degree Credit)

## ART 176 F Stained Glass (Architectural Fabrication for

 Residential and Commercial) (3)Two hours lecture and four hours studio per week. SECTION 1: Students learn 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. Proper use of tools, materials and vocabulary will be emphasized. Project emphasis will be in the design and fabrication of residential and commercial pieces. SECTION 2: Students continue developing skills learned in prior semester in addition to learning alternative processes such as overlay, sandblasting, and fusing. Project emphasis will be in the design and fabrication of residential and commercial pieces. SECTION 3: Students are involved in three-dimensional and large scale projects; also independent, instructor-approved fabrications of real world commission-type projects utilizing all processes and vocabulary learned in first and second semesters. Project emphasis will be in the design and fabrication of residential and commercial pieces. Course may be taken a total of four times with Section 1 and two taken once each and Section 3 taken two times. Production hours outside of class time are required. (CSU) (Degree Credit)

## ART 179 F Drawing for Non-Art Majors (2)

One hour lecture and three hours studio per week. 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 Perspective Drawing and Rendering (3)

Prerequisite: ART 182 F with a grade of "C" or better
Two hours lecture and four hours studio per week. 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. Perspective topics include its use as a descriptive and compositional device, and a discussion of the limits of linear perspective and of alternative ways to represent space. Rendering topics include explanations of the surface qualities of various materials, and the accurate depiction of the materials' interaction with light. This course also meets student needs in advertising, illustration, and industrial design. Course may be taken three times for credit. (CSU) (Degree Credit)

## ART 181 F Drawing from the Masters (2)

One hour lecture and three hours lab per week. The lecture portion of this class covers working methods and media of master draftsmen from previous centuries. The lab consists of analyzing and copying master drawings in a variety of media. Emphasis is placed on the traditional approach to drawing as practiced by masters such as Durer, Michelangelo, Da Vinci, Raphael, Rubens and others. Course may be taken three times for credit. (CSU) (UC) (Degree Credit)

## ART 182 F Basic Drawing (3)

Two hours lecture and four hours studio per week. An introduction to the fundamentals of representational drawing. Media used may include pencil, ink, charcoal, conte, pastels, watercolor, and mixed media. Designed for art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 183 F Representational Drawing (2)

Prerequisite: ART 182 F with a grade of " $C$ " or better
One hour lecture and three hours studio per week. 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. Recommended for art majors. (CSU) (UC) (Degree Credit)

## ART 184 F Expressive Drawing (2)

Advisory: ART 182 F or ART 186AF
One hour lecture and three hours studio per week. 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) CSU GE

## ART 185 F Life Sculpture (3)

Two hours lecture and four hours studio per week. This class is an introduction to figurative sculpture with emphasis on accurate anatomical training in sculpture. Designed to develop an understanding of the human form, this class focuses on structure, gesture and detail. The skeleton, plaster casts, and the life model are used in this process. May be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 186AF Beginning Life Drawing (3)

Two hours lecture and four hours studio per week. 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 the accurate anatomy study through continued use of the skeleton and life models. Required for all art majors. (CSU) (UC) (Degree Credit) AA GE

## ART 186BF Intermediate Life Drawing (3)

Prerequisite: ART 186AF with a grade of " $C$ " or better
Two hours lecture and four hours studio per week. An intermediate course in drawing the human figure. The course emphasis is on the refinement of basic skills, exercises and anatomy. Complex techniques reinforce the understanding gesture, structure and anatomy, through the continued use of the skeleton and life models. Recommended for all art majors. (CSU) (UC) (Degree Credit)

## ART 186CF Advanced Life Drawing (3)

Prerequisite: ART 186BF with a grade of " $C$ " or better
Two hours lecture and four hours studio per week. 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 all art majors. (CSU) (UC) (Degree Credit)

## ART 187 F Watercolor for Non-Art Majors (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours studio per week. This is an introductory course in watercolor painting with emphasis on a wide variety of traditional and contemporary techniques and skills. Creative selfexpression is encouraged in still life, landscape, figurative, and abstract approaches. Media includes both transparent and opaque watercolor and related materials. May be taken twice for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 188 F Watercolor Painting (3)

Two hours of lecture and four hours of studio per week. 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. This class may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 189AF Beginning Painting (3)

Two hours lecture and four hours studio per week. This course approaches painting as a creative process while developing the elementary skills of painting as a means of self-expression. In this course emphasis is upon the fundamentals of composition, color theory, and craftsmanship as applied to painting. Required by art majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ART 189BF Intermediate Painting (3)

Prerequisite: ART 189AF with a grade of "C" or better
Two hours lecture and four hours studio per week. This course is a continued study of painting techniques and media. As a creative process, emphasis is placed upon individual experimentation with multi-media application as well as continued skills development and conceptual application to issues in painting. Recommended for art majors. (CSU) (UC) (Degree Credit)

## ART 189CF Advanced Painting (3)

Prerequisite: ART 189BF with a grade of "C" or better
Two hours lecture and four hours studio per week. This course constitutes a study of advanced painting problems stressing experimentation, traditional and contemporary painting composition and methods. Course may be taken twice for credit. The second semester of the class, emphasis is upon a body of work demonstrating individual conceptualism and material exploration. (CSU) (UC) (Degree Credit)

## ART 190 F Art Seminar (.5-2)

Prerequisite: ART 189AF with a grade of "C" or better
Lecture/Lab hours may vary with credit given. Various classes may be offered from semester to semester, which are designed to meet the interests and needs of students and faculty. Students may enroll up to a maximum of four semesters. (Not currently being offered - if interested, contact Division Office.) (UC credit limitation depending on course content) (CSU) (Degree Credit)

## ART 194 F Studio Painting Lab (1-2)

Pass/No Pass only — Open Entry/Open Exit
Prerequisite: ART 189AF with a grade of " $C$ " or better
Fifty-four hours of lab in the painting studio. The lab course provides the opportunity for the painting student to work on new or ongoing projects; to learn to operate studio equipment; to have available the supervision of a painting instructor for advice and guidance; to work with a peer group; and to expand and complete work for a portfolio. May be taken four times for credit. (CSU) (Degree Credit)

## ART 195 F Anatomical Figure Drawing (2)

One hour lecture and three hours studio per week. 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. A full size human skeleton, plaster casts and slides of master's anatomy studies are used as reference. The lab consists of copying and analyzing a variety of anatomical studies to compile a note book representing all the components of the figure. This class serves the needs of the student in drawing, painting and sculpting the human figure. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## ART 196HF Honors Creative Arts - Art (3)

Three hours lecture plus one hour per week arranged in the attendance at museums, concerts, and theatrical performances. This course explores the nature of creativity through exposure to the performing arts, literature, and the fine arts. Honors 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)

Two hours lecture and four hours of studio lab per week. This course is for the beginning through advanced student intended to teach the fundamentals of faux (fake) finishes and mural painting. 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. May be taken three times for credit. (CSU) (Degree Credit)

## ART 210 F Life Painting (3)

Prerequisite: ART 189 F and ART 186 F with a grade of " $C$ " or better, or a portfolio review by the instructor
Two hours lecture and four hours lab per week. 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 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. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## ART 212 F Asian Art History (3)

Three hours lecture and slide presentation per week. This course surveys the arts of 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. In a full semester course an additional 15 minutes per week will be spent in the art gallery, pro-rated per semester for short-term courses. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ART 213 F Pre-Columbian Art (3)

Three hours lecture per week. This course surveys 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 244 F Illustration (3)

## Advisory: ART 182 F and ART 120 F

Two hours lecture and four hours lab per week. The lecture portion of the 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## ART 261 F Sculpture - Ceramics (2)

Prerequisite: ART 160 F or ART 150AF with a grade of "C" or better One hour lecture and three hours studio per week. 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 290 F Portfolio Preparation and Artwork Presentation (3)

Prerequisite: ART 120 F or ART 182 F, both with a grade of "C" or better
Three hours lecture per week. This course will help Studio Arts and Design majors in the creation of a portfolio that will assist in the transfer to a BA or BFA University Art program. In addition, major emphasis is placed on the development of a professional portfolio and the quality of the artwork in it. Course may be taken twice for credit. (CSU) (Degree Credit)

## ART 298 F Arts Internship (1-3)

Advisory: Completion of 6-9 units of art courses which may include art history, design, art studio, business practices in art, portfolio preparation or computer graphics.
One unit of credit will be awarded for each 54 hours of work experience accomplished per semester. 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 their own internship opportunity. Course may be taken two times for credit. (CSU) (Degree Credit)

## ART 299 F Art Independent Study (1-2)

One unit of credit will be awarded for each 54 hours of lab time. For advanced students who wish to pursue a particular area of art through individual study. Instructor approval needed. Course may be taken four times for credit. NOTE: Students must sign up with an instructor in the Art Dept before registering for this class. Completed forms must be in the Art Dept office by the second week of class. (CSU) (UC Credit Limitation depending on course content) (Degree Credit)

# Automotive Technology (AUTO) 

Technology \& Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7119<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu

Associate in Science Degree
Automatic Transmission Specialist Skills Certificate
Automotive Chassis Skills Specialist Certificate
Automotive Maintenance Specialist Skills Certificate
Automotive Management Certificate
Automotive Service Advisor Skills Certificate
Automotive Technology Certificate
Automotive: Emission Control Specialist Skills Certificate
Automotive: Engine Performance Specialist Skills Certificate
Automotive: Fabrication Specialist Skills Certificate
Automotive: Light Repair Specialist Skills Certificate
Automotive: Manual Drive Specialist Skills Certificate

## Automotive Courses

## AUTO 131 F Automotive Fundamentals (4)

Four hours lecture and two hours demonstration and lab per week. Emphasis is placed on the basic operating principles, nomenclature, car care, inspection, preventive maintenance and minor repair procedures. (CSU) (Degree Credit) (For Industrial Arts Vocational Majors)

## AUTO 050 F Automotive Specialty Practice (2)

Corequisite: Concurrent enrollment in any automotive technology course
One hour lecture and four hours lab per week. Emphasis is placed 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. Course may be taken four times for credit. (Degree Credit)

## AUTO 051 F Internship in Automotive (1-4)

Corequisite: Any vocational automotive class
One hour lecture per week and five hours of supervised employment per week in an automotive dealership or independent service facility. 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. Course may be taken four times for credit. (Degree Credit)

## AUTO 055 F Automotive Business Management (5)

Advisory: AUTO 131 F
Four hours lecture and three hours lab per week. The course covers the automotive service management operations of an automotive business/ dealership as related to service advisor/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. (Degree Credit)

## AUTO 060 F Automotive Powertrains (5)

Advisory: AUTO 131 F
Four hours demonstrated lecture and four hours lab per week. 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 electrical/electronic systems, and rear axles. The student will perform hands-on lab assignments. (Degree Credit)

## AUTO 065 F Automotive Electrical and Electronic Systems (5) <br> Advisory: AUTO 131 F

Four hours lecture and four hours lab per week. 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 (7)

## Advisory: AUTO 131 F

Six hours demonstrated lecture and three hours lab per week. 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)

Advisory: AUTO 131 F
Six hours demonstrated lecture and three hours lab per week. Instruction is given on 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)

Advisory: AUTO 131 F
Six hours demonstrated lecture and three hours lab per week. 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 (8)

## Advisory: AUTO 131 F

Six hours demonstrated lecture and six hours lab per week. 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 and

## Drivability (8)

## Advisory: AUTO 131 F

Six hours demonstrated lecture and six hours lab per week. 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. Course may be taken twice for credit. 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 (8)

Advisory: AUTO 131 F
Six hours demonstrated lecture and six hours lab per week. 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 Transmission (8)

Advisory: AUTO 131 F
Six hours demonstrated lecture and six hours lab per week. 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/Transaxle (A2) examination. (Degree Credit)

## AUTO 086 F Automatic Transmission Fundamentals (3)

Advisory: AUTO 131 F
Two hours lecture and three hours lab per week. 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. The course may be taken twice for credit. First semester students will study hydraulic controlled transmission; students repeating the course will study electronically controlled transmissions. (Degree Credit)

## AUTO 088 F Fuel Systems and Advanced Drivability Diagnosis (4)

## Advisory: AUTO 131 F

Three hours demonstrated lecture and three hours lab per week. Instruction 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)

## AUTO 089 F Automotive Air Conditioning (4)

Advisory: AUTO 131 F
Four hours demonstrated lecture and two hours lab per week. Theory and principles of automotive air conditioning. Study of design features of various type systems. Demonstrated lectures on servicing, maintenance, diagnosis, and repair procedures. Students to perform on lab units or on other vehicles. (Degree Credit)

## AUTO 090 F Emission Control Systems and Advanced Diagnosis (6) <br> Advisory: AUTO 131 F

Six hours lecture and two hours lab per week. Instruction includes 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)

Three hours demonstrated lecture and three hours lab per week. 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 (4)

## Advisory: AUTO 131 F

Three hours lecture and three hours lab per week. Practical applications of performance and durability pertaining to motorized vehicles. Covers areas of engine, drivelines, brakes, and suspension necessary for better performance and increased safety and durability. (Degree Credit)

# Biology (BIOL) 

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/<br>Associate in Arts Degree<br>Biological Technician - Associate in Science Degree<br>\section*{Biology Courses}

## BIOL 060 F Fundamentals of Biology (3)

Four hours lecture/discussion per week for twelve weeks. This course is intended to provide an introduction to the fundamental concepts and terminology necessary for the basic understanding of science and especially biology. This class is designed for students with limited high school background in science that wish to take college level biology classes. Topics covered will include scientific method, taxonomic system, basic chemistry, cells, energetics, heredity, ecology, and evolution.

## BIOL 100 F Principles of Biology (4)

Four hours lecture or equivalent per week. This course is an introductory non-majors 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) (Degree Credit) CSU GE, IGETC

## BIOL 101 F General Biology (5)

Four hours lecture and three hours lab per week. This integrated lecturelab 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)
Four hours lecture and three hours lab per week. This integrated lecturelab 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)

Three hours lecture per week. Integrated lectures, discussions and films are designed to study modern biological chemistry, cellular basis of life, energetics, 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 101 F or 101HF) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 102LF Human Biology Lab (1)

## Corequisite: BIOL 102 F

Three hours lab per week. 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 credit if taken after BIOL 101 F or BIOL 101HF) (Degree Credit) CSU GE, IGETC

## BIOL 104 F Biology of Insects and Spiders (3)

Three hours lecture per week. 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)

Letter Grade or Pass/No Pass option
Three hours lecture per week. This class introduces the history, uses of plants and plant products that have played major roles in the molding of civilization. Plants used by native Americans will be observed and studied. Lectures are integrated with discussion, demonstration and handson 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) CSU GE, IGETC

## BIOL 109 F Genetics and Biotechnology in Society (3)

Three hours lecture per week. This introductory survey course will cover the basic concepts of heredity and current advanced in biotechnology, such as cloning, recombinant DNA technology, DNA fingerprinting 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)

 (formerly Genetics and Biotechnology in Society Lab)Six hours lab per week. 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 (3)
Three hours lecture per week. 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)

Prerequisite: High School Biology with a grade of "B" or better and MATH 040 F with a grade of " $C$ " or better
Advisory: BIOL 101 F with a " $C$ " or better or advanced placement high school biology with a grade of 3 or better on the placement exam
Three hours lecture, three hours lab, and one hour of discussion per week. 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. There are required field trips for this class. This class is designed for Biological Science majors in transfer programs. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 222 F Marine Biology (3)

Prerequisite: A biological science lab course with a grade of "C" or better
Two hours lecture and three hours lab and field work per week. 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)
Three hours lecture and six hours lab per week. 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) (UC) (Degree Credit) CSU GE, IGETC

## BIOL 268 F General Botany (5)

Prerequisite: A biological science lab course with a grade of "C" or better
Three hours lecture and six hours lab/field work per week. 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)

Prerequisite: BIOL 170 F and one semester of college chemistry with a grade of "C" or better
Three hours of lecture/discussion and three hours of lab per week. Integrated lectures and laboratories 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 used in modern biology. Discussion topics which are supported by lab experiences include (a) the molecular basis of life, (b) tissue, (c) enzyme kinetics, (d) gene expression, (e) development, and (f) immunology. Designed for Biological Sciences majors in transfer programs. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## BIOL 274 F General Ecology (4)

Prerequisite: BIOL 170 F with a grade of "C" or better
Three hours classroom lecture, and three hours of lab/field work per week. Two weekend field trips are required. Field trips, including an overnight trip, are required. 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, environmen tal survey techniques, laws of thermodynamics, behavioral and physiological adaptations of organisms, and ecological models. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## BIOL 276 F Genetics and Evolutionary Biology (4)

Prerequisite: BIOL $272 F$ with a grade of " $C$ " or better or equivalent Three hours lecture and three hours lab per week. 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 Study (1)
Prerequisite: A 200-level course in the biological sciences with a grade of "B" or better.
Three hours lab per week. 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. Course may be taken three times for credit. (CSU) (UC review required) (Degree Credit)

## Business (BUS)

## Business \& CIS Division

Office: Bldg 300, Room 310
714.992.7032

Dean: Ann Hovey
Website: http://bizdiv.fullcoll.edu

Business Administration Associate in Arts Degree Business Management Associate in Science Degree Business and Technology Certificate Business Management Certificate E-Business Development Skills Certificate Entrepreneurship Associate in Science Degree Entrepreneurship Certificate<br>International Business Management Associate in Science Degree<br>International Business Skills Certificate<br>International Business Management Certificate<br>Managerial Communications Skills Certificate<br>Marketing Management Associate in Science Degree<br>Project Management Skills Certificate

## Business Courses

## BUS 021 F The Securities Market (1)

One hour lecture per week. 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.

## BUS 022 F Common Stock (1)

Letter Grade/Pass/No Pass option
One hour lecture per week. 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.

## BUS 023 F Fixed Income Securities (1)

Pass/No Pass only
One hour lecture per week. 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)

Pass/No Pass only
Advisory: BUS 021 F
One hour lecture per week. This course provides an introduction to put and call options. Topics to be discussed include the options market, mechanics of investing in options, basic options strategies, and returnrisk characteristics. (Degree Credit)

## BUS 025 F Investment and Retirement Plans (1)

## Pass/No Pass only

One hour lecture per week. 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 IRA's and Keogh Plans. (Degree Credit)

## BUS 055 F Business English (3)

Three hours lecture per week. A basic business English review course intended for the vocational business student. Practice is provided in essentials of grammar, punctuation, English usage, capitalization, number usage, sentence structure, and spelling. Basic principles of letter writing are introduced. (This course does not meet English requirements for transfer to CSU)

## BUS 061 F Business Skills Internship (1-4)

Letter Grade/Pass/No Pass option
Five hours of supervised employment or volunteer work per week in business or industry for each unit, for a maximum of 4 units ( 20 hours). 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. Course may be taken four times for credit. (Degree Credit)

BUS 100 F Introduction to Business (3)
Three hours lecture per week. An introductory business course designed to give an understanding and appreciation of the American business/ economic system. The course surveys the nature of business, ownership, physical factors, personnel relations, marketing, finance, corporate ownership, management control, business regulations, law, taxation, and the international business environment. (CSU) (UC) (Degree Credit)

## BUS 101 F Personal Financial Management (3)

Three hours lecture per week. 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

## BUS 111 F Business Communications (3)

Three hours lecture per week. 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 131 F Principles of International Business (3)

Three hours lecture per week. 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 management/international 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)

Three hours lecture per week. 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)

Prerequisite: MATH 020 F with a grade of " $C$ " or better or math skills clearance
Three hours lecture per week. 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)

Three hours lecture per week. 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)

Three hours lecture per week. 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)
Three hours lecture per week. 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)

One and one-half hour lecture and one and one-half hour lab per week. 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 (2)

One and one-half hour lecture and one and one-half hour lab per week. 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 Personal Investments (3)

Three hours lecture per week. 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)

## BUS 211 F Writing for Business (3)

Prerequisite: ENGL 100 F or ENGL 100HF with a grade of "C" or better; the prefix for this course is BUS but this writing course has sequential skills to those taught in ENGL 100 F or ENGL 100 HF
Three hours lecture per week. This course is an introduction to communication skills and knowledge needed in organizations today. The 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. (CSU) (Degree Credit)

## BUS 211HF Honors Writing for Business (3)

Prerequisite: ENGL 100 F or ENGL 100 HF with a grade of "C" or better
Three hours lecture per week. 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)

Three hours lecture per week. 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)

Three hours lecture per week. This course provides practical knowledge with specific applications in international business management. Topics include import/export management, international financial management, foreign join venture, foreign joint venture, foreign licensing and franchising, and countertrade. 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)

Three hours lecture per week. 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE

## BUS 240HF Honors Legal Environment of Business (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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. 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) (Degree Credit)

## BUS 241AF Business Law (3)

Three hours lecture per week. This course is an introduction to business 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)
Prerequisite: BUS 241AF with a grade of "C" or better
Three hours lecture per week. 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)

Three hours lecture per week. 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 Requirement for graduation. (CSU) (Degree Credit) AAGE, MULT CULT REQ

## BUS 251 F Business Finance (3)

Three hours lecture per week. A course designed for first-line, new, or future managers covering the skills required to effectively supervise and manage employees in organizations. This class emphasizes the supervisor's 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 262 F Principles of Management (3)

Three hours lecture per week. 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)

Three hours lecture per week. 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 are covered. (CSU) (Degree Credit) AA GE

## BUS 267 F Principles of Supervision (3)

Three hours lecture per week. A course designed for first-line, new, or future managers covering the skills required to effectively supervise and manage employees in organizations. This class emphasizes the supervisor's 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)

Two hours lecture per week. 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)

Three hours lecture per week. This applications-oriented 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 290 F Managerial Communications (3)

Three hours lecture per week. 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 (.5-3)

Zero to three hours lecture and/or zero to nine hours lab per week. 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)

## BUS N01 F Business/Computer Skills Lab (0)

NON-CREDIT COURSE: This course provides individualized units of study based on individual student needs using a variety of courses: Office Keyboarding, Data Entry, 10-Key, Typing/Keyboarding for Speed and Accuracy, Windows XP, MS Office (Word, Excel, Access, Outlook, PowerPoint), Intro to Internet and World Wide Web, internet access and free email.

# Chemistry (CHEM) 

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

## Associate in Arts Degree

## Chemistry Courses

## CHEM 100 F Chemistry for Daily Life (4)

Three hours lecture and three hours lab per week. The focus is 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. The course is designed for the non-science major seeking a lab science. (CSU) (UC; no credit if taken after CHEM 111AF.) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 101 F Introduction to Chemistry (5)

Prerequisite: MATH 040 F with a grade of "C" or better
Four hours lecture, one hour problem solving, and three hours lab per week. This is an introductory course emphasizing 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)

Three hours lecture per week. This course is intended for non-science students seeking general education credit in a physical science course without a laboratory. Course emphasizes basic principles of Chemistry and their relationship to the modern world. This course will foster and 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 Elementary Chemistry (5)

Prerequisite: MATH 040 F with a grade of " $C$ " or better
Four hours lecture, three hours lab, and one hour problem solving per week. 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 111AF/111BF General Chemistry. 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 (5)

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 grade of " $C$ " or better
Three hours lecture, three hours lab, two hours of problem solving, and one hour discussion per week. Lecture topics include: course introduction, chemical reactions and stoichiometry; thermochemistry and calorimetry; atomic structure and chemical periodicity; chemical bonding; molecular structure; gases; physical properties of solids, liquids and solutions. Lab work supports topics of Chemistry 111AF. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## CHEM 111BF General Chemistry II (5)

Prerequisite: CHEM 111AF with a grade of "C" or better
Three hours lecture, three hours lab, two hours of problem solving and one hour discussion per week. Chemistry lecture topics are selected from kinetics, equilibria, acid-base, thermodynamics, electrochemistry, transition metals and coordination compounds. Lab work supports topics. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## CHEM 201 F Basic Concepts of Organic and Biochemistry (5)

Prerequisite: CHEM 101 F with a grade of "C" or better
Four hours lecture, one hour of problem solving, two hours lab, and one hour discussion per week. 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 211 AF Organic Chemistry (5)

Prerequisite: CHEM 111BF with a grade of "C" or better
Three hour lecture, four hours lab, and two hours discussion per week. This course is the first part of a full year organic chemistry course designated primarily for chemistry majors but strongly recommended for premedical, pre-dental, pre-veterinary, pre-chiropractic, 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 211 BF Organic Chemistry (5)

Prerequisite: CHEM 211AF with a grade of "C" or better
Three hour lecture, four hours lab, and two hours discussion per week. 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 \& Educational Studies (CDES) 

Social Sciences Division<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/

Child Development and Education Studies Associate in Arts Degree<br>Early Childhood Education Associate in Arts Degree<br>Early Childhood Education Administration Certificate<br>Early Childhood Education Associate Teacher Certificate<br>Early Childhood Education Teacher Certificate<br>Elementary Education Associate in Arts Degree<br>Family Child Care Skills Certificate<br>Infant/Toddler Caregiver Certificate<br>Para-Professional in Education Certificate<br>School Age Skills Certificate<br>Weekend Associate Teacher Certificate

## Child Development and Educational Studies Courses

## CDES 110 F Anti-Bias Perspective Seminar (3)

Three hours lecture per week. This course places an emphasis on addressing issues of bias that individuals, children and families experience on a daily basis. The focus of this seminar is to prepare the student to create 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. Students are required to examine their own world views. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) MULT CULT REQ

## CDES 112 F Teaching Peace (2)

Two hours of lecture per week. This course provides an overview of peace education and a framework for creating environments and curriculum that promote peace. Students gain skills in communication, conflict management, the anti-bias perspective, promoting non-violence and community building. (CSU) (Degree Credit)

## CDES 115 F Introduction to Early Childhood Education Curriculum (3)

Three hours of lecture per week. 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. (CSU) (Degree Credit)

## CDES 120 F Child Development (3)

Three hours lecture per week. Students 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. Inclusive viewpoints of theory and practice are addressed. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## CDES 121 AF Introduction to Early Childhood Teaching (2) <br> Corequisite: CDES 121BF

Two hours lecture per week. This course is designed to provide students interested in educating young children (preschool through the early primary grades) an introduction to teaching and learning. Current standards, policies and mandates within the early childhood profession are explored. (Not limited to Child Development majors). (CSU) (Degree Credit)

## CDES 121BF Introduction to Early Childhood Teaching Lab (1) <br> Corequisite: CDES 121AF

One hour lab per week. The purpose of this course is to provide students interested in early childhood and early primary teaching weekly opportunities to develop observational strategies as well as opportunities to engage in the learning experiences of the classrooms. There will also be opportunities to develop, present, and evaluate learning activities for a wide age range of children in the Fullerton College Child Development Lab School as well as early primary grades. Not limited to Child Development majors. (CSU) (Degree Credit)

## CDES 122 F Principles of Early Childhood Education (3)

Three hours lecture per week. Emphasis is placed on the development of the teacher and the construction of quality programs. Issues included are developmentally appropriate practice, professional ethics, cross-cultural/non-sexist education, curriculum, health and safety, working with parents and the role of the adult as teacher and advocate. Students gain observation skills at the Fullerton College Lab. (CSU) (Degree Credit)

## CDES 123AF Early Childhood Art Education (2)

## Corequisite: CDES 115 F

A total of 32 lecture hours. This course examines the teacher's role in children's artistic growth. Emphasis is on the child as the artist, learner and creator. Students explore, analyze, develop and present artistic experiences that support children's use of art as a tool for communication and understanding. (CSU) (Degree Credit)

## CDES 123BF Early Childhood Language and Literary Education (2) <br> Corequisite: CDES 115 F

A total of 21 lecture hours. This course examines the teacher's role in children's language and literacy development. Emphasis is on the child as listener, reader and writer. Students explore, analyze, develop and present artistic experiences that support children's use of art as a tool for communication and understanding. (CSU) (Degree Credit)

## CDES 123CF Early Childhood Science and <br> Math Education (2)

Corequisite: CDES 115 F
A total of 32 lecture hours. Students gain insight and learn techniques for creating a scientific early childhood classroom environment that promotes a constructivist approach. Emphasis is on the child as researcher, explorer and investigator. Students explore processes that promote in-depth scientific investigation and early math understanding. (CSU) (Degree Credit)

## CDES 123DF Early Childhood Music Education (2)

Corequisite: CDES 115 F
Two hours lecture per week. Students learn to create musical environments as they explore brain research. Both vocal and instrumental music are explored. Using a multicultural lens, the role of the teacher as bridge between music and the child and family is emphasized. (CSU) (Degree Credit)

## CDES 125 F Observation and Assessment <br> for Early Learning and Development (3)

Three hours of lecture per week. 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. (CSU) (Degree Credit)

## CDES 131 F Business Principles of Family Child Care (3)

Three hours lecture per week. This course addresses the theory, practice and principles of operating a quality family child care home. Philosophy, goals, regulations, parent communication, business policies, record-keeping, safety, physical space requirements, and nutrition are the primary focus. Accreditation/certification options and family child care support services are discussed. (CSU) (Degree Credit)

## CDES 132 F Environments and Programs for Family Child

 Care (3)Three hours lecture per week. This course prepares the family child care provider with the knowledge and techniques to create culturally relevant, quality environments and programs. Current brain research, developmental theories and innovative models will be explored. This course is relevant for the new and experienced family child care providers. (CSU) (Degree Credit)

## CDES 135 F Early Childhood CPR and First Aid (1)

Pass/No Pass only
One hour lecture per week. This course is designed to prepare the student to respond to emergency situations utilizing Cardio-Pulmonary Resuscitation (CPR) techniques and/or pediatric first aid. Topics such as injury prevention and disaster preparedness are also covered. This course meets, in-part, the California Department of Social Services health/safety requirements for family child care and center-based providers. Upon successful completion of the course American Red Cross certification is earned. (CSU) (Degree Credit)

## CDES 140 F Infant/Toddler Development and Observation (3)

Three hours lecture per week. 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) AA GE

## CDES 141 F Principles of Infant/Toddler Care and Education (3)

Three hours lecture per week. 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: Program, Curriculum, Guidance (3)

Three hours lecture/demonstration per week. This course is for those working with in 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 173 F The Process of Parenting (3)

Three hours lecture/demonstration per week. This course applies a developmental framework in examining theoretical and practical approaches to the process of parenting. It explores expectations, influences and strategies of parenting with focus on attitudes and behaviors. Topics include: facilitating the parent-child relationship from birth through adolescence; adaptations of parenting techniques for working parents, single parents, and step-parents. These topics are addressed within the context of cultural diversity. (CSU) (Degree Credit) AA GE

CDES 199 F Child Development Independent Study (1)
One hour lecture or scheduled conference per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

## CDES 200 F Adolescent Development (3)

Three hours lecture per week. This course examines 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)
Three hours lecture per week. This course provides a sociological and 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. (CSU) (Degree Credit) AA GE, MULT CULT REQ

## CDES 204 F Introduction to Special Education (3)

Three hours lecture per week. This course provides an overview of special education. 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 (2) Two hours lecture per week. This course is designed for adults interested in planning inclusive environments for children. It is valuable for administrators, interior designers, and teachers. Students develop ways of examining the 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 environmental planning to enrich children's experience is emphasized. Students design both indoor and outdoor environments for a group setting. (CSU) (Degree Credit)

CDES 206 F Perceptual-Motor Development for Children (2) Two hours lecture per week. This course provides early childhood education teachers and parents with a better understanding of the 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 physical development are addressed. (CSU) (Degree Credit)

## CDES 207 F Principles and Techniques for Early Childhood Special Education with Field Experience (3)

Two hours lecture and seven hours lab per week. 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 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. Field experience in an inclusive setting will be incorporated into the course content. (CSU) (Degree Credit)

## CDES 208 F Working with Families of Children with <br> Special Needs (3)

Three hours lecture per week. This course is designed for teachers, administrators, parents, and others interested in supporting children with special needs and their families. The first part of 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 in Diverse Settings (3)

Three hours lecture per week. This course is an overview of the roles and responsibilities of para-professional 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 para-professional. (CSU) (Degree Credit)

## CDES 211 F Classroom Practices for Diverse <br> Learners (3)

Three lecture hours per week. 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, are gifted, etc.). Topics will include literacy, language, and behavior support. Introductory knowledge in the assessment, design and implementation of life-span curriculum and methodology will be covered. (CSU) (Degree Credit)

## CDES 215 F Health, Safety, Food, and Nutrition for Children (3)

Three hours lecture per week. This course focuses on health and safety and the use of food as an instructional medium in early childhood settings. Emphasis is placed on the planning and organization of foodrelated activities for young children, including safety, and sanitation issues; the application of basic nutrition principles to menu planning/ evaluation; the resolution of common food-related problems such as obesity and caregiver manipulation; and techniques and resources for providing culturally-appropriate foods and nutrition education. Health practices such as the prevention of infectious diseases and injury prevention are also covered. This course, in-part, meets the California Department of Social Services health/safety requirements for family child care and center-based providers. (CSU) (Degree Credit)

## CDES 225 F Early Childhood Teaching with Field Experience (3)

Prerequisite: CDES 120 F, CDES 122 F, CDES 123AF/123BF/123CF/ 123DF (two courses), and CDES 201 F, all with a grade of "C" or better Corequisite: CDES 238 F all with a grade of " $C$ " or better
Two hours lecture and seven hours lab per week. Placement may be in the Fullerton College Development Lab or a Mentor Teacher site. Student Teachers observe and document the behavior of a diverse group of children in order to design, implement and evaluate constructivist curriculum. Other elements of teaching such as environmental design, parent-teacher conferences and parent communication are explored. (CSU) (Degree Credit)

CDES 230 F Early Childhood Education Administration (3) Prerequisite: Completion of the Basic Children's Program Certificate at Fullerton College or completion of the California Department of Social Services required core courses as required by Title 22 Child Day Care General Licensing requirements
Forty-eight hours lecture per semester. This course is required for the Early Childhood Education Administration Certificate and meets the State Department of Social Services licensing regulations for administrators. The course emphasizes the following components: facility and financial management, marketing, enrollment, managing health and safety, food service, and legal considerations for child care centers. This is one course in a series of administrative course offerings. (CSU) (Degree Credit)

## CDES 231 F Early Childhood Education

## Administration II (3)

Prerequisite: Completion of the Basic Children's Program Certificate at Fullerton College or completion of the California Department of Social Services required core courses as required by Title 22 Child Day Care General Licensing requirements
Forty-eight hours lecture per semester. The 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 235 F Bilingual/Cross-Cultural Teacher Aide Methods (3) <br> Corequisite: ETHS 101 F or ETHS 118 F

Three hours lecture per week. This course is for students preparing to become bilingual/crosscultural teacher aides. It includes the role of the teacher/aide team with emphasis on effective use of the bilingual aide, practical classroom skills and techniques, and ways of establishing an effective learning environment. It covers current bilingual/crosscultural curriculum methods and evaluation. Information on employment trends, ways to find jobs, and ways to further career will be provided. (CSU) (Degree Credit)

## CDES 238 F Advanced Curriculum Design Seminar (3)

Three hours lecture per week. Students examine the role of the teacher in curriculum design based on inspirations from the Reggio Emilia preschools in Italy. Constructivist, child centered and play-based theoretical curricular approaches are explored as the students apply theory to practice. Observation, reflection, children's theory building, emergent curriculum and documentation are included. Course meets the specialization unit requirements for the Master Teacher level Child Development Permit Matrix. (CSU) (Degree Credit)

## CDES 240 F Leadership in the Early Childhood Profession (3)

Prerequisite: Student must meet requirement for the Associate Teacher on the Child Development Permit Matrix, California Commission on Teacher Credentialing, and the Child Development Division, State Department of Education
Three hours lecture per week. This course explores leadership strategies for positive growth and change in the early childhood profession. Course focuses on the promotion of quality professional teaching environments including the study of the following: mentoring, supervising, communication skill development, effective working relationships and innovations in the field. Class lectures include the exploration of the following leadership development topics: creating a vision, planning for change, implementing change, building a team, ethical responsibilities, exploration of bias, professional development and the need for advocating and leading change. Course meets requirements for adult supervision and application to the Mentor Teacher Project. (CSU) (Degree Credit)

## CDES 242 F Introduction to Liberal Studies (3)

Prerequisite: ENGL 100 F with a grade of " $C$ " or better
Three hours of lecture with discussion per week. 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) (Degree Credit) CSU GE, IGETC

## CDES 245 F Personal Proficiency in Educational Technologies for Secondary Teachers (3)

Three hours of lecture per week. The purpose of this course is to provide students interested in secondary teaching (grades 7-12) personal proficiency in educational technologies that facilitate the teaching process and enhance student learning. Training includes educational technology terminology, development of a teaching portfolio that includes a specific unit plan in the student's designated discipline, multimedia presentation samples, internet search and retrieval literacy, electronic communication applications, evaluation tools, support materials, and awareness of legal and ethical issues. (CSU)

## CDES 248 F Introduction to Secondary Teaching (3)

This course provides students with an overview of secondary teaching as a profession through observations, readings, interactive classroom participation and selected developmental assignments. Students analyze fieldwork experience while examining the history, philosophy and social foundations of education. The California Teaching Performance Expectations and Assessment (TPEs and TPAs) are introduced. The course overviews content standards, the needs of special populations, and accommodations for English Language Learners (ELL) and struggling readers. Curriculum Development and curriculum reform are reviewed. Students complete the initial development of a Teaching Assessment Documentation. Forty hours of observation/fieldwork are required. (CSU)

## CDES 261 AF Introduction to Elementary Classroom Teaching (2) <br> Corequisite: CDES 261BF with a grade of "C" or better

Two hours lecture per week. The purpose of this course is to provide students interested in elementary teaching an introduction to teaching and learning, an overview of the scope and sequence of curriculum planning, the understanding of content standards, California Standards of the Teaching profession, experience in the development, presentation and evaluation of learning activities. (CSU) (Degree Credit)

## CDES 261 BF Introduction to Elementary Classroom Teaching: Observation (1)

Corequisite: CDES 261AF. Three lab hours per week
The purpose of this course is to provide 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/week. (CSU) (Degree Credit)

PE 232 F Games and Rhythms for Elementary Schools (2)
One hour lecture and two hours lab per week. This course provides theory and practical experience in teaching the elementary school child. This course will survey social, psychological, and physical development, and capacities of children ages 5 through 12. Games of low organization, team sports, and rhythmic skills are included. (CSU) (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)

Letter Grade or Pass/No Pass option
Five hours lecture plus one arranged lab hour per week. 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 Chinese-speaking countries. This course is conducted primarily in Chinese. (CSU) (UC) (Degree Credit)

CHIN 102 F Elementary Chinese - Mandarin II (5)
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
Five hours lecture per week plus one arranged lab hour per week. The 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 Chinese-speaking countries. This course is conducted primarily in Chinese. (CSU) (UC) (Degree Credit) IGETC

## CHIN 203 F Intermediate Chinese - Mandarin III (4)

Letter Grade or Pass/No Pass option
Prerequisite: CHIN 102 F with a grade of "C" or better or two years high school Chinese with grade of " $C$ " or better
Four hours lecture per week. This course is a review of grammar with written and oral practice. Conversation is based on cultural and literary materials. (CSU) (UC) (Degree Credit)

## CHIN 204 F Intermediate Chinese - Mandarin IV (4)

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
Four hours lecture per week. This course is a review of grammar with written and oral practice. Conversation is based on cultural and literary materials. The course includes an introduction to Chinese literature. Instruction is in Chinese. (Not currently being offered - if interested, contact Division Office.) (CSU) (UC) (Degree Credit)

# Cinema-Radio-TV (CRTV) 

Technology \& Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7122<br>Dean: Scott McKenzie<br>Website: communications.fullcoll.edu

Communications: General Associate in Arts Degree<br>Radio Broadcasting Associate in Arts Degree<br>Radio Production Associate in Arts Degree<br>Radio and Television/Video Production Certificate<br>Radio Broadcasting Certificate<br>Sports Broadcasting Skills Certificate<br>Television/Film Associate in Arts Degree<br>\section*{Cinema-Radio-Television Courses}

## CRTV 030 F Media Industry Independent Contractor (1)

One hour lecture per week. This course will present the basics of working as an independent freelance professional in the media industry. Subjects to be covered include choosing a business structure, basic business practice, handling 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.

## CRTV 118 F Introduction to Radio, Television and Film (3)

Three hours lecture per week. 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, including: regulation of broadcasting and film, the effects of broadcasting and film, non-commercial broadcasting, ratings and research, production and marketing of films, and electronic mass media. (CSU) (Degree Credit) AA GE

## CRTV 120 F Media Aesthetics (3)

Three hours lecture per week. This course provides a background in understanding aesthetics used in television, motion pictures, and video games 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 The American Cinema (3)

Three hours lecture per week. This course examines the American motion picture industry as a unique economic, industrial, aesthetic, and cultural institution. Development and changes 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) Advisory: CRTV 118 F
Two hours lecture and four hours lab per week. 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)

One hour lecture per week. 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)
Three hours lecture per week. 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)

Three hours lecture per week. 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 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 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)

Three hours lecture/discussion per week. This course covers the concepts and practices in the various types of dramatic writing for television and motion picture production. Students will learn about characterization, conflict, structure, and commercial prospects. Course may be taken twice for credit. (CSU) (Degree Credit)

## CRTV 128 F Writing for Radio-Television-Film (3)

Three hours lecture per week. This course covers the concepts, practices and forms for commercials, interviews, corporate and dramatic presentations for radio, television, film and the Internet. This is a course in all forms of media writing. (CSU) (Degree Credit)

## CRTV 129 F Broadcast News (3)

Two hours lecture and four hours lab per week. This course provides instruction and practice in gathering and writing news for radio and television. The emphasis is on writing copy and familiarization 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## CRTV 130 F Broadcast Audio Production (3)

Prerequisite: CRTV $122 F$ with a grade of " $C$ " or better
Two hours lecture and four hours lab per week. 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 purposes for radio, television, film, internet and media production. (CSU) (Degree Credit)

## CRTV 131 F Contemporary Cinema (3)

Three hours lecture per week. This course focuses on the American motion picture industry beginning with the film school generation 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 production aesthetics and techniques, marketing, distribution, and technology. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## CRTV 133 F Traffic Reporting (3)

Two hours lecture and three hours lab per week. 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 operations, 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 (3)

Two hours lecture, three hours lab per week. 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 137 F Television Announcing (3)

Three hours lecture/discussion per week. This course covers on-camera television announcing for newscasts, commercials, interviewing, and ad-lib productions. Students develop non-dramatic television announcing skills through practice and evaluation. (CSU) (Degree Credit)

## CRTV 145 F Radio/TV Sports Broadcasting (3)

Two hours lecture, four hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## CRTV 150 F Television Studio Production (3)

Advisory: CRTV 118 F
Two hours lecture/discussion and three hours lab per week. This course covers the basic use and operation of television equipment utilizing camera, lenses, switching, sound, lights, graphics, videotape recording, and character generator. Lab work will center on video programs. (CSU) (Degree Credit)

## CRTV 157 F Digital Production/Non-Linear Editing for Video/Film (formerly CRTV 164AF) (3)

Two hours lecture and four hours lab per week. 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 post-production 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 Filmmaking (3)

Prerequisite: CRTV 157 F with a grade of " $C$ " or better
Two hours lecture and three hours lab per week. Introduction to the fundamental techniques and aesthetics of film production. The 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/Non-Linear Editing for Video (formerly CRTV 164BF) (3)

Prerequisite: CRTV $157 F$ with a grade of " $C$ " or better
Two hours lecture and four hours lab per week. 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)

Advisory: CRTV 157 F with a grade of " C " or better, or knowledge of camcorder usage and Apple computers
Three lecture hours per week. 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 (.5-3)

Lecture and lab hours will vary according to the nature of the seminar. Communications Seminars are courses 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. Course may be taken four times for credit or a maximum of four units. (CSU) (Degree Credit)

## CRTV 199 F Cinema-Radio-Television <br> Independent Study (1-3)

Prerequisite: Approval of Communications Department Coordinator One hour lecture or scheduled conference or three hours independent lab research per week per unit of credit. 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 lab research problems with staff supervision may be approved. Course may be taken four times for credit. (CSU) (UC review required.) (Degree Credit)

## CRTV 235 F On-Air Radio Broadcasting (3)

Prerequisite: CRTV 122 F and CRTV 135 F with a grade of " C " or better
One hour lecture/discussion and six hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## CRTV 245AF Digital Editing, Graphics and Effects (3)

Prerequisite: CRTV 157 F with a grade of " $C$ " or better
Two hours lecture and four hours lab per week. This course builds on the knowledge and skills received in CRTV 157 F Digital Production and Non-Linear Editing for Television/Film. 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, Graphics and Effects (3)

Prerequisite: CRTV 245AF with a grade of "C" or better
Two hours lecture and four hours lab per week. 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 Workshop (2-5)

Prerequisite: CRTV 150 F with a grade of "C" or better
One hour lecture and one hour lab plus three hours arranged per week for the first two units. An additional three hours lab per week is required for each additional unit for a maximum of five units each semester and a cumulative total of 20 units. Students participate as crewmembers on Media Services and Communication Department cable and campus productions utilizing four camera remote van, studio 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## CRTV 290 F Internship in Communications (2-4)

One hour lecture per week and 5 hours supervised employment or unpaid internship per week in communications. An additional five hours per week of supervised employment or unpaid internship for each additional unit of credit is required. 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 at newspapers, magazines, public relations firms, radio, television, and cable stations, and television and film industry related companies. Course may be taken four times for credit. (CSU) (Degree Credit)

# Computer Information Systems (CIS) 

Business \& CIS Division<br>Office: Bldg 300, Room 310<br>714.992.7032<br>Dean: Ann Hovey<br>Website: http://bizdiv.fullcoll.edu

Computer Information Systems Associate in Science Degree Computer Information Systems Certificate Computer Software Applications Specialist Certificate Database Applications Skills Certificate E-Commerce Programming Skills Certificate<br>Enterprise Database Skills Certificate<br>Internet Skills Certificate<br>Networking Skills Certificate<br>PC Applications Skills Certificate<br>Programming Skills Certificate<br>Spreadsheet Applications Skills Certificate<br>Web Design Skills Certificate<br>Web Scripting Skills Certificate

## Computer Information Systems Courses

## CIS 050 F Web Page Design I (2)

Advisory: Ability to navigate the internet using web browsers.
One and one-half hour lecture and one and one-half hour lab per week. This course is an introduction to automatic web page creation using state-of-the-art 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 (1-3)

One to three hours lecture and zero to three hours lab per week. 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. May be taken for credit four times.

## CIS 090 F Office Certification Preparation (1-3)

Variable hours of lecture and/or lab. This course is for students who wish to prepare for the Microsoft Office Specialist tests. Unit credit may range from 1-3 units in any given semester. Consult the class schedule to verify topics and credit offered in a particular semester. May be taken for credit four times. (Degree Credit)

## CIS 100 F Introduction to Personal Computers (3)

Three hours lecture and two hours lab per week. This course introduces students as well as the business professional to the use of the personal computer using state-of-the-art software. Topics include an overview of personal computer applications including a brief introduction to computer concepts, use of a word processor, spreadsheet application, presentation manager application, and how to use the Internet. (CSU) (UC) (Degree Credit) AA GE

## CIS 102 F Intro to Open Source Software (3)

Three hours lecture and two hours lab per week. 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 104 F Presentation Graphics (2)

One and one-half hour lecture and one and one-half hour lab per week. 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 105 F Spreadsheet I (2)

One and one-half hour lecture and one and one-half hour lab per week. This provides an introduction to spreadsheets in the solution of business problems. Students will create, format and print worksheets that include formulas, functions, charting, relative and absolute cell references, work with large worksheets. Also covered are creation of static and dynamic Web pages and design and manipulation of databases. State-of the-art software will be used. (CSU) (Degree Credit)

## CIS 106 F Beginning Spreadsheet (MS Excel) (3)

Three hours lecture and two hours lab per week. 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 3-D 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 Intro to Operating Systems (2)

One and one-half hour lecture and one and one-half hour lab per week. This course is designed to introduce the operating system on the personal computer. This 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 accessories and system tools. (CSU) (Degree Credit)

## CIS 109 F Personal Computer Security (2)

One and one-half hour lecture and one-half hour lab per week. This class introduces the student to personal security on individual computers and across 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 over the Internet and how to securely send information. (CSU) (Degree Credit)

## CIS 111 F Introduction to Information Systems (3)

Three hours lecture and two hours lab per week. This 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE

## CIS 111HF Honors Introduction to Information Systems (3)

Three hours lecture and two hours lab per week. This 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. As an honors course, this class 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)

One and one-half hour lecture and one and one-half hour lab per week. 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)

Advisory: CIS 120AF
One and one-half hour lecture and one and one-half hour lab per week. 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 123AF Word Processing I (2)

One and one-half hour lecture and one and one-half hour of lab per week. This course is designed as an introduction to word processing software. The course will cover 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. State-of-the-art software will be used. (CSU) (Degree Credit)

## CIS 123BF Word Processing II (2)

Advisory: CIS 123AF
One and one-half hour lecture and one and one-half hours lab per week. This course introduces advanced topics using word processing software. Covered topics include creating tables and charts, columns, adding graphics and multimedia elements, managing and printing files, merged documents, table of contents, and indexes. State-of-the-art software will be used. (CSU) (Degree Credit)

## CIS 142 F Database I (2)

One and one-half hours lecture and one and one-half hours of lab per week. This course is 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 Communications (2)

Advisory: Students should have some email knowledge
One and one-half hours lecture and one and one-half hours lab per week. 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 149 F Internet Entertainment (3)

Three hours lecture and two hours lab per week. This class teaches the various elements of entertainment on the Internet. These include how media companies are using the Internet for content distribution and marketing, how various types of Internet Entertainment programs work with client operating systems like Windows, and how to configure clients to use various Internet Entertainment packages. (CSU) (Degree Credit)

## CIS 150 F Introduction to Internet (3)

Three hours lecture and two hours of lab per week. 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 (2)

## Advisory: CIS 150 F

One and one-half hour lecture and one and one-half hour lab per week. 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 multimedia; 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)

Three hours lecture and two hours lab per week. This course presents introductory and 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 websites, 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, 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)

Advisory: CIS 150 F or familiarity with using the internet
Three hours lecture and two hours lab per week. 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 (2)

Prerequisite: CIS 150 F or CIS 152 F, both with a grade of "C" or better
One and one-half hour lecture and one and one-half hour lab per week. 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 (2)

Advisory: CIS 152 F with a grade of "C" or better
One and one-half hour lecture and one and one-half hour lab per week. This course introduces students to multimedia Web design. Topics include how to create multimedia content for Web pages, how to choose the right multimedia material, how to edit the material, and how to include the material in Web pages. (CSU) (Degree Credit)

## CIS 156AF WebMaster - Foundations (2)

One and one-half hour lecture and one and one-half hour lab per week. This course covers an introduction to the structure, operation, and technical aspects of the Internet. Students will learn how to use a personal computer to access Internet and the World Wide Web to search for its wealth of online resources. Topics include an overview of personal computer operations; the history and philosophy of the Internet; configuring a personal computer to connect to the Internet; selecting an Internet Service Provider; sending and receiving electronic mail (E-mail); locating network resources using Search Engines; downloading software, online text, graphics, sound and video files using file transfer protocol (FTP) and ethical uses of the Internet. Other topics include developing, creating and posting personal and business Web pages using the hypertext markup language (HTML). The course also covers CIW [Certified Internet WebMaster] material so it will prepare students for the all other CIW exam(s) (CSU) (Degree Credit).

## CIS 156BF WebMaster - Designer (3)

Three hours lecture and two hours lab per week. This course covers designing web sites that have e-commerce capabilities. Topics include using web programs and editors to create, set-up, and edit B2C and B2B web sites. Information on design methodology, e-commerce strategies, and web site structure will be examined. Students must have a working knowledge of basic Internet concepts, HTML/DHTML, and some programming language. The course also covers CIW [Certified Internet Webmaster] material so will prepare students for the 1DO-420, and 1DO-425 test. These exams fulfill the requirements for CIW Designer certification. (CSU) (Degree Credit)

## CIS 156CF WebMaster - Administration (3)

Advisory: CIS 156AF, CIS 150 F or CIS 152 F, and some knowledge of a programming language
Three hours lecture, two hours lab per week. This course covers administration of web resources. Topics include using web programs and editors to set-up, edit, and manage web sites. Information on server administration, Internetworking, and web security will be examined. Students must have a working knowledge of basic Internet concepts, HTML, basic networking and some programming language. The course also covers CIW [Certified Internet Webmaster] material so will prepare students for the 1DO-450, 1DO-460, and 1DO-470. These exams fulfill the requirements for CIW Administrator certification. (CSU) (Degree Credit)

## CIS 157 F Dreamweaver I (3)

Three hours of lecture and two hours of lab per week. This course covers using Dreamweaver to create Web pages. Topics include creating web pages with graphics, links, and multimedia elements. Students will also learn how to import files and graphics into Dreamweaver from other programs. Students should be familiar with the Internet. (CSU) (Degree Credit)

## CIS 159 F Introduction to XML (2)

Advisory: CIS 152 F
One and one-half hour lecture and one and one-half hour lab per week. 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)

Three hours lecture and one hour lab per week. 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 (3)

Advisory: Basic knowledge of computer networking
Three hours lecture and one hour lab per week. This class 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 (3) Advisory: Basic knowledge of computer forensics
Three hours lecture and one hour lab per week. 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 (3)

 Advisory: Basic knowledge of C++Three hours lecture and one hour lab per week. 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 171 F Network Intrusion and Detection (3)

Advisory: Basic knowledge of a network operating system and basic networking concepts
Three hours lecture and one hour lab per week. 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 177 F Dreamweaver II (3)

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.
Three hours lecture and two hours lab per week. 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 (3)

Three hours lecture per week. 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, internetworking, and categorizing network operating systems. (CSU) (Degree Credit)

## CIS 183 F Network Security Fundamentals (3)

Advisory: Complete CIS 107 F and CIS 180 F with a grade of "C" or better
Three hours lecture and one hour lab per week. This course covers terminology, technology, and software used with network security. This course is designed to provide students with an overview of network security. Students will learn about communication security, infrastructure security and cryptography. Business plans for disaster recovery will be covered. This course may be taken four times for credit. (CSU) (Degree Credit)

## CIS 205AF Spreadsheet II (2)

## Advisory: CIS 105 F

One and one-half hour lecture and one and one-half hour lab per week. Building upon knowledge gained in CIS 105 F Spreadsheet I, advanced applications including worksheet design, worksheet text enhancements, graphs and formatting capabilities will be covered. Advanced concepts on the creation and use of databases, integration with other database software, and how spreadsheet software can be used as a repository and report writer for data queried from other databases or from a corporate SQL relational database will be covered. Development of complex formulas using functions, and an in-depth study of macros, including the design of custom menus to automate spreadsheet applications will also be included. This course will cover integration of spreadsheet software with other window-based software. State-of-the-art software will be used. (CSU) (Degree Credit)

## CIS 205BF Macro Programming (2) <br> Advisory: CIS 105 F

One and one-half hour lecture and one and one-half hour lab per week. This course covers using the macro and programming features spreadsheet application programs. Students will learn how macros work, how to define macros by capturing actions, and how to create custom macros. Students will also learn the Visual Basic for Applications programming language including looping, input and output, and decisions. This course may be taken four times for credit. (CSU) (Degree Credit)

## CIS 211 F Basic Programming for Business (3)

Three hours lecture and two hours lab per week. This class teaches fundamental programming concepts using a modern programming language. Students learn the concepts behind program design and operation, how to use decision-making commands, how to perform input and output, how to create and use looping instructions, and how to use other current programming concepts. (CSU) (UC Credit Limitation) (Degree Credit)

## CIS 212 F Robotic Programming (3)

Three hours lecture and two hours lab per week. 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)

Three hours lecture and two hours lab per week. This course is an introduction to Visual Basic Programming. The course provides a study of the use and implementation of Visual Basic Programming including 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 218 F Visual Basic Programming III (3)

Advisory: CIS 105 F and CIS 142 F
Three hours lecture and two hours lab per week. This class introduces Visual Applications programming. Topics include the structure of a VBA program, programming logic, and using VBA to create Microsoft Office applications. Additional topics include using BVA in Excel, Word, Access, and Outlook. This course may be taken four times for credit. (CSU) (Degree Credit)

CIS 219 F Visual Basic Programming II (3)
Prerequisite: CIS 217 F with a grade of "C" or better
Three hours lecture and two hours lab per week. 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)

Advisory: CIS 152 F and CIS 217 F
Three hours lecture and two hours lab per week. 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)

Three hours lecture and one hour lab per week. 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 computers. (CSU) (Degree Credit)

## CIS 222 F CGI/Perl Scripting (3)

## Advisory: Complete CIS 152 F

Three hours lecture and two hours lab per week. 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)

Advisory: CIS 226 F or CIS 211 F
Three hours lecture and two hours lab per week. 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 Credit Limitation - CIS 223 F and CSCI 233 F combined: maximum credit one course) (Degree Credit)

## CIS 225 F Netware System Manager (3)

Three hours lecture and two hours lab per week arranged. This course covers terminology, technology, topologies, and software used in local area networks. The course is designed for computer users and managers of local area networks. System administrators will learn to support users, save user accounts, implement levels of security, apply diagnostics, and back up and maintain LAN software. Course may be taken twice for credit. (CSU) (Degree Credit)

## CIS 226 F Java Programming I (3)

Advisory: CIS 211 F or CIS 217 F or CIS 223 F with a grade of " $C$ " or better
Three hours lecture and two hours lab per week. 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)

## Advisory: Basic knowledge of the C\# programming language

 Three hours lecture and two hours lab per week. 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)

Advisory: CIS 226 F and CIS 107 F with a grade of " $C$ " or better Three hours lecture and two hours lab per week. 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)

Advisory: CIS 159 F
Three hours lecture and two hours lab per week. 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)

Advisory: CIS 152 F and CIS 154 F
Three hours lecture and two hours lab per week. This class 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. This course may be taken four times for credit. (CSU) (Degree Credit)

## CIS 242 F Database II (2)

Advisory: CIS 142 F
One and one-half hour lecture and one and one-half hour lab per week. 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)

## Advisory: CIS 152 F

One and one-half hour lecture and one and one-half hour lab per week. 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 (2)

## Advisory: CIS 154 F

One and one-half hour lecture and one and one-half hour lab per week. This course teaches advanced concepts in JavaScript. Students learn how to use JavaScript for client and server side design and implementation. Students must have a working knowledge of JavaScript (completing CIS 154 F with a grade of "C" or better). (CSU) (Degree Credit)

## CIS 255 F Web Page Multimedia Design II (2)

Advisory: CIS 155 F
Three hours lecture and two hours lab per week. 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, preloaders, 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)

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
Three hours lecture and two hours lab per week. 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 260 F Solaris System Administration (3)

## Advisory: CIS 290 F

Three hours lecture and 2 hours lab per week. This course provides students with the necessary knowledge and skills to perform essential system administration tasks in the Sun Solaris Unix Operating System. Students must have a working knowledge of Unix. Topics include file system management, security, process control, user administration, device management, name services, backup procedures, installation, and application of patches. (CSU) (Degree Credit)

## CIS 270 F SQL Server Administration (3)

Advisory: CIS 180 F and CIS 107 F with a grade of "C" or better Three hours lecture and one hour lab per week. 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 Intro to Oracle: SQL and PL/SQL (3)

## Advisory: CIS 142 F

Three hours lecture and two hours lab per week. 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 PL/SQL 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 (3)

Three hours of lecture and one hour of lab per week. 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 284 F Windows Professional (2)

Advisory: CIS 180 F and CIS 107 F with a grade of " $C$ " or better One and one-half hour lecture and one and one-half hour lab per week. This course introduces students to Microsoft Windows Professional. Students learn an overview of the Windows environment, installing and administering Professional, software management, performance tuning, and connecting to a network. Emphasis is placed on configuring Windows Professional as a network client. (CSU) (Degree Credit)

## CIS 285 F Windows Server (3)

Advisory: CIS 180 F and CIS 107 F both with a grade of " $C$ " or better Three hours lecture and one hour lab per week. 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)

Advisory: CIS 180 F and CIS 107 F with a grade of "C" or better Three hours lecture and one hour lab per week. 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)

Advisory: CIS 180 F and CIS 107 F with a grade of "C" or better Three hours lecture and one hour lab per week. 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)

Advisory: CIS 180 F and CIS 107 F with a grade of "C" or better
Three hours lecture and one hour lab per week. 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 (3)

Advisory: CIS 107 F
Three hours lecture and two hours lab per week. 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 a Microsoft Windows or Windows NT. (CSU) (Degree Credit)

CIS 291 F Enterprise Networking (3)
Advisory: CIS 180 F and either CIS 285 F, CIS 225 F or CIS 260 F Three hours lecture and two hours lab per week. This class teaches concepts and skills in enterprise networking. Topics include cross platform and enterprise level networking hardware and software including DNS, routing, backups, security, and integrating and managing servers running different network operating systems. Students will get hands-on experience configuring different network operating systems to work in an enterprise network. (CSU) (Degree Credit)

## CIS 298 F Advanced Computer Topics (.5-3)

Zero to three hours lecture and/or zero to nine hours lab per week. 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/CIS Division

Office: Bldg 300, Room 310
714.992.7032

Dean: Ann Hovey
Website: http://bizdiv.fullcoll.edu

## Computer Information Systems Gaming Courses

CISG 100 F Introduction to Computer Game Design (3)
Three hours lecture and one hour lab per week. 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 Computer Games (3)

Advisory: Basic knowledge of a procedural or object-oriented programming language
Three hours lecture and one hour lab per week. 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, $3-\mathrm{D}$ engine design, and how game programmers interact with game designers. (CSU) (Degree Credit)

## CISG 160 F C\# for Game Programming (3)

Advisory: Basic knowledge of C\# programming language
Three hours lecture and one hour lab per week. 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)

## CISG 165 F C++ for Game Programming (3)

Advisory: Knowledge of basic C++ programming
Three hours lecture and one hour lab per week. This course teaches students how to use C++ to write computer games. Topics include a review of basic $\mathrm{C}++$, how to use various data structures in $\mathrm{C}++$, 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 text-based games in C++. (CSU) (Degree Credit)

## CISG 170 F Java for Game Programming (3)

Advisory: Basic knowledge of Java programming language
Three hours lecture and one hour lab per week. 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 text-based games in Java. (CSU) (Degree Credit)

## CISG 175 F Game Programming in Flash (3)

## Advisory: Basic knowledge of Flash

Three hours lecture and one hour lab per week. 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)

Advisory: Basic knowledge of C++ and .NET
Three hours lecture and one hour lab per week. 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 (3) Advisory: General knowledge of the C++ or Java programming language
Three hours lecture and one hour lab per week. 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 Multi-User Online Games (3)

Advisory: Basic knowledge of a modern object-oriented programming language and general network concepts
Three hours lecture and one hour lab per week. 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<br>Office: Bldg 600, Room 613-02<br>714.992.7041<br>Dean: Mark Greenhalgh<br>Website: compsci.fullcoll.edu<br>\section*{Computer Science Associate in Science Degree}<br>\section*{Computer Science Courses}

## CSCI 123 F Introduction to Programming Concepts

 in C++ (4)Prerequisite: MATH 141 F or MATH 142 F, or equivalent with a grade of " $C$ " or better
Four hours lecture and one hour lab arranged per week. 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)

Prerequisite: CSCI 123 F or equivalent, with a grade of " $C$ " or better Four hours lecture and one hour lab arranged per week. 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 Mathematics and Science (4)

Prerequisite: CSCI 123 F or one prior programming language with a grade of " $C$ " or better
Four hours lecture and one hour lab arranged per week. 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 (4)

Prerequisite: CSCI 133 F with a grade of " $C$ " or better or CSCI 223 F with a grade of "C" or better
Four hours lecture and one hour lab arranged per week. 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<br>Office: Bldg 1000, Room 1005<br>714.992.7577<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu

# Construction Estimating Skills Certificate Construction Inspection Associate in Science Degree Construction Inspection Certificate Construction Management Associate in Science Degree Construction Technology Associate in Science Degree Construction Technology Certificate 

## Construction Courses

## CSTR 005 F Construction Technology Lab (.5-2)

Open Entry/Open Exit
Twenty-four hours lab for each .5 unit credit. 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. Course may be taken four times for credit for a maximum of 8 units. (Degree Credit)

## CSTR 006 F Introduction to Residential Plumbing and Mechanical Systems (3)

Three hours lecture per week. Fundamentals of residential plumbing, heating, air conditioning, and ventilation. (Degree Credit)

## CSTR 007 F Residential Electrical Systems (2)

One and one-half hours lecture and one and one-half hours lab per week. 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 Contractors' License Law (3)

Three hours lecture per week. 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 Contractors' License in the state of California. (Degree Credit)

## CSTR 015 F Construction Management (3)

Three hours lecture per week. 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 Construction Industry (3)
Three hours lecture per week. 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 Practice II (4)

Prerequisite: CSTR 102 F with a grade of "C" or better
Two hours lecture and six hours lab per week. 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 Construction I (4)
Prerequisite: CSTR 100 F with a grade of "C" or better
Two hours lecture and six hours lab per week. 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 Construction II (4)

Prerequisite: CSTR 102 F with a grade of " $C$ " or better
Two hours lecture and six hours lab per week. 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)

Two hours lecture per week. 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)

Three hours lecture per week. 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)

Three hours lecture per week. 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)

Three hours lecture per week. Topics of instruction 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 Blueprint Reading (3)

Three hours lecture per week. 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)

Three hours lecture per week. Topics of instruction 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 \& Energy Costs (3)

Three hours lecture per week. 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 (3)

Three hours lecture per week. Topics of instruction 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)

Three hours lecture per week. Topics of instruction 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)

Three hours lecture per week. Topics of instruction 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)

Three hours lecture per week. 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 for Hazardous Materials (3)

 Advisory: ET 200 FThree hours lecture per week. The 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. (Degree Credit)

## CSTR 041 F International Residential Code (3)

Three hours lecture per week. Topics of instruction 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 Construction (4)

Three hours lecture and three hours lab per week. 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 (2)

One and one-half hours lecture and two and one-half hours lab per week. 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 (3)

Two hours lecture and three hours computer lab per week. 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)

Two hours lecture and three hours lab per week. 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 Construction (4)

Three hours lecture and three hours lab per week. 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 Construction (4)

Three hours lecture and three hours lab per week. 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)

Two and one-half hour lecture and one and one-half hour lab per week. The 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)

One hour lecture and three hours lab per week. 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)

Three hours lecture per week. 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 (2)

Two hours lecture per week. 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 Practice I (4)

Prerequisite: CSTR 100 F
Two hours lecture and six hours lab per week. 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 1000, Room 1005
714.992.7123

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

Cosmetology Associate in Science Degree Cosmetology Certificate<br>Cosmetology Instructor — Associate in Science Degree Esthetician Certificate

## Cosmetology Courses

## COSM 041 F Esthetician: Level 1 (10)

Prerequisite: 10th grade education or equivalent
Advisory: Must be 17 years of age when applying for State Board Examination
Seven and one half hours lecture and eleven and one half hours lab per week. 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)

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
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 first of two consecutive segments. Pivot Point Member School. (Degree Credit)

## COSM 043 F Advanced Topics in Esthetics (.5-3)

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
Three hours lecture and nine hours lab per week. 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 Microdermabrasion (4)



Prerequisite: COSM 042 F or COSM 055EF with a grade of " $C$ " or better
Advisory: Completed 10th grade or its equivalent
Two hours lecture and six hours lab per week. 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 Exfoliation Microdermabrasion (2)



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
One hour lecture and three hours lab per week. 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)

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
One hour lecture and three hours lab per week. 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)

Prerequisite: 10th grade education or equivalent
Advisory: Must be 17 years of age when applying for State Board Exam
Seven and one-half hours lecture and eleven and one-half hours lab per week. 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 (11)

Prerequisite: COSM 055AF with a grade of "C" or better; or equivalent Advisory: Must be 17 years of age when applying for State Board Examination
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)

Prerequisite: COSM 055BF with a grade of " $C$ " or better
Five and one-half hours lecture and thirteen and one-half hours lab per week. 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 (11)

Prerequisite: COSM 055CF with a grade of "C" or better; or equivalent Advisory: Must be 17 years of age when applying for State Board Examination
The course includes advanced hair design, advanced manicuring, advanced facials and make-up, advanced permanent waving/chemical texturizing, advanced hair sculpting, extensions, advanced color design, and advanced chemical relaxing-sodium hydroxide. Related subjects, as they are applicable to cosmetology, are covered. The program is designed toward preparation for the California Bureau of Barbering and Cosmetology Examination, and a successful career as a cosmetologist. Eleven (11) units are given for 320 hours of class work completed with a "C" or better average. (Degree Credit) Pivot Point Member School.

## COSM 055EF Cosmetology: Level 5 (9)

Prerequisite: COSM 055DF with a grade of "C" or better
Advisory: Must be 17 years of age when applying for State Board Exam
Four hours of lecture and sixteen hours of lab per week. 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 (8)

Prerequisite: Cosmetology or esthetician license in good standing
Advisory: Minimum of five years experience as cosmetologist or esthetician with one year completed with the previous two years
Four hours lecture and twelve hours lab per week. This course is designed to prepare the student for the teacher's exam required by the Board of Barbering and Cosmetology/Esthetician and enable the student to secure employment as an instructor in a school of cosmetology/ esthetician. The lecture section consists of demonstrations in teaching with the student participating in both lectures of related information and practical trade demonstrations. A lab period involves the instructor trainee in the teaching of cosmetology/esthetician students in practical salon work. Eight units for 600 clock hours of technical education. Offered as a self-pacing, open-entry course with flexible hours within a minimum of twelve lab hours per week. Course may be taken two times for credit. Pivot Point Member School. (Degree Credit)

## COSM 061 AF Pivot Point Instruction I (3)

Prerequisite: COSM 060 F and current Cosmetology/Esthetician License
Two hours lecture and three hours lab per week. 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)

Prerequisite: COSM 061AF with a grade of "C" or better and a valid California cosmetology or esthetician license in good standing
Two hours lecture and three hours lab per week. 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. (Degree Credit)

## COSM 061CF Pivot Point Instruction (3)

Prerequisite: COSM 061BF with a grade of "C" or better and a current cosmetology/esthetician license
Two hours lecture and three hours lab per week. 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. (Degree Credit)

## COSM 070 F Continuing Education Instruction Techniques

 in Cosmetology (5)Open Entry/Open Exit
Prerequisite: Verify California esthetician instructor license
Four hours lecture, four and one half hour lab per week. 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. Course may be taken four times for credit. (Degree Credit).

## Counseling and Guidance (COUN)

Counseling and Student Development Division
Office: Bldg 2000, Room 2022
714.992.7084

Dean: Lisa Campbell
Website: counseling.fullcoll.edu

## Counseling and Guidance Courses

## COUN 050 F College Orientation (1)

## Pass/No Pass only

Eighteen hours lecture and activities per term. This course is designed to satisfy the California 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 Credit)

## COUN 060 F Academic Success (1)

Pass/No Pass only
Eighteen hours lecture and activities 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 093 F Managing College Finances (1)

One hour of lecture per week or equivalent. 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 101 F The College Experience (2)

Thirty-six hours lecture and activities 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 (3-4)

Letter Grade or Pass/No Pass option
Thirty-six hours lecture and 50-100 fieldwork hours per term. 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) (3)

Three hours lecture per week. 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. Students who receive credit in this course will not receive credit in STSV 135 F. (CSU) (Degree Credit)

## COUN 136 F Applied Leadership

## (same as STSV 136 F) (3)

One hour lecture and two hours participation in campus organizations required each week. 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)

Pass/No Pass only
Eight hours of lecture and activities per term. Students taking this course will receive an overview of graduation requirements, transfer requirements, campus policies, student services and career planning. 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 (1)

Letter Grade or Pass/No Pass option
Eighteen hours lecture and activities 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. Selfevaluation 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 selfdescription in relation to the choice of occupation and career. (CSU) (Degree Credit)

## COUN 143 F Creative Job Search (1)

Letter Grade or Pass/No Pass option
Eighteen hours lecture and activities 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 (1)

Letter Grade or Pass/No Pass option
Eighteen hours lecture and activities 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)

Letter Grade or Pass/No Pass option
Eighteen hours lecture and activities 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 (3)

Letter Grade or Pass/No Pass option
Fifty-four hours of lecture and activities per term. A course designed for, but not restricted to, undecided students and persons in career transition. 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) CSU GE

## COUN 161 F Assertion Skills/Communication (1)

Letter Grade or Pass/No Pass option
One hour of lecture per week or equivalent. Course will equip students with a basic understanding of assertive communication and present skills, techniques and strategies for implementation of assertive communication behaviors. Course may be taken twice for credit. (CSU) (Degree Credit)

## COUN 163 F Personal Growth and Life Transitions (3)

Three hours lecture per week. 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 and Guidance Independent Study (.5-2)

Letter Grade or Pass/No Pass option
Selected hours depend upon units assigned. 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. Students may enroll up to a maximum of three semesters. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

## Dance (DANC)

## Physical Education Division

Office: Bldg 1200, Room 1206
714.992.7045

Dean: Susan Beers (Interim)
Dance Associate in Arts Degree
Dance Technique Skills Certificate

## Dance Courses

## DANC 100 F Introduction to Dance (3)

One and one-half hours lecture and one and one-half hours lab per week. Introduction to Dance Appreciation explores historical, multicultural and contemporary dance forms. The course will consist of a combination of lecture and activity. The student will experience various dance forms such as ballet, modern, jazz, folk, and ethnic. The emphasis will be on the history and understanding dance as an art form. Recommended for non-majors. (CSU) (UC) (Degree Credit) AA GE, CSU GE

DANC 101 F Introduction to Dance World Culture (2)
Three lab hours per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

DANC 102 F Conditioning for Dance (1)
Two hours lab per week. This class is designed to prepare a student mentally and physically for dance. Students will learn floor mat exercises and a floor barre to increase flexibility, strength, body alignment and use of turn out. Relaxation and visualization techniques will be covered. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## DANC 103 F Dance Technique I (1)

Three hours lab per week. The 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

DANC 104 F Dance Technique II (1)
Prerequisite: DANC 103 F with a grade of "C" or better or instructor approval
Three hours lab per week. This class 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. Course may be taken two times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

DANC 105 F Ballet I (1)
Three hours lab per week. This course is designed to instruct the beginning dance student in the fundamentals of ballet technique and terminology as well as acquainting the enrolled student with viewing and practicing ballet as a performing art form. This class includes work at the ballet barre, center floor and across the floor. Course may be taken four times for credit. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) CSU GE

## DANC 106 F Ballet II (1)

Prerequisite: DANC 105 F with a grade of " $C$ " or better or previous ballet experience or approval of instructor
Three hours lab per week. This course is designed to continue the ballet training of the dance student. The class includes more advanced techniques at the barre and center floor and more advanced adagio and allegro dance sequences. Course may be taken four times for credit. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) CSU GE

## DANC 107 F Modern Dance I (1)

Three hours lab per week. The class provides opportunities for the student to develop sensitivity to the use of body movement, space and time for creative expression. This class includes work on skill techniques, movement exploration and beginning dance composition. Course may be taken four times for credit. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) CSU GE

## DANC 108 F Modern Dance II (1)

Prerequisite: DANC 107 F with a grade of "C" or better
Two hours lab per week. This course is designed to give more advanced experiences in skill techniques and compositional factors and devices. Individual and group choreography are incorporated into class structure. Course may be taken twice for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 110 F Ballet Folklorico (1)

Two hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## DANC 111 F Jazz I (1)

Three hours lab per week. This course is designed for the student who is interested in developing a jazz style in dance. This course includes basic techniques unique to the jazz form of dance including dance combinations to classical jazz music and contemporary music. Course may be taken four times for credit. AA Dance; Liberal Arts; satisfies PE requirement for General Education. (CSU) (UC) (Degree Credit) CSU GE

## DANC 112 F Jazz II (1)

## Prerequisite: DANC 111 F with a grade of " $C$ " or better

Two hours lab per week. This class 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. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## DANC 113 F Tap Dance I (1)

Three hours lab per week. This class is designed to introduce basic tap dance techniques and elementary tap dances, providing an opportunity to develop increased coordination and rhythm. Course may be taken twice for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 114 F Tap Dance II (1)

Prerequisite: DANC 113 F with a grade of " $C$ " or better or instructor approval
Three hours lab per week. This course provides opportunity for further development of tap dance skills at an intermediate level. Includes some provision for student composition. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## DANC 115 F Hip Hop Dance I (1)

Three hours lab per week. Students will learn various forms of beginning hip-hop dancing including pop and rock, hip-hop funk, syncopations and rhythms. A basic history of hip-hop culture will be discussed. Course may be taken four times for credit. (CSU Credit Limitation) (UC) (Degree Credit) CSU GE

DANC 116 F Social Dance (1)
Three hours lab per week. This course gives students the opportunity to learn various social dance forms. It is designed for students with no dance experience as well as dance students who want to be introduced to new dance forms. Examples of dance forms that may be included are: swing, salsa (mambo), cha-cha, tango, waltz, country and fox trot. The course will focus on exploring the differences and similarities among styles and techniques while developing coordination skills. Historical studies and individual choreography will enhance the student's knowledge of each dance form as well as encourage creativity. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 119 F Dance for Theatre (1)

Three hours lab per week. This class provides opportunities to explore various dance styles: ballet, jazz, modern and tap. The emphasis is on performing each dance style in an informal in-studio setting. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 120 F Dance History (3)

Three lecture hours per week. Students will study dance forms from primitive to present day through readings, 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 122 F Middle Eastern Dance (1)

Three hours of lab per week. This course is designed to explore various types of dances that are common in the Middle East (Belly dancing and dabke). The students will learn movement, perform, critique and analyze dance performances. Course may be taken four times for credit. (CSU) (Degree Credit)

DANC 130 F Afro Caribbean Dance (1)
Three hours lab per week. Students will learn the dance styles and rhythms of African and Caribbean cultures. Different regions of Africa, Puerto Rico, Brazil, Trinidad, Haiti, and the Dominican Republic. Dance as an inseparable part of the culture will be discussed. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

## DANC 132 F Flamenco Dance I (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## DANC 150 F Commercial Dance (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## DANC 151 F Latin Jazz (1)

Three hours lab per week. 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. This course may be taken four times for credit. Cost of dance concert admission will not exceed \$40. (CSU) (Degree Credit)

## DANC 202 F Dance Composition and Choreography (2)

Prerequisite: DANC 107 F with a grade of "C" or better
One hour lecture and three hours lab per week. This course allows practical application of choreographic techniques with instructor supervision permitting group work during the class session. This class includes theory and practice in the basic elements of dance composition and provides the opportunity for the student to develop and present solo and group compositions. This course may be taken two times for credit and is transferable to the State and University systems; degree credit for A.A. in Dance; A.A. Liberal Arts; satisfies P.E. requirement for general education. (CSU) (UC) (Degree Credit) CSU GE

## DANC 203 F Dance Production (2)

Prerequisite: Any previous dance class; concurrent enrollment in any dance class
Six hours lab per week. This class 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 (3)

Prerequisite: Any previous dance class or instructor approval Nine hours lab per week. This class 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 (2)

One hour lecture and three hours lab per week. A selective dance performing group utilizing advanced resource and movement materials. This class is designed to give the advanced performer an additional opportunity for continued performance and growth in individual dance technique and group repertoire. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

DANC 210 F Multicultural Dance in the U.S. Today (3)
Three hours lecture per week. Social and theatrical dances of the U.S. today 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) CSU GE, IGETC, MULT CULT REQ

## DANC 214 F Dance Repertory (2)

Six hours lab per week. 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. This course may be taken four times for credit. (CSU) (UC) (Degree Credit) CSU GE

## Drafting

## (see Industrial Drafting)

## Earth Sciences (ESC)

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

Astronomy Associate in Arts Degree

## Earth Sciences Courses

## ESC 100 F Physical Geology (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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)

Corequisite: ESC 100 F
Three hours lab per week. 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 (3)

Three hours lecture per week. Lab not required but recommended. 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. 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)

Three hours lab per week. This lab enhances topics covered in the ESC 101 F Earth Sciences Survey lecture course. Included are 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)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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)

Letter Grade or Pass/No Pass option
Three hours lecture and three hours lab per week. 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 (3) Letter Grade or Pass/No Pass option
Three hours lecture per week. A description of the broad geologic features of North America with special emphasis on U.S. National Parks and Monuments, will be presented. 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 Meteorology (3)

Three hours lecture per week. A non-mathematical introduction to the science of the Earth's atmosphere, covering both global climate and local weather. Physical explanations of phenomena familiar in southern California such as temperature changes, sea breezes, Santa Ana winds, cloud patterns, rain showers and steady rain, thunderstorms, fronts, and air pollution as well as those more common elsewhere such as tornadoes and hurricanes. Optical effects such as mirages, rainbows, coronas, glories, haloes, and auroras. Topics of growing international concern include the greenhouse effect, global warming, and the hole in the ozone layer. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ESC 106 F Geology of the Orange County Area (2)

Two hours lecture per week. 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. (Degree Credit)

## ESC 116 F Astronomy (3)

Advisory: MATH 020 F
Three hours lecture per week. 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)

Advisory: MATH 020 F or math skills clearance


Three hours lecture per week. This 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)

Corequisite: ESC 116 F
Four hours lab or field work per week. 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 120 F Geology of California (3)

Three hours of lecture per week or equivalent. 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)

Three hours of lecture per week. 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) AA GE, CSU GE, IGETC

## ESC 130HF Honors Introduction to Oceanography (3)

Three hours lecture per week. This 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 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 (1) <br> Corequisite: ESC 130 F

Four hours field study per week for eight weeks or the equivalent. 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 133 F Navigation and Seamanship (3)

Two hours lecture and three hours lab per week. This course is designed to present the basics of navigation theory and the fundamentals of small boat handling and safety. Lab and field exercises are designed to give practical experience in navigation techniques and small boat seamanship. (CSU) (Degree Credit)

## ESC 140 F Geology of California Coastal Areas (2) (formerly ESC 198AF)

Two hours lecture per week or equivalent time spent in the field. 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 (1) (formerly ESC 198BF)

One hour lecture per week or equivalent. 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) (formerly ESC 198CF)

One hour lecture per week or equivalent. 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/ <br> Mammoth Lakes Area (1) <br> (formerly ESC 198DF)

One hour lecture per week or equivalent. This course involves lecture and field study of geologic processes and features in the Owens ValleyMammoth 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 the Southern California Mountain Areas (1) <br> (formerly ESC 198EF)

One hour lecture per week or equivalent. 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 (1) (formerly ESC 198FF)

One hour of lecture per week or equivalent. 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 <br> National Park Area (1) <br> (formerly ESC 198GF)

One hour lecture per week or equivalent. 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) (formerly ESC 198IF)

Two hours lecture per week. 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 180 F Modern Techniques in Sampling (4)

Three hours lecture and three hours lab per week. An introduction to modern survey and sampling methods in terrestrial and ocean sciences, including geological, physical, chemical and biological techniques. Special emphasis will be placed on interdisciplinary and synoptic measurements, including data acquired from earth-orbiting satellites, weather stations, ocean buoys and seismic networks. Lab experience will include sampling design, field studies, data acquisition and data analysis, covering a range of environments and data types. Students will be responsible for preparing oral and written reports of their work. Basic computer skills are recommended. (CSU) (Degree Credit)

ESC 190 F Environmental Geology (3)
Three hours of lecture per week. 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)

One hour of lecture per week or equivalent. 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: Dan Tesar
Website: http://socsci.fullcoll.edu/

## Economics Associate in Arts Degree

## Economics Courses

## ECON 101 F Principles of Economics - Micro (3)

Three hours lecture per week. Microeconomic analysis. 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 - Micro (3)
Three hours lecture per week. Microeconomics analysis. This course is enhanced for honors students, presenting the basic structure of the economic system of the United States and emphasizing the behavior of the firm within this structure. Topics treated include comparative economic systems, supply and demand, product and resource pricing, the market models, 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)
Prerequisite: ECON 101 F with a grade of " $C$ " or better
Three hours lecture per week. Macroeconomic analysis. This 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, economic 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 - Macro (3)
Prerequisite: ECON 101 F or ECON 101HF with a grade of "C" or better
Three hours lecture per week. Macroeconomics analysis. This course is enhanced for honors students. It 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<br>Office: Bldg 1000, Room 1005<br>714.992.7051<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu<br>Engineering Associate in Science Degree<br>\section*{Engineering Courses}

ENGR 101 AF Surveying I (4)
Prerequisite: MATH 030 F and MATH 040 F with a grade of "C" or better
Three hours lecture and three hours lab per week. This course covers the principles and practices of measuring distances, directions and elevations. Other topics are the study of errors, computation of areas and coordinates, and use and care of instruments and equipment. (CSU) (Degree Credit)

## ENGR 101 BF Surveying II (4)

Prerequisite: ENGR 101AF with a grade of " $C$ " or better
Three hours lecture and three hours lab per week. Application of surveying techniques to engineering and construction problems. Public and private land, route and topographic surveys. Introduction to photogrametry, triangulation, level adjustments, and applications of astronomical observations. (CSU) (Degree Credit)

## ENGR 102 F Engineering Drawing (3)

Prerequisite: Three years of college preparatory mathematics or MATH 040 F and MATH 030 F with grades of "C" or better
Advisory: One year of high school mechanical drawing
Three hours lecture and three hours lab per week. Lettering, geometry constructions, orthographic and pictorial drawing, auxiliary views, sectioning, dimensioning, and fasteners will be covered. (CSU) (UC) (Degree Credit)

## ENGR 105 F Engineering CAD (4)

Three hours lecture and three hours lab per week. 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 computer-assisted drafting to develop solutions to 2-D and 3-D 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)

Prerequisite: MATH 040 F with a grade of " $C$ " or better
Three hours lecture per week. 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. 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 mechanics and electricity. This course also meets requirements for credit in Engineering. (CSU) (Degree Credit)

## ENGR 201 F Statics (3)

Prerequisite: MATH 150BF and PHYS 221 F with a grade of "C" or better
Three hours lecture per week. This course applies equilibrium conditions of force and moments to engineering problems. Algebraic and graphical methods are use. Topics include equilibrium of particles and rigid bodies, trusses, beams, levers, pulleys, centroids, friction, fluids and work principles. (CSU) (UC) (Degree Credit)

## ENGR 203 F Electric Circuits (4)

Prerequisite: PHYS 222 F and MATH 150BF with a grade of "C" or better
Corequisite: ENGR 203LF
Four hours lecture per week. 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 and are analyzed under DC, AC-steady state and transient conditions using multiple methods including bode plots and Laplace transforms. (CSU) (UC) (Degree Credit)

## ENGR 203LF Electric Circuits Lab (1)

Prerequisite: PHYS 222 F and MATH 150BF with a grade of "C" or better
Corequisite: ENGR 203 F
Three hours lab per week. Basic electrical measurement techniques and experimental investigation of simple circuits. 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 Associate in Arts Degree

## English Courses

## ENGL 039 F Basic Writing (4)

## Pass/No Pass only

## Advisory: Enrollment in READ 036 F

Four lecture hours per week. This course is designed for native speakers of English who require instruction in basic writing including such topics as: sentence and paragraph writing, literal comprehension, vocabulary development and study techniques.

## ENGL 059 F Developmental Writing (4)

Pass/No Pass only
Prerequisite: ENGL 039 F with a grade of "Pass" or recommended score
Advisory: READ 056 F
Four hours lecture per week. 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, organization of ideas into paragraphs and essays, fundamentals of English, reading short essays, vocabulary building, basic critical thinking, and study skills.

## ENGL 060 F Preparation for College Writing (4)

Pass/No Pass only
Prerequisite: ENGL 059 F with a grade of "Pass" or recommended score

## Advisory: READ 096 F

Four hours lecture per week. 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 English fundamentals, read and analyze professional essays, and write essays with an emphasis on exposition and critical thinking.

## ENGL 100 F College Writing (3)

Prerequisite: ENGL 060 F with a grade of "Pass" or ESL 186 F with a grade of "C" or better
Advisory: Enrollment in READ 142 F
Four hours lecture per week. This is a college level course in composition 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 (3)

Prerequisite: ENGL 060 F with a grade of "Pass" or ESL 186 F with a grade of " $C$ " or better
Advisory: Enrollment in READ 142 F
Four hours lecture per week. This is a college level course in composition enhanced for honors students designed to develop critical thinking, and writing strategies, including research and documentation skills, necessary for academic success. The emphasis is on reading and writing expository essays. The course will be conducted as a seminar, and it will require a significant independent research project that uses correct documentation skills. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 102 F Introduction to Literature (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three lecture hours per week. 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 (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. A continuation of ENGL 100 F, this course uses literary works as content for reading and writing with emphasis on analytical and critical approaches to drama, poetry and prose fiction. As an Honors section, this class 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 (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. This course is designed to develop critical thinking, reading, and writing skills beyond the level achieved in ENGL 100 F . The course will focus on the development of logical reasoning and analytical and argumentative writing skills. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 103HF Honors Critical Reasoning and Writing (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. This course is designed to develop critical thinking, reading, and writing skills, beyond the level achieved in ENGL 100 F . 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 104 F Critical Thinking and Writing about Literature (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 105 F Introduction to Creative Writing (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. 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. (CSU) (UC) (Degree credit) AA GE, CSU GE, IGETC

## ENGL 203 F Introduction to Dramatic Literature (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three hours lecture per week. 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)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of " $C$ " or better

## Advisory: ENGL 102 F

Three lecture hours per week. 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 205 F The Film: From the Beginning to 1950 (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three hours lecture per week. This course is designed to view, analyze and discuss films. A study of representative film masterpieces will reveal the evolution of moving pictures from their inception to the period just after World War II. The ideas, values, concerns, and views reflected in the films are emphasized, and the artistic techniques employed are considered. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 206 F The Film: From 1950 to the Present (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: A grade of " $C$ " or better in ENGL 102 F
Three hours lecture per week. This course is designed to view, analyze and discuss films. A study of representative film masterpieces will reveal the evolution of moving pictures from 1950 to the present. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 207 F The Short Story (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF, both with a grade of "C" or better
Three lecture hours per week. The 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)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture and one hour lab per week. 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)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 105 F with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 200 F
Three hours lecture per week. Intermediate Creative Writing 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 <br> and Use (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. 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) (Degree Credit)

## ENGL 211 F English Literature to 1800 (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours of lecture per week. A survey of British literature from the Middle Ages to 1800, this course 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 212 F English Literature Since 1800 (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. 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, and Postmodern eras in Great Britain and other countries of the Empire and Commonwealth. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 214 F Contemporary Literature (3)
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three hours lecture per week. 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 218 F California Writers (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F with a grade of " $C$ " or better Advisory: ENGL 102 F
Three hours lecture per week. English 218 F is a survey of the historical and cultural development of the literature of California. This course emphasizes the literary, social, economic, multicultural and environmental contexts of the California writers studied. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

ENGL 221 F American Literature to the Civil War (3)
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. A survey of representative works by American writers from the Colonial period through the Civil War, this course emphasizes 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) (US) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 222 F American Literature from Civil War to the Present (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. A survey of representative works by American writers from the Colonial period through the Civil War, this course emphasizes 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) (US) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 224 F World Literature Through the Early Modern Period (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three hours lecture per week. This course is a study of the great masterpieces of world literature, and the cultures and authors that produced them. The course will trace common themes and changing ideas from classical antiquity through the Early Modern Period in the works of writers such as Homer, Confucius, Virgil, Li Po, Dante, and Chaucer and works such as the Tale of Genji, The Ramayana, and A Thousand and One Nights. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 225 F World Literature Since the Early Modern Period (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three lecture hours per week. This course is a study of the masterpieces of world literature including a consideration of the authors as well as the cultural context of the works. The course will trace common themes and changing ideas since the Early Modern Period to the present in the works of writers such as Voltaire, Goethe, Akhmatova, Flaubert, Kafka, Ibsen, Dostoevsky, Mahfouz, Borges, and Soyinka. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## ENGL 234 F Introduction to Shakespeare (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. This course 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. This honors seminar course emphasizes discussion and exchange based on students' presentations and independent research. (CSU) (UC) (Degree credit) AA GE, CSU GE, IGETC

## ENGL 234HF Honors Introduction to Shakespeare (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF, both with a grade of "C" or better
Three hours lecture per week. This honors course is designed to introduce students to ten to twelve of the tragedies, comedies and histories of William Shakespeare. Elizabethan context, genre, and critical analysis with regard to theme, poetic devices, plot, character development, and irony will be emphasized. This honors seminar course emphasizes discussion and exchange based on students' presentations and independent research. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 239 F Survey of Children's Literature (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three lecture hours per week. 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 (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F with a grade of "C" or better

Three hours lecture per week. 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 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)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF, both with a grade of "C" or better
Three hours lecture per week. 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, IGETC, MULT CULT REQ

## ENGL 245 F The Bible as Literature (3)

Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of " $C$ " or better
Advisory: ENGL 102 F with a grade of " $C$ " or better
Three hours lecture per week. Students will study the English Bible as literature, its literary forms and techniques. Readings and discussions emphasize analysis of such forms as short story, poetry, letters, dramatic and narrative prose, wisdom and didactic literature. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENGL 246 F The Novel (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better

## Advisory: ENGL 102 F or ENGL 102HF

Three hours lecture per week. 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 247 F Voices of America: Studies in Multicultural

 Literature (3)Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Three hours lecture per week. The course is a study of multicultural literature, by both immigrant, and native American writers, which explores varied responses, ethnic, gender, and regional, in the cultural context of a diverse country. Students will critically examine a wide variety of literature that includes such genres as fiction, plays, essays, journals, autobiography, letters, tales, chants and other less traditional literary forms. The course is designed to enrich students' lives by exploring the multicultural literary resources of America. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, MULT CULT REQ

ENGL 248 F Science Fiction (3)
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
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)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F
Three hours lecture per week. 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 250 F Survey of African American Literature (3)

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

Three lecture hours per week. This course is a survey of literature by African American writers. It emphasizes the literary, social, economic and environmental context of the works studied and traces the development of African American writing from spirituals and other oral literatures through writing by contemporary African American writers in a variety of genres. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 251 F Survey of Native American Literature (3) Letter Grade or Pass/No Pass option
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F with a grade of "C" or better
Three hours lecture per week. 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 252 F Women's Literature (3)

Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. This course is a survey of literatures by women and examines traditional and non-traditional forms of women's writing from a variety of critical perspectives. The course focuses on analysis of literary texts both in terms of their aesthetic qualities and cultural contexts. (CSU) (UC) (Degree credit) AA GE, CSU GE, IGETC

ENGL 253 F Survey of Asian American Literature (3)
Letter Grade or Pass/No Pass option.
This course surveys the development of Asian-American literature from the mid-19th century to the contemporary period in the United States. Drawing upon such literary genres as fiction, poetry, drama, memoir, and film, this course examines the literary, cultural, historical, and political contexts of Asian-American writers. (CSU/UC) (Degree Credit) AA GE, CSU GE, IGETC

ENGL 254 F Intermediate Creative Writing: Poetry (3)
Prerequisite: ENGL 100 F or ENGL 100HF, both with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. 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 free-verse tradition, and study non-fiction essays related to the writing of poetry. (CSU) (UC) (Degree Credit) AA GE

ENGL 255 F Intermediate Creative Writing: Fiction (3)
Letter Grade or Pass/No Pass option.
Prerequisite: ENGL 105 F with a grade of "C" or better
Advisory: ENGL 102 F or ENGL 102HF
Three hours lecture per week. 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, CSU GE

ENGL 280 F Language Arts Tutoring Practicum (3)
Prerequisite: ENGL 100 F or ENGL 100 HF , both with a grade of "C" or better, and recommendation from an English instructor
Corequisite: ENGL 103 F or ENGL 103 HF or ENGL 104 F or ENGL 201 F
Two hours lecture and three hours lab per week. This course provides training for students to acquire specific 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 Humanities Independent Study (1)

One hour lecture or scheduled conference per week. For able students who wish to increase their knowledge of literature or language through individual study or research. Elective credit in the humanities area. Course may be taken three times for credit. (CSU) (UC review required) (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

## ESL Courses

## ESL 025 F Basic English Grammar (3)

## Pass/No Pass only

Three hours lecture per week. 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 of ESL (2)

## Pass/No Pass only

Two lecture hours per week. 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 students of English as a second language (ESL).

## ESL 035 F Intermediate English Grammar (3) <br> Pass/No Pass only

Three hours lecture per week. 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)

## Pass/No Pass only

Four hours lecture per week. This course is designed to improve beginning students' ability to speak and understand English in simple everyday 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 of American English Pronunciation (2)

Pass/No Pass only
Two hours lecture per week. 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 for Students of ESL (3)

Pass/No Pass only
Two lecture hours per week. 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)

Pass/No Pass only
Three hours lecture per week. 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)

Pass/No Pass only
Two hours lecture per week. 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 (2, 2) <br> Pass/No Pass only

Advisory: ESL skills evaluation
Two hours lecture per week. 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. Course may be taken twice for credit.

## ESL 048 F Intermediate American English Pronunciation (2)

Pass/No Pass only
Two hours lecture per week. 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 Academic Vocabulary for Advanced Students of ESL (3)

Pass/No Pass only
Three lecture hours per week. 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 050 F Occupational English (2)

Pass/No Pass only
Corequisite: Occupational programs as designated in the Schedule of Classes
Two hours lecture and one hour lab per week. This is an intensive course in English as a second language for students in vocational programs. The course emphasizes the development of basic listening, speaking, reading, and writing skills for successful completion of required classes in vocational certificate programs. The class will focus on aspects of employability and workplace culture.

## ESL 056 F Advanced Conversation: Academic Topics (2)

## Pass/No Pass only

Two hours lecture per week. 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: Foreign Accent Reduction (2)

## Pass/No Pass only

Two hours lecture per week. This course is designed to refine pronunciation, to reduce foreign accent, and to build confidence in complex oral expression.

## ESL 080 F Fundamental Listening, Speaking, Reading and Writing for Students of American English (5)

Pass/No Pass only
Prerequisite: ESL skills evaluation
Five hours lecture and one hour arranged lab per week. 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 of English (5)

Pass/No Pass only
Prerequisite: ESL skills evaluation or ESL 080 F with a grade of "Pass"
Five hours lecture and one hour arranged lab per week. This is a low intermediate integrated skills course designed to improve the reading, grammar, writing, listening comprehension, and speaking skills of nonnative speakers with a basic command of English.

## ESL 082 F Intermediate English for Non-Native Speakers of English (5)

Pass/No Pass only
Prerequisite: ESL skills evaluation or ESL 081 F with a grade of "Pass"
Five hours lecture and one hour arranged lab per week. Designed for intermediate students of English, this course provides practice in all four language skills - listening, speaking, reading, and writing - with special emphasis on reading and writing to develop critical thinking, reading comprehension, and writing skills at the paragraph level.

## ESL 083 F High Intermediate Reading and Writing for Students of American English (5)

Letter Grade or Pass/No Pass option
Prerequisite: ESL skills evaluation or ESL $082 F$ with a grade of "Pass"
Five hours lecture and one hour arranged lab per week. This course is for high-intermediate students of English. It provides instruction in critical reading and expository paragraph development. Application of grammar concepts, sentence variety, and vocabulary development are emphasized. The course offers continuing practice in listening and speaking skills.

## ESL 184 F Low Advanced English for Non-Native Speakers of English (5)

Letter Grade or Pass/No Pass option
Prerequisite: ESL skills evaluation or ESL 083 F with a grade of " $C$ " or better
Five hours lecture plus one hour arranged lab per week. This course is an advanced course designed to improve the reading, writing and grammar skills of non-native speakers with an advanced command of English. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 185 F Advanced Reading and Writing for Students of American English (5)

Letter Grade or Pass/No Pass option
Prerequisite: ESL skills evaluation or ESL 184 F with a grade of "C" or better
Five hours lecture plus one hour arranged lab per week. Designed for advanced students of English, this course primarily emphasizes critical reading and expository essay writing; the course promotes continued practice in listening comprehension and oral communication. (CSU) (UC Credit Limitation) (Degree Credit)

## ESL 186 F Composition for Students of American English (5)

Letter Grade or Pass/No Pass option
Prerequisite: ESL skills evaluation or ESL 185 F with a grade of "C" or better
Five hours lecture per week. Designed to prepare advanced students for college level writing, this course provides a review of English fundamentals and practice in reading, critical thinking, expository essay writing, and basic research skills. The course also offers continued practice in special problems common to second language learners and promotes continued practice in listening comprehension and oral communication. (CSU) (UC Credit Limitation) (Degree Credit)

# Environmental Sciences (ENVS) 

Natural Sciences Division

Office: Bldg 400, Room 411
714.992.7043

Dean: Carol Mattson (Interim)
Website: http://natsci.fullcoll.edu/

## Environmental Sciences Associate in Arts Degree

## Environmental Science Courses

## ENVS 105 F Environmental Biology (3)

Three hours lecture per week. This is a biology course for non-science majors and introduces the student to the principles of organismal biology framed in the context of Earth's natural environments. This course examines the interactive relationships between the environment and biological phenomena on all levels. This course will also explore Earth's environmental systems including global climate system, atmospheric system, aquatic systems, and terrestrial and aquatic ecosystems. It will also highlight life's influence on these systems in terms of biological phenomena including molecular biology, cellular biology, cellular respiration, photosynthesis, genetics, ecology, evolution and biodiversity. Students will analyze how both robust and delicate biological systems adjust to a variety of human influences to produce complex environmental transformations as well as emphasize 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)

Advisory: Concurrent enrollment in ENVS 105 F or completion of ENVS $105 F$ with a grade of " $C$ " or better
One half hour of lecture and one and one half hours of lab per week. 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)

Three hours lecture per week. This is a biology course for non-science majors. This multidisciplinary science course seeks to understand and maintain the earth's biological diversity. It draws from fields as diverse as 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 reveals the variety of ways that biological science is being applied to conserve biodiversity. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ENVS 126 F Natural History of California (3)

Three hours lecture per week. 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 Field Lecture (2) Corequisite: ENVS 126 F

Two hours lecture per week. 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 Natural Area. Course may be taken three times for credit. (CSU) (UC) (Degree Credit)

## ENVS 140 F Birds of Southern California (1-2)

One to two hours of lecture per week or equivalent. This is a fieldoriented 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## ENVS 141 F Desert Natural History (1) (formerly ENVS 198AF)

One hour lecture per week or equivalent. This course involves lecture and field study of desert ecological principles and concepts in selected areas within California's 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 various field study techniques and in use of specific scientific equipment. Field trips are required. Course may be taken four times for credit. (CSU) (Degree Credit)

## ENVS 142 F Geology and Marine Biology of the Channel Islands (2) (formerly ENVS 198CF)

Two hours of lecture per week or equivalent. 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 use of scientific instruments. Field trips are required. (CSU) (Degree Credit)

## ENVS 143 F Baja California Field Studies (2) (formerly ENVS 198DF)

Two hours lecture per week or equivalent. 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) (formerly ENVS 198EF)

Two hours of lecture per week or equivalent. 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 factory 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 Channel Islands (1) <br> (formerly ENVS 198FF)

One hour lecture per week or equivalent. 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 (3)

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 grade of " 3 " or better on the Placement Exam
Three hours of lecture per week. This course for science majors 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 worlds such as Mars, the moons of Jupiter, and extrasolar 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 194 F Internship in Environmental Sciences/ Newport Bay (2)

Two hours lecture or equivalent per week. The course includes field trips, teaching demonstrations and group activities. This course introduces the basic ecology of estuaries, natural history of marine and terrestrial animals and plants, cultural history of local native Americans, and the environmental importance of coastal wetlands. Students will follow experienced naturalists to learn about habitat restoration, scientific sampling, and/or interpretative techniques in the field. When mastery of selected topics has been achieved, students will design teaching materials and serve as naturalists/tour guides at Newport Bay. (CSU) (Degree Credit)

## ENVS 196 F Regional Field Studies/Life Sciences (1-2)

One or two hours of lecture per week or equivalent. 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 autecological and synecological studies of biological communities, monitoring abiotic factors, field identification of flora and fauna, and human impact on the study area. Course may be taken three times for credit. (CSU) (Degree Credit)

## ENVS 197 F Internship in Environmental Sciences/ Environmental Concerns (2)

Two hours lecture, teaching demonstrations and small group discussions per week or equivalent. Students will be assisted in selecting and developing teaching modules in defined areas of environmental science or related topics. Students will gain expertise in their selected topics with guidance from the instructor. Students will then serve as teaching interns in K-6 classrooms by presenting teaching modules to specific grade level(s) of choice in area schools within the North Orange County Community College District. (CSU) (Degree Credit)

# Ethnic Studies (ETHS) 

Social Sciences Division<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/

## Chicano/Chicana Studies Associate in Arts Degree Ethnic Studies Associate in Arts Degree

## Ethnic Studies Courses

## ETHS 101 F American Ethnic Studies (4)

Three hours lecture and two hours discussion per week. 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 110 F Introduction to Multicultural Studies (3)

Three hours of lecture and discussion per week. A survey course which reviews the concepts of ethnic studies and their applications to world cultures. (Degree Credit)

## ETHS 118 F Introduction to Bilingual-Crossculturalism (3)

## Letter Grade or Pass/No Pass option

Three hours lecture and discussion per week. The 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. (CSU) (Degree Credit)

ETHS 129 F Introduction to African American Studies (3) Three hours lecture per week. 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)

Three hours lecture per week. This course is a survey of the AfricanAmerican 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) CSU GE, IGETC

## ETHS 131 F African-American History II (3)

Three hours lecture per week. This course is a survey of the AfricanAmerican 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 socioeconomic 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; military during the 1960s; and the black experience in contemporary America. (CSU) (UC) CSU GE, IGETC

## ETHS 140 F Introduction to Chicano/Chicana Studies (3)

Three hours lecture per week. This is an introductory level course 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 Chicano/Chicana History (3)

Three hours lecture per week. This course provides the student with the social and cultural roots of the Chicana/Chicano. The class traces the origins of the Chicana/Chicano from their indigenous and Spanish beginnings to the present. An inter-disciplinary approach is used to develop the understanding of this human experience. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## ETHS 142 F The Chicano-a/Latino-a in Contemporary Society (3)

Three hours lecture per week. 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) CSU GE, IGETC

## ETHS 160 F History of the Native Americans (3)

Three hours lecture per week. 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. (CSU) (UC) (Degree Credit) CSU GE

ETHS 170 F Introduction to Asian American Studies (3)
Three hours lecture per week. This course serves as an introduction to Asian American Studies. The student will be studying the experiences of various Asian and Pacific Islander groups, utilizing the lens of race, class, gender and sexuality. This will be achieved using various disciplinary methods. Throughout the semester 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, anti-Asian 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-American History (3)

Three hours lecture per week. This course is a survey of the Asian and Pacific Islander American experience in the United States from the mid19th 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) CSU GE, IGETC

## ETHS 199 F Ethnic Studies Independent Study I (1)

One hour lecture or scheduled conference per week. 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. Course may be taken three times for credit. (CSU) (UC Credit Limitation depending upon course content; UC review required.) (Degree Credit)

## ETHS 299 F Ethnic Studies Independent Study II (1)

One hour lecture or scheduled conference per week. 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. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

# Fashion (FASH) 

Technology \& Engineering Division
Office: Bldg 1000, Room 1005
714.992.7560

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

Dressmaking - Alterations Certificate<br>Fashion Design Associate in Arts Degree<br>Fashion Design Certificate<br>Advanced Fashion Design Certificate<br>Fashion Illustration Certificate<br>Fashion Journalism Associate in Arts Degree<br>Fashion Merchandising Associate in Arts Degree<br>Fashion Merchandising Certificate<br>Image Consultant Certificate<br>Patternmaker Skills Certificate<br>Product Development Apparel Skills Certificate<br>Textiles and Clothing Associate in Arts Degree

## Fashion Courses

## FASH 010 F Clothing Construction Studio (1)

Pass/No Pass only
Corequisite: One semester of clothing construction
Three hours arranged lab per week. A student may pursue individual clothing construction projects under staff supervision during open lab hours. Sign up first week of school for flexible hours. Course may be taken four times for credit.

## FASH 020 F Modeling (2)

Two hours lecture for a total of thirty-two hours in each session. This course includes professional skills needed for men and women to enter a career in runway and print modeling. It will cover fashion show procedures and skills, professional makeup, posture enhancement, personal development, modeling for a photographer, developing a modeling portfolio, and working with agencies and contracts. Course may be taken four times for credit.

## FASH 045 F Swim and Active Wear (1)

Eight hours lecture and 24 hours lab. Students will learn the techniques needed to create commercial quality swimwear and active wear using both industrial and home equipment. Course may be taken twice for credit. (Degree Credit)

## FASH 050 F Careers in Fashion (1)

Letter Grade or Pass/No Pass option
Sixteen hours lecture per semester. 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)

Letter Grade or Pass/No Pass option
Two hours lecture per week. 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 and Sewing Leather (2)

Prerequisite: FASH 101 F with a grade of "C" or better
One hour lecture and three hours lab per week. The student will learn the skills and techniques needed to design and sew fashionable apparel and accessories of leather and suede.

FASH 080BF Designing and Sewing Leather (2)
Prerequisite: FASH 080AF with a grade of "C" or better
One hour lecture and three hours lab per week. The student will learn the advanced specialized 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)
Prerequisite: FASH 201 F with a grade of "C" or better
One hour lecture and three hours lab per week. This course covers specialized construction techniques used in the manipulation of fancy garment fabrics for bridal and special occasion wear. The resources for these fabrics, notions and embellishments used in the assembly of special occasion wear will also be included. Course may be taken twice for credit. (Degree Credit)

## FASH 088 F CAD for Apparel (2)

Advisory: FASH 108AF, FASH 186 F and ACG 104 F with a grade of "C" or better
One hour lecture and three hours lab per week. Students will learn the basics of 2-D Microcomputer paint and design programs used in the garment industry for designing apparel and textiles, making patterns and markers, fashion illustrating. Course may be taken twice for credit. (Degree Credit)

FASH 090 F Creative Serging: The Overlock Machine (2)
One hour lecture and three hours lab per week. The 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. Course may be taken four times for credit. (Degree Credit)

## FASH 093 F Pattern Alteration and Fitting (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours lab per week. 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. Course may be taken twice for credit. (Degree Credit)

## FASH 101 F Clothing I (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours lab per week. This course is designed for both beginner and experienced seamstress. 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. Course may be taken twice for credit. (CSU) (Degree Credit)

## FASH 107 F Apparel Analysis (3)

Three hours lecture per week. 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 108AF Flat Pattern Methods and Design I (2)

One hour lecture and three hours lab per week. Students will learn to design and make garments by apparel industry techniques by manipulating paper patterns, thereby translating a designer's sketch or concept into a saleable garment. (CSU) (Degree Credit)

## FASH 108BF Flat Pattern Methods and Design II (2)

Prerequisite: FASH 108AF with a grade of "C" or better
One hour lecture and three hours lab per week. Students will make patterns for apparel using basic techniques learned in FASH 108AF and adding more advanced concepts for creating wearable clothing. (CSU) (Degree Credit)

## FASH 108CF Flat Pattern Methods and Design (2)

Prerequisite: FASH 108BF with a grade of "C" or better
One hour lecture and three hours lab per week. Students will develop patterns for fashion forward apparel using techniques learned in FASH 108BF, adding more advanced concepts. (CSU) (Degree Credit)

## FASH 145 F Field Studies in Fashion (1)

A total of 18 hours. 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. Course may be taken twice for credit. (CSU) (Degree Credit)

## FASH 150 F Introduction to the Fashion Industry (3)

Three hours lecture per week. The 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)

Three hours lecture per week. The student will learn to analyze and evaluate the construction, appearance, pricing, sizing and fit of ready-towear 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 (3)

Prerequisite: FASH 150 F with a grade of "C" or better
Three hours lecture per week. The 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)

Letter Grade or Pass/No Pass option
One hour lecture and three hours studio/lab per week. 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. Course may be taken twice for credit. (CSU) (Degree Credit)

## FASH 188 F Apparel Production (2)

Prerequisite: FASH 108AF and FASH 050 F with a grade of "C" or better
Corequisite: FASH 297 F
One hour lecture and three hours lab per week. This course provides an opportunity for students to become familiar with a major segments 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 (1)

Corequisite: FASH 108AF
Nine hours of lecture and 27 hours of lab. Students learn to "size up" and "size down" a fashion pattern for all size ranges in missy, junior, children, and men's wear using industry techniques. (CSU) (Degree Credit)

## FASH 196 F International Fashion Studies (3)

Letter Grade or Pass/No Pass option
Forty hours of lecture before and during extended travel experiences to the major fashion centers of the world, plus ten hours of field trips. 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 (1-2)

Prerequisite: Completion of at least one semester in the area of study Three hours independent lab work per week per unit credit plus scheduled conferences with instructor. 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. Students may enroll up to a maximum of three semesters. (CSU) (UC review required.) (Degree Credit)

## FASH 201 F Clothing II (2)

Prerequisite: FASH 101 F with a grade of "C" or better or two years high school clothing construction
One hour lecture and three hours lab per week. 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, appliqué and beading. Course may be taken twice for credit. (CSU) (Degree Credit)

## FASH 202 F Visual Merchandising (2)

One hour lecture and three hours lab per week. 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 (2)

Prerequisite: FASH 201 F with a grade of "C" or better
One hour lecture and three hours lab per week. 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 205BF Tailoring (2)

Prerequisite: FASH 205AF with a grade of "C" or better
One hour lecture and three hours lab. This course presents contemporary and traditional custom tailoring techniques applicable to women's and men's tailored garments such as suits and coats. Students registered for FASH 205BF will construct a garment utilizing techniques they did not use in FASH 205AF. (CSU) (Degree Credit)

## FASH 206 F Textiles (3)

Three hours lecture per week. 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 209AF Draping (2)

One hour lecture and three hours lab per week. The student will learn to manipulate fabrics on a dress form and create designs without the use of a drafted pattern. A variety of fabrics will be used in an exploration of the many possibilities of draping techniques. (CSU) (Degree Credit)

## FASH 209BF Draping (2)

Prerequisite: FASH 209AF with a grade of "C" or better
One hour lecture and three hours lab per week. Students registered for FASH 209BF will be given more advanced assignments and work independently under the instructor's supervision. (CSU) (Degree Credit)

## FASH 220 F Retail Buying (3)

Three hours lecture/student project participation per week. 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 242 F History of Costume (3)

Three hours lecture per week. 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) AA GE

## FASH 243 F Theatrical Costume Construction (2)

Corequisite: FASH 209AF and FASH 242 F
One hour lecture and three hours lab per week. 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 145 F in Theatre Arts.) (CSU) (UC) (Degree Credit)

FASH 244 F Ethnic Costume (2)
Letter Grade or Pass/No Pass option
Total of 32 hours lecture. This course surveys clothing worn as the national dress and daily wear of the people in each of the developed and underdeveloped areas of the world. Emphasis is placed on its influence on contemporary fashion. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) (Transfers to Woodbury) AA GE, MULT CULT REQ

FASH 250 F Fashion Promotion (3)
Prerequisite: FASH 150 F with a grade of "C" or better
Three hours lecture per week. The 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 284AF Fashion Design (2)

One hour lecture and three hours lab per week. The students will learn the application of design principles to contemporary fashion for ready-towear and couture and how to make it salable. Class work will require garment sketching. Current fashion trends and resources for design ideas will be explored. (CSU) (Degree Credit)

## FASH 284BF Fashion Design (2)

Prerequisite: FASH 284AF with a grade of "C" or better
One hour lecture and three hours lab per week. This course covers design problems encountered in the various size ranges, style categories, and price ranges in designing seasonal lines and promotional groups in the manufacturing of apparel. Current fashion trends and resources of design ideas will be explored. (CSU) (Degree Credit)

FASH 297 F Fashion Design Portfolio (1)
Prerequisite: FASH 108BF and FASH 209AF with a grade of "C" or better

## Corequisite: FASH 188 F

Sixteen hours lecture. 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 (1-4)

Prerequisite: For Design Majors: FASH 108BF, FASH 209AF and FASH 188 F with a grade of " $C$ " or better
Prerequisite: For Merchandise Majors: FASH 150 F, FASH 250 F, and FASH 220 F with a grade of "C" or better
One hour lecture, five hours 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. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

## FASH 975 F Patternmaking: Collections (2)

Prerequisite: FASH 108AF and FASH 209AF with a grade of "C" or better
One hour lecture and three hours lab per week. 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: Collections (2)
Prerequisite: FASH 975 F with a grade of "C" or better
One hour lecture and three hours lab per week. 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)

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/<br>Nutrition and Foods Associate in Arts Degree<br>\section*{Foods Courses}

## FOOD 060 F Foods for Fitness (2)

One hour lecture and three hours lab per week. This course presents nutrition information to enhance knowledge about food choices. The principles of nutrition and food preparation are presented in a nontechnical format. Students are able to apply new knowledge to their personal fitness, diet, and health goals. Labs include the planning and preparation of meals which are emphasized in the current Dietary Guidelines for Americans. (Degree Credit)

## FOOD 070 F Nutrition Concepts and Food Preparation for Vegetarians (2)

One hour lecture with three hours lab per week. 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 101AF Introduction to Foods (3)

One hour lecture and six hours lab per week. 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)

FOOD 101BF Introduction to Food Management (3)
Prerequisite: FOOD 101AF with a grade of "C" or better
One hour lecture and six hours lab per week. This course adds to and reinforces the principles taught in FOOD 101AF. It introduces experiences in managing time, money and human energy in the production of meals which meet the nutrient needs of various population groups. (CSU) (Degree Credit)

FOOD 130 F Cultural Aspects of Foods (2)
One hour lecture and three hours lab per week. This course examines food as an expression of cultural unity and diversity. Students will investigate the many culture 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

## Nutrition Courses

## NUTR 210 F Human Nutrition (3)

Three hours lecture per week. 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) AA GE, CSU GE

## CDES 215 F Nutrition and Food Experiences for

 Children (2)A total of 32 hours lecture. This course focuses on the use of food as an instructional medium in early childhood settings. Emphasis is placed on the planning and organization of food-related activities for young children, including safety and sanitation issues; the application of basic nutrition principles to menu planning/evaluation; the resolution of common food-related problems such as obesity and caregiver manipulation; and techniques and resources for providing culturally-appropriate foods and nutrition education. (CSU) (Degree Credit)

## 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 (5)

Letter Grade or Pass/No Pass option
Five hours lecture per week plus one arranged lab hour per week. 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 French-speaking countries. This course is conducted primarily in French. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## FREN 102 F Elementary French II (5)

Letter Grade or Pass/No Pass option
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
Five hours lecture per week plus one arranged lab hour per week. The 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 French-speaking countries. This course is conducted primarily in French. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## FREN 200 F Conversational French (2)

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
This course will focus on improving listening comprehension and speaking skills in simulated real-life situations within the framework of ACTFL Proficiency Guidelines. Reading, writing and cultural components will be included. This course may be taken concurrently with French 203 F and 204 F (preferably after FREN 203 F). Instruction will be in French. Course may be taken four times for credit. (CSU) (Degree Credit)

## FREN 203 F Intermediate French III (4)

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
Four hours of lecture per week. The course emphasizes the acquisition of an expanded vocabulary and grammatical information to develop speaking, reading and writing skills. New cultural, historic and literary material is introduced through lectures, reading and writing assignments. The course is conducted in French. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## FREN 204 F Intermediate French IV (4)

## Letter Grade or Pass/No Pass option

Prerequisite: FREN 203 F with a grade of " $C$ " or better or three years high school French with a grade of "C" or better
Four hours of lecture per week. The course emphasizes the mastery and application of all grammatical rules. It requires more advanced reading of modern and classical French, as well as a continued emphasis on oral and written expression. It is designed to help the student acquire a working knowledge of the language and to form the basis for advanced work in literature and science. Continued readings and discussions of French life and culture are an essential factor. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## FREN 299 F French Independent Study (1)

Prerequisite: Four semesters of the language
One hour lecture or scheduled conference per week. For able students who wish to increase their knowledge of literature, culture, language, or composition through individual study or research. Elective credit in the humanities area. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

## Geography (GEOG)

Social Sciences Division<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/<br>\section*{Geography Associate in Arts Degree}<br>\section*{Geography Courses}

## GEOG 100 F Global Geography (3)

Three hours lecture per week. 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. Fulfills 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)

Three hours lecture per week. This course is an overview to the world's geographical regions enhanced for honors students. 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 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 (3)

Three hours lecture per week. 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 102LF Physical Geography Lab (1)

Corequisite: GEOG $102 F$ within the past three semesters
Three hours lab/field study per week designed to supplement GEOG 102 F Physical Geography. 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. The 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 warming, 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)

Three hours lecture per week. 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 131 F Introduction to Desktop GIS (2)

Letter Grade or Pass/No Pass option
This course provides an introduction to concepts and the use of a Geographic Information System (GIS), and its role in analysis and decisionmaking. Various applications of GIS technology used in business, economics and government will also be presented. Specific topics and skills taught will include an understanding of GIS terminology, verification of data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases (map features and attribute tables), and spatial analysis (map overlays, buffers, networks). (CSU) (Degree Credit)

## GEOG 160 F Cultural Geography (3)

Three hours lecture and discussion per week. 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) Three hours lecture and discussion per week. This course provides an analysis of variations in the urbanization process of great 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. (CSU) (UC) (Degree Credit)

## GEOG 199 F Geography Independent Study (1)

One hour lecture or scheduled conference per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation depending upon course content) (UC review required.) (Degree Credit)

## GEOG 281 AF Introduction to Geographic Information Systems (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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 amp projections. Varied applications and examples of GIS technology used in environmental science, business, government and social sciences will also be presented. Specific topics and skills taught will include an understanding of GIS terminology, raster and vector data structures, verification of data sources and accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases (map features and attribute tables), and spatial analysis (map overlays, buffers, networks). (CSU) (Degree Credit)

## German (GERM)

Humanities Division<br>Office: Bldg 500, Room 522-O<br>714.992.7036<br>Dean: Dan Willoughby<br>Website: www.humanities.fullcoll.edu

## German Courses

## GERM 101 F Elementary German I (5)

Letter Grade or Pass/No Pass option
Five hours lecture per week plus one arranged lab hour per week. 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 German-speaking countries. This course is conducted primarily in German. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## GERM 102 F Elementary German II (5)

Letter Grade or Pass/No Pass option
Prerequisite: GERM 101 F with a grade of " C " or better or one year of high school German with a grade of " $C$ " or better
Five hours lecture per week plus one arranged lab hour per week. The 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GERM 200 F Conversational German (2)

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
This course will focus on improving listening comprehension and speaking skills in simulated real-life situations within the framework of the ACTFL Proficiency Guide lines. Reading, writing and cultural components will be included. This course may be taken concurrently with GERM 203 F and GERM 204 F. Instruction will be in German. Course may be taken four times for credit. (CSU) (Degree Credit)

## GERM 203 F Intermediate German III (4)

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
Four hours of lecture per week. The course emphasizes the acquisition of advanced skills in listening, speaking, reading, and writing. Students will be introduced to further elements of the culture, history, and geography of Germany through lectures, slides, films, dialogues and reading assignments. Instruction will be in German. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GERM 204 F Intermediate German IV (4)

## Letter Grade or Pass/No Pass option

Prerequisite: GERM 203 F with a grade of "C" or better or three years high school German with a grade of " $C$ " or better
Four hours of lecture per week. The course emphasizes the acquisition of more advanced listening, speaking, reading, and writing. Students will be introduced to the further elements of culture, history and geography of Germany through lectures, slides, films, dialogues and reading assignments. Instruction will be in German. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## GERM 299 F German Independent Study (1)

Prerequisite: Four semesters of the language
One hour lecture or scheduled conference per week. For able students who wish to increase their knowledge of literature, culture, or language through individual study or research. Elective credit in the humanities area. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

## Health Education (HED)

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

## Health Education Courses

## HED 140 F Health Science (3)

Three hours lecture per week. 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)

Letter Grade or Pass/No Pass option
One hour lecture per week, and a total of forty hours at the internship site required. 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<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/

## History Associate in Arts Degree

## History Courses

## HIST 110 F Western Civilization I (3)

Three hours lecture per week. 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 (3)

Three hours lecture per week. This 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. 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 111 F Western Civilization II (3)

Three hours lecture per week. This course 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 111HF Honors Western Civilization II (3)

Three hours lecture per week. This course is a continuation of HIST 110 or 110HF 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. 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 112 F World Civilizations I (3)

Three hours lecture and discussion per week. 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)

Three hours lecture and discussion per week. This 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 (3)

Three hours lecture and discussion per week. 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 (3)

Three hours lecture per week. This 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)

Three hours lecture per week. This course is a survey of American history from the colonial foundations to the present time. (CSU) (UC Credit Limitation) (Degree Credit)

## HIST 151 F Survey of British History I (3)

Three hours lecture per week. A survey of British history from prehistoric times to 1714, emphasizing the contributions of Celts, Romans, AngloSaxons 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 TudorStuart period. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## HIST 152 F Survey of British History II (3)

Three hours lecture per week. 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) CSU GE, IGETC

## HIST 154 F Ancient Egypt (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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 160AF Asia: Basic Heritage (3)

Three hours lecture per week. This course is a study of the historical developments of Asia's three great civilizations: India, China and Japan. 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) CSU GE, IGETC

## HIST 160BF Modern China and Japan (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. 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 of the Chinese and the Japanese to replace traditional institutions with something "modern" in their 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) CSU GE, IGETC

## HIST 162AF History of the Americas I (3)

Three hours lecture per week. 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 162BF History of the Americas II (3)

Three hours lecture per week. 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 165 F Introduction to the Middle East (3)

Three hours lecture per week. 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. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## HIST 170 F History of the United States I (3)

Three hours lecture per week. This course is a survey of American History from the colonial foundations to 1877. (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 as of F08) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 170HF Honors History of the United States I (3)

Three hours lecture per week. This course is a survey of American History from the colonial foundations to 1877, examining the diversity of American cultures during this period. As an honors section, this class will employ enhanced teaching methods such as a seminar approach and more research-based writing assignments calling for a higher level of critical thinking. (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 as of Fall 08) (Degree Credit) AA GE, CSU GE, IGETC

## HIST 171 F History of the United States II (3)

Three hours lecture per week. 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 as of Fall '08) (Degree Credit) AA GE, CSU GE, IGETC

HIST 171HF Honors History of the United States II (3)
Three hours lecture per week. This course is a survey of American history from 1877 to the present time, examining the diversity of American cultures during this period. As an honors section, this class will employ enhanced teaching methods such as a seminar approach and more research-based writing assignments calling for a higher level of critical thinking. (CSU) (UC Credit Limitation). Credit will be granted to either HIST 127 F or HIST 170 F or HIST 170HF and HIST 171 F or HIST 171HF as of Fall '08) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

HIST 199 F History Independent Study (1)
One hour lecture or scheduled conference per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)

## HIST 270 F Women in United States History (3)

Three hours lecture per week. 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. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

HIST 275 F History of California and the Pacific Coast (3)
Three hours lecture per week. Economic, social, intellectual, and political history of California from the earliest times to the present. Special emphasis is placed upon the geography of the state and the 20th century development of Southern California. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## HIST 299 F History Independent Study (1)

One hour lecture of schedule conference per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation depending upon course content) (UC review required) (Degree Credit)

# Horticulture (HORT) 

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

Greenhouse and Nursery Production Certificate Landscape Management Associate in Science Degree<br>Landscape Design/Management Certificate<br>Landscape Irrigation Certificate<br>Nursery Management Associate in Arts Degree<br>Ornamental Horticulture Associate in Science Degree<br>Ornamental Horticulture Certificate<br>Pest Management Certificate

## Horticulture Courses

## HORT 001 F Principles of Horticulture I (4)

Three hours lecture and three hours lab per week. Identification and use of ornamental plants; culture of landscape plantings; survey of soil properties and fertilizers; morphology of leaves, flowers and fruit, and landscape design principles for basic horticultural skills in the gardening and nursery trade. (Degree Credit)

## HORT 002 F Principles of Horticulture II (4)

Three hours lecture and three hours lab per week. Plant propagation techniques; weed control in landscapes, plant disease control; responsible and safe use of pesticides and their alternatives and turf grass management techniques for basic horticulture skills in the gardening and nursery trade. (Degree Credit)

## HORT 005 F Basic Landscape Plants I (3)

Three hours lecture per week. 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 Plant Identification. (Degree Credit)

## HORT 006 F Basic Landscape Plants II (3)

Three hours lecture per week. 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 Plant Identification. (Degree Credit)

## HORT 008AF Landscape Pruning Practices (1)

Letter Grade or Pass/No Pass option
Two hours of lecture and three hours lab per week for six weeks or the equivalent. Principles and practices used in pruning ornamental shrubs, trees, vines, herbaceous perennials, groundcovers and fruit trees found in residential and commercial landscapes will be covered. Special attention is given to appropriate plant use and maintenance. (Degree Credit)

## HORT 008BF Basic Turf Care (1)

Letter Grade or Pass/No Pass option
Two hours lecture and three hours lab per week for six weeks or the equivalent. 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)

Letter Grade or Pass/No Pass option
Two hours lecture and three hours lab per week for six weeks or the equivalent. 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 (3)

Two hours lecture and three hours lab per week for nine weeks. Principles and practices used in lighting outdoor trees, shrubs, planter beds and living spaces. Emphasis is given to appropriate selection of codeapproved low voltage electrical components, wiring and lighting fixtures for residential use.

## HORT 010BF Landscape Water Features (3)

Two hours lecture and three hours lab per week for nine weeks. 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 Training Pest Control Professionals (3)
Three hours lecture per week. Designed to assist persons desiring to be licensed as Pest Control Advisers or Pest Control Operators or 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. Course may be taken twice for credit. (Degree Credit)

## HORT 046 F Pesticide Safety for Landscape Workers (2)

Letter Grade or Pass/No Pass option
Two hours lecture per week. A course 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 (2)

Letter Grade or Pass/No Pass option
Three hours lecture and three hours lab per week for eight weeks or the equivalent. 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)

Letter Grade or Pass/No Pass option
Two hours lecture and one and one-half hour lab per week. A basic ecological 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 give nature tours in the parks. Assumes no science background. Weekly field trips required. (Degree Credit)

## HORT 075 F Habitat Assessment and Restoration (2.5)

Letter Grade or Pass/No Pass option
Two hours lecture and one and one-half hour lab per week. An eight week course 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)

Three hours lecture and three hours lab per week. A course 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) CSU GE

## HORT 153 F Landscape Irrigation (3)

Two hours lecture and three hours lab per week. 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 (3)

Prerequisite: HORT 153 F with a grade of " $C$ " or better
Two hours lecture and three hours lab per week. This course covers the principles and practices of designing residential and small commercial irrigation systems. It includes the study of component selection, sprinkler spacing and location, hydraulic calculations, graphics presentation and current practices in water conservation in irrigation. Field trips and on-site analysis will be included as part of the lab. (CSU) (Degree Credit)

## HORT 155 F Soils (3)

Two hours lecture and three hours lab per week. 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 (3)

Two hours lecture and three hours lab per week. 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)

Prerequisite: HORT 153 F with a grade of " $C$ " or better
Two hours lecture and three hours lab per week. 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 Identification (Ornamental Trees) (3)

Three hours lecture per week. The study of 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 161 F maximum credit one course.) (Degree Credit)

HORT 161 F Plant Identification (Ornamental Shrubs) (3)
Three hours lecture per week. 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. (CSU) (UC; HORT 160 F and 161 F maximum credit one course.) (Degree Credit)

## HORT 162 F Landscaping for Dry Climates (3)

Advisory: HORT 200 F
Two hours lecture and three hours lab per week. A semester course covering the effects of Southern California environment upon plant selection, knowledge of the growth requirements of selected native and exotic species, and their proper usage in landscapes. Emphasis is placed upon functional values and aesthetic qualities of native and exotic droughttolerant 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 lab projects, including one weekend trip, which is required of all students. (CSU) (Degree Credit)

## HORT 164 F Plant Identification (Annuals, Perennials, and Houseplants) (3)

Three hours lecture per week. 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)

Three hours lecture and three hours lab per week. 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)

Three hours lecture per week. Use and cost estimates of various landscape construction materials. Problems dealing with structure, grading, drainage, sprinklers, masonry, and electricity used in landscape construction. Course designed for students qualifying for the State Landscape Contractors Examination. (CSU) (Degree Credit)

HORT 169LF Landscape Construction Lab (1)
Corequisite: HORT 168 F Landscape Construction
Three hours lab per week. 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 Landscape Contracting (3)

Three hours lecture per week. 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 (3)

Two hours lecture and three hours lab per week. 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)

Two hours lecture and three hours lab per week. 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 Turfgrass Management (3)

Two hours lecture and three hours lab per week. 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)

Letter Grade or Pass/No Pass option
One hour lecture and three hours lab per week. 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)

Letter Grade or Pass/No Pass option
One and one-half hour lecture and one and one-half hour lab per week. A course, which 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)

Two hours lecture and two hours lab per week. Basic drafting techniques are taught 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)

Prerequisite: HORT 200 F with a grade of " $C$ " or better
Two hours lecture-discussion and three hours lab per week. 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 lab, including one weekend trip required of all students. (CSU) (Degree Credit)

## HORT 205 F Applied Entomology (3)

Two hours lecture and three hours lab per week. Study of 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) CSU GE

## HORT 207 F Plant Pathology (3)

Two hours lecture and three hours lab per week. 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) CSU GE

## HORT 215 F Diseases and Pests of Ornamental Plants (4)

 Prerequisite: HORT 205 F or HORT 207 F with a grade of " $C$ " or betterThree hours lecture and three hours lab per week. Diagnosis and control of parasitic and non-parasitic disease problems in ornamental landscapes. Course also involves determination of insects, mites, and other pest problems affecting ornamental plantings and the methods employed in control. Lab and field trips will be utilized to observe various problems in production areas. Transfer credit to colleges offering similar courses. California Department of Food and Agriculture continuing education hours are available for this course. (CSU) (Degree Credit)

HORT 218 F Landscape Hydraulics (3)

## Prerequisite: HORT 153 F with a grade of " $C$ " or better

Two hours lecture and three hours lab per week. 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)

Two hours lecture, three hours lab per week. 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 920 F Advanced CAD Applications in Horticulture (3) Letter Grade or Pass/No Pass option
Prerequisite: HORT 219 F CAD with a grade of "C" or better
Two hours lecture and three hours lab per week. 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. Course may be taken twice for credit. (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 170 F Education: Tutoring Individuals and Small Groups (2)

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) (UC) (Degree Credit)

## HUM N01 F Supervised Tutoring (0)

NON-CREDIT COURSE: This course provides individualized units of study based on individual student needs using a variety of courses.

# Industrial Drafting (DRAF) 

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7595

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

Drafting Technology Associate in Science Degree Industrial Drafting - Level I Certificate<br>Industrial Drafting - Level II Certificate

## Industrial Drafting Courses

## DRAF 070 F Blueprint Reading for the Metal Trades (2)

Two hours lecture per week. 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)

## ENGR 102 F Engineering Drawing (3)

Prerequisite: Three years of college preparatory mathematics or MATH 040 F and MATH 030 F with grades of "C" or better
Advisory: One year of high school mechanical drawing
Three hours lecture and three hours lab per week. Lettering, geometry constructions, orthographic and pictorial drawing, auxiliary views, sectioning, dimensioning, and fasteners will be covered. (CSU) (UC) (Degree Credit)

## DRAF 140 F AutoCAD for Industry (2)

## Advisory: DRAF 171 F or equivalent industry experience

Two hours lecture per week. 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, 2-D AutoCAD drawing commands, plotting, symbol libraries, dimensioning, productivity, and basic 3-D commands. (CSU) (Degree Credit)

## DRAF 141 F Advanced Computer Aided Design for Industry (2)

Advisory: DRAF 140 F or equivalent industry experience
One and one-half hour lecture and one and one-half hour lab per week. 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 "2-D" approach to AutoCAD will be used. (CSU) (Degree Credit)

DRAF 143 F 3-D Applications Using AutoCAD (2)
Advisory: DRAF 140 F or equivalent industry experience
One and one-half hour lecture and two and one-half hours lab per week. This course is designed for the experienced AutoCAD user who needs a working knowledge of AutoCAD's 3-D environment. Topics will include an introduction to 3-D applications, the 3-D coordinate system, display control wire frame modeling, surface modeling, solids modeling, analysis of a solids model (mass properties), model rendering, hardcopy output, and 2-D/3-D transfer. The course will be taught with an emphasis on mechanical drafting applications. (CSU) (Degree Credit)

## DRAF 145 F CAD/CAM (2)

Advisory: DRAF 140 F or equivalent industry experience
Two hours lecture and one hour lab per week. This course will introduce the process of manufacturing using a common database. Students will use popular Computer-Aided-Drafting (CAD) programs to document design ideas and transfer the database for manufacturing purposes using a Computer-Aided-Manufacturing (CAM) program. Students will produce a prototype of their original idea using a CNC machine tool driven by the CAM data. Topics will include the CAD/CAM industry environment, review of basic CAD concepts and design for manufacturing, introduction to CAM, CAD/CAM communication, CNC code generation and editing, set up and operation of machine tools, and inspection techniques. Some previous machining experience would be helpful. (CSU) (Degree Credit)

## DRAF 171 F Fundamentals of Drafting (2)

One hour lecture and three hours lab per week. A beginning drafting course. Proper use of drafting instruments, lettering, geometric construction, pictorial drawings, orthographic projection, dimensions, singleauxiliary 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 (2)
Advisory: DRAF 070 F or DRAF 171 F or equivalent industry experience
Two hours lecture per week. 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 Parametric Solid Modeling (3)

Two and one-half hours lecture and one and one-half hour lab per week. 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. Course may be taken four times for credit. (Degree Credit)

## DRAF 958 F Electronics Drafting Using AutoCAD (2)

Advisory: DRAF 140 F or equivalent industry experience
One hour and one-half hour of lecture and two and one-half hours of lab per week. This course is designed to provide experience in the use and application of microcomputer based computer-aided design (CAD) in the development of block, flow, single line, schematic, logic, and wiring diagrams. The design and development of a printed wiring board along with all necessary documentation is covered as well. Topics include software and hardware configuration, file management, productivity, menu structure, drawing creation, editing, symbol libraries, and hard copy output. (Degree Credit)

# Interior Design (IDES) 

Technology and Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7561<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu<br>Interior Design Commercial Design Certificate Interior Design Assistant Associate in Science Degree<br>Interior Merchandising Level I Certificate<br>Residential Design Certificate

## Interior Design Courses

Fullerton College offers an interdisciplinary Interior Design curriculum partnership in conjunction with three other Southern California Community Colleges: Mount San Antonio College, Orange Coast College, and Saddleback College. (Long Beach City College status is pending at the time of this printing.) This regional program provides multi-level, accredited courses, which prepare students with competencies required to enter the Interior Design profession.

## IDES 085 F Kitchen and Bath Design (2)

Prerequisite: IDES 110 F with a grade of "C" or better
One hour lecture and three hours lab per week. 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)

## IDES 100 F Fundamentals of Interior Design (3)

Three hours lecture per week. 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)

One hour lecture, three hours lab per week. This studio course is designed to apply concepts and theories presented in the lecture course, IDES 100 F Fundamentals of Interior Design. 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 (3)

Two hours lecture, three hours lab per week. 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)

Two hours lecture per week. 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)
Three hours lecture and three hours lab per week. 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)

Prerequisite: IDES 110 F or ARCH 100 F with a grade of "C" or better Two hours lecture, three hours lab per week. 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)

Four hours lecture per week. This course will cover methods of analysis, application and evaluation of products and materials used in Interior Design. Includes interior textiles, furnishings and finish materials and products. (CSU) (Degree Credit)

## IDES 170 F Space Planning (3)

Advisory: IDES 110 F
Two hours lecture and three hours lab per week. The application of programming, theory and techniques in residential and commercial space planning. Skills in drafting and presentation techniques are emphasized in the studio. (CSU) (Degree Credit)

## IDES 180 F History of Interior Architecture and

Furnishings I (3)
Three hours lecture per week. 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) AA GE

## IDES 190 F History of Interior Architecture and Furnishings II (3)

Three hours lecture per week. 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 200 F Interior Illustration (2)

Advisory: IDES 100 F and IDES 130 F
One hour lecture, three hours lab per week. 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)

Three hours lecture per week. 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)

## Advisory: IDES 100 F, IDES 130 F and IDES 170 F

One hour lecture and three hours lab per week. Develop, analyze and apply design concepts to interior environments. 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)

Three hours lecture per week. 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 (2-3)

One hour lecture per week, plus 75 hours of paid or 60 hours unpaid work experience for the first two units of credit. 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. Course may be taken twice for credit. (CSU) (Degree Credit)

## IDES 248AF Restaurant/Hotel Design (2)

Prerequisite: IDES 215 F, IDES 110 F or ARCH 100 F with a grade of "C" or better
One hour lecture and three hours lab per week. 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 (2)

Prerequisite: IDES 215 F, IDES 110 F or ARCH 100 F with a grade of "C" or better
One hour lecture and three hours lab per week. 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 Studies in International Architecture and Design (1)

A total of 18 hours of lecture and guided field trips. 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 Studies in International Architecture and

 Design (2)A total of 36 hours of lecture and guided field trips. 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 Studies in International Architecture and

 Design (3)A total of 54 hours of lecture and guided field trips. 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)
Prerequisites: IDES 215 F, IDES 110 F with a grade of " $C$ " or better One hour lecture and three hours lab per week. An emphasis is placed on 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 (5)
Letter Grade or Pass/No Pass option
Five hours lecture per week plus one arranged lab hour per week. 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 Italian-speaking countries. This course is conducted primarily in Italian. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## ITAL 102 F Elementary Italian II (5)

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
Five hours lecture per week plus one arranged lab hour per week. The 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 Italian-speaking countries. This course is conducted primarily in Italian. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## ITAL 203 F Intermediate Italian III (4)

Letter Grade or Pass/No Pass option
Prerequisite: ITAL 102 F with a grade of " $C$ " or better or two years of high school Italian with a grade of "C" or better
Four hours lecture per week. Continuation of ITAL 102 F. 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)

Letter Grade or Pass/No Pass option
Prerequisite: ITAL 203 F with a grade of "C" or better or three years of high school Italian with a grade of "C" or better
Four hours lecture per week. Continuation of ITAL 203 F. The course emphasizes the acquisition of more advanced listening, speaking, reading, and writing. Students will be introduced to the further elements of culture, history and geography of Italy through lectures, slides, films, dialogues and reading assignments. Instruction will be in Italian. (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 (5)

Letter Grade or Pass/No Pass option
Five hours lecture plus one arranged lab hour per week. 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 Japanese-speaking countries. This course is conducted primarily in Japanese. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## JAPN 102 F Elementary Japanese II (5)

Letter Grade or Pass/No Pass option
Prerequisite: JAPN 101 F with a grade of "C" or better or one year of high school Japanese with a grade of "C" or better
Five hours lecture per week plus one arranged lab hour per week. The 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## JAPN 203 F Intermediate Japanese III (4)

Letter Grade or Pass/No Pass option
Prerequisite: JAPN 102 F with a grade of "C" or better or two years of high school Japanese with a grade of "C" or better
Four hours lecture per week. The course includes development of listening and reading comprehension, speaking and writing Japanese 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

## JAPN 204 F Intermediate Japanese IV (4)

## Letter Grade or Pass/No Pass option

Four hours lecture per week. 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)

## Journalism (JOUR)

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7575

Dean: Scott McKenzie
Website: communications.fullcoll.edu
Journalism Associate in Arts Degree
Advertising Certificate
Journalism Certificate
Public Relations Certificate

## Journalism Courses

## JOUR 101 F Reporting and Writing (3)

Prerequisite: ENGL 060 F or ESL 186 F, both with a grade of "C" or better or recommended score on English placement test
Three hours seminar and lecture plus one hour lab per week. This class 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)

Prerequisite: JOUR 101 F with a grade of " $C$ " or better
Three hours seminar/lecture per week plus one hour lab per week. 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)

Three hours seminar/lecture per week. Principles of freelance writing for magazines, newspapers, and other specialized periodicals are introduced. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## JOUR 110 F Mass Media Survey (3)

Three hours lecture per week. 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 135 F Magazine Production (3)

Two hours lecture and three hours lab per week. All aspects of the magazine publishing industry will be covered. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## JOUR 140 F Public Relations and Publicity (3)

Three hours lecture per week. Students will study and practice 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 (.5-4)

Lecture and lab hours will vary according to the nature of the seminar. Communications seminars are courses designed to expose the students to up-to-date 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. Students may enroll in up to a maximum of four semesters. (CSU) (Degree Credit)

## JOUR 199 F Journalism Independent Study (1-3)

Prerequisite: JOUR 101 F with a grade of " C " or better
One hour lecture or scheduled conference or three hours independent lab research per week per unit of credit. 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. Students may enroll up to a maximum of four semesters. (CSU) (UC review required) (Degree Credit)

## JOUR 210 F Multimedia Reporting (3)

Two hours lecture and three hours lab per week. 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)

Two hours lecture and three hours lab per week. 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)

Advisory: ENGL 100 F
Three hours lecture and one hour lab per week. 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 225 F Newspaper Production (3)

Two hours lecture and three hours lab per week. This course includes the following areas of study: reporting, editing, page design, photojournalism, editing and proofreading. Online reporting and publishing techniques are also studied and practiced in the production of The Hornet newspaper and Online Hornet. Course may be taken four times for credit. (CSU) (Degree Credit)

JOUR 274 F Spanish-Language Media Reporting (3)
Advisory: Basic Spanish language skills (reading and writing) Three hours lecture and one hour lab per week. 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 Spanishspeaking and Latino communities. Course may be taken four times for credit. (CSU) (Degree Credit)

JOUR 290 F Internship in Journalism/Public Relations (2-4) One hour lecture per week and five hours supervised employment or unpaid internship per week in journalism or public relations. An additional five hours per week of supervised employment or unpaid internship for each additional unit of credit. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

Library Technology (LIB)<br>Library Division<br>Office: Bldg 800, Room 823 (LLRC)<br>714.992.7039<br>Dean: Jackie Boll<br>Website: library.fullcoll.edu

## Library Courses

## LIB 100 F Introduction to Research (1)

One hour lecture per week. This class is designed to introduce students to print and online library research tools and resources, including the Internet. Students will learn how to develop research strategies that will enable them to locate/retrieve, analyze, evaluate, and cite appropriate resources on a given topic. Each student will compile and prepare a written bibliography of relevant sources on a topic. The class 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)

One hour lecture per week.This is an enhanced course designed to introduce honors students to print and online library research tools and resources, including the Internet. Students will develop critical thinking skills and learn research strategies that will enable them to locate/ retrieve, analyze, evaluate, and cite appropriate resources on a given topic. Each student will compile and prepare a written bibliography of relevant sources on a topic. The class is of special value to those students intending to transfer to a four-year institution. (CSU) (UC) (Degree Credit)

## LIB 103 F Research in the 21 st Century (2)

One and one-half hours lecture and one and one-half hours lab per week. Students will examine the core concepts of information competency for locating, organizing, evaluating and presenting information to conduct academic and personal research. The impact of the Internet on society and academia will be analyzed with special emphasis on copyright and plagiarism issues. Students will identify and analyze the ethical, legal and socio-political implications of information. (CSU)

## Machine Technology (MACH)

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7586

Dean: Scott McKenzie
Website: techneng.fullcoll.edu
CNC Operator Skills Certificate
Computer Numerical Control (CNC) Certificate
Machine Technology — Level I Certificate
Machine Technology - Level II Certificate
Mastercam Skills Certificate
Surfcam Skills Certificate

## Machine Technology Courses

## MACH 010 F Machining Skills Lab (.5-2)

Open Entry/Open Exit
Pass/No Pass only
Twenty-seven hours lab for each .5 unit of credit. 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. This course may be taken a total of four times.

## MACH 040 F CNC Wire EDM: Programming and <br> Operation (3)

Two and one-half hours lecture and one and one-half hours lab per week. 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

## Technology (.5-3)

Zero to three hours lecture, zero to nine hours lab per week. 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 Mastercam (3)

Advisory: MACH 086 F or MACH 091 F or MACH 116 F
Two and one-half hours lecture and one and one-half 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 Advanced CNC Programming Using Mastercam (3)

Advisory: MACH 050 F CNC Programming or industry experience using Mastercam in a 2-D environment
Two and one-half hours lecture and one and one-half hour lab per week. 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 3-D 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 SURFCAM (3)

Advisory: MACH 086 F or MACH 091 F or MACH 116 F
Two and one-half hours lecture and one and one-half hours lab per week. 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 Using SURFCAM (3)

Two and one-half hours lecture and one and one-half hours lab per week. 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 3-D 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 and Operation (3)

Two and one-half hours lecture and one and one-half hour lab per week. 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)

Two and one-half hours lecture and one and one-half hours lab per week. 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)

Advisory: MACH 086 F or industry experience operating both CNC lathes and mills and completion of MACH 087 F
Two and one-half hours lecture and one and one-half hour lab per week. 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 processed during lab time. (Degree Credit)

## MACH 090 F Multiple Axis CNC Set and Operation (3)

Prerequisite: MACH 086 F, MACH 087 F, and MACH 088 F, all with a grade of "C" or better
Two and one-half hours lecture and one and one-half hours lab per week. 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)

Three hours lecture and six hours lab per week. 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)

Prerequisite: MACH 091 F or MACH 116 F (both semesters) with a grade of "C" or better
Three hours lecture and six hours lab per week. 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)

Prerequisite: MACH 092 F with a grade of "C" or better
Three hours lecture and six hours lab per week. 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. This course may be taken twice for credit. (Degree Credit)

## MACH 116 F Machine Tools (2)

One hour lecture and three hours lab per week. 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. Course may be taken twice for credit. (CSU) (Degree Credit)

# Marketing Management (MKT) 

Business Division<br>Office: Bldg 300, Room 310<br>714.992.7032<br>Dean: Ann Hovey<br>Website: http://bizdiv.fullcoll.edu

## Marketing Management Associate in Science Degree Marketing Management Certificate

## Marketing Management Courses

## MKT 090 F Current Issues in Marketing (.5-3)

Variable lecture and/or lab hours per week. 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. May be taken for credit four times.

## MKT 100 F Introduction to Marketing (3)

Three hours lecture per week. This course is an introduction to marketing and e-marketing principles and their practical applications. 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)

## MKT 103 F Principles of Advertising (3)

Three hours lecture per week. This course covers the role 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 Internet Marketing and Promotion (3)

Three hours lecture per week. 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)

One and one-half hour lecture and one and one-half hour lab per week. 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)

One and one-half hour lecture and one and one-half hour lab per week. 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 201 F Small Business Promotions (3)
Three hours lecture per week. 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 205 F Multicultural Markets in U.S. (3)
Three hours lecture per week. 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)

Three hours lecture per week. 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 Associate in Arts Degree

## Mathematics Courses

## MATH 004 F Basic Mathematics I (2)

Pass/No Pass only
Two hours lecture and one-half hour arranged per week. This course is an intensive review of the fundamentals of arithmetic. The course includes: arithmetic operations with whole numbers and fractions, rounding and estimation, and applied problems. Calculators will not be permitted. NOTE: This course is currently not being offered.

## MATH 006 F Basic Mathematics II (2)

Pass/No Pass only
Prerequisite: MATH 004 F with a grade of "Pass"
Two hours lecture and one-half hour arranged per week. This course is an intensive review of the fundamentals of arithmetic. The course includes: 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. NOTE: This course is currently not being offered.

## MATH 010 F Basic Mathematics (4)

Four hours lecture and one hour arranged per week. 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)

Prerequisite: MATH 004 F and MATH 006 F with a grade of "Pass" or MATH 010 F with a grade of "C" or better, or math skills clearance Four hours lecture and one hour arranged per week. 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)

Prerequisite: MATH 015 F with a grade of "C" or better or math skills clearance
Four hours lecture and one hour arranged per week. 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)
Prerequisite: MATH 020 F with a grade of "C" or better or math skills clearance
Four hours lecture and one hour arranged per week. 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)

Prerequisite: MATH 020 F with a grade of "C" or better or math skills clearance
Four hours lecture and one hour arranged per week. 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 100 F Liberal Arts Mathematics (3)

Prerequisite: MATH 040 F with a grade of "C" or better or math skills clearance
Three hours lecture per week. This is a survey course with selected topics from the history and development of mathematics, patterns and inductive reasoning, set theory and deductive reasoning, the real number system, algebra, geometry, probability, statistics, and problem solving. It 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 Statistics (4)

Prerequisite: MATH 040 F with a grade of "C" or better or math skills clearance
Four hours lecture per week. 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 ChiSquare Distribution with applications. Scientific and/or graphing calculators will be used extensively throughout the course. Computers, utilizing MINITAB will be used for various topics. Students who receive credit for MATH 120 F may not receive credit for SOSC 120 F. (CSU) (UC Credit Limitation: MATH 120 F or MATH 120HF and PSY 161 F combined, maximum one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 120HF Honors Introductory Probability and Statistics (4)

Prerequisite: MATH 040 F with a grade of "C" or better or math skills clearance
Four hours lecture per week. An enriched approach designed for honors students. 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 graphic calculators will be used extensively throughout the course. Computers, utilizing MINITAB 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 or MATH 120HF and PSY 161 F combined, maximum one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 129 F College Algebra for Business Calculus (4)

Prerequisite: MATH 040 F with a grade of ' $C$ ' or better or math skills clearance
Four hours lecture per week. 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 and economics, systems of equations and matrices, financial applications of sequences and series, 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)
Prerequisite: MATH 129 F with a grade of " $C$ " or better or math skills clearance
Four hours lecture per week. 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 combined with MATH 150AF; maximum credit, one course) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 141 F College Algebra (4)

Prerequisite: MATH 040 F and MATH 030 F with grades of " C " or better or math skills clearance. This course may be taken prior to or concurrently with MATH 142 F. Both MATH 141 F and MATH 142 F are required for enrollment in MATH 150AF.
Four hours lecture and one hour arranged per week. This is a onesemester course 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. (CSU) (UC Credit Limitation; MATH 141 F and MATH 129 F; maximum combined credit, one course) (Degree Credit) AA GE, CSU GE, IGETC

MATH 141 HF Honors College Algebra (4)
Prerequisite: MATH 040 F and MATH 030 F with a grade of " C " or better. 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.
Four hours lecture and one hour arranged per week. An enriched approach designed for honors students. This 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. (CSU) (UC Credit Limitation; MATH 141 F and MATH 129 F ; maximum combined credit, one course) (Degree Credit) AA GE, CSU GE, IGETC (approval pending)

## MATH 142 F Trigonometry (4)

Prerequisite: MATH 040 F and MATH 030 F with grades of "C" or better or math skills clearance. This course may be taken concurrently with MATH 141 F. Both MATH 141 F and MATH 142 F are required for enrollment in MATH 150AF.
Four hours lecture and one hour arranged per week. This is a onesemester 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, DeMoivre's theorem. Calculators will be used for selected topics. (CSU) (Degree Credit) AA GE, CSU GE

## MATH 150AF Calculus I (4)

Prerequisite: MATH $141 F$ and MATH $142 F$ with a grade of "C" or better or math skills clearance
Four hours lecture per week. This is a beginning calculus course covering 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 150AF combined with MATH 130 F, maximum credit one course.) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 150BF Calculus II (4)

Prerequisite: MATH 150AF with a grade of "C" or better
Four hours lecture per week. This is a second semester 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, GETC

## MATH 171 F Discrete Mathematics (4)

Prerequisite: MATH 141 F and MATH 142 F, both with a grade of "C" or better, or math skills clearance
Four lecture hours per week. This is one of two courses in fundamental discrete mathematical concepts and techniques needed in computerrelated disciplines. Topics include logic, truth tables, Boolean algebra, logic circuits, elementary set theory, functions, relations, proof techniques, combinatorics, probability, and recurrences. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 172 F Graph Theory and Linear Algebra (4)

Corequisite: MATH 171 F taken concurrently or completed with a grade of "C" or better
Four hours lecture per week. 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 Elementary Teachers (3)

Prerequisite: MATH 100 F and MATH 030 F with a grade of " C " or better
Three hours lecture per week. 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 (4)

Prerequisite: MATH 150BF with a grade of "C" or better
Four hours lecture per week. This is a third semester course in calculus covering conic sections, solid analytic geometry, vectors in three dimensions, vector calculus, differential calculus of functions of several variables, multiple integration, vector fields and theorems. Hand calculators will be used for selected topics. (Degree Credit) (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MATH 250BF Linear Algebra and Differential Equations (4) Prerequisite: MATH 250AF with a grade of "C" or better
Four hours lecture per week. 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 solutions, and Laplace transformations. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MATH 250CF Additional Topics in Linear Algebra (2)

Corequisite: MATH 250BF taken concurrently or completed with a grade of "C" or better
Two hours lecture per week. 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 295 F Mathematics Seminar (.5-4)

Prerequisite: MATH 040 F with a grade of " $C$ " or better
One-half to four hours lecture and zero to nine hours lab per week. 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. Topics are of varying rigor and depth, depending on progress in the field and the abilities of the participants. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## MATH 299 F Mathematics Independent Study (1)

One to three hours lecture or scheduled conferences per week or equivalent. This course is for able students who wish to increase their knowledge of pure and/or applied mathematics through individual study and small group conferences. Elective credit in Mathematics. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## MATH N01 F Improving Individual Math Skills Lab (0)

NON-CREDIT COURSE: This course provides individualized units of study based on individual student needs in writing, reading or mathematics skills.

## Metallurgy (METL)

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7051

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

## Metallurgy Courses

## METL 192 F Fundamentals of Metallurgy (3)

Three hours lecture per week. 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
Office: Bldg 400, Room 411
714.992.7043

Dean: Carol Mattson (Interim)
Website: http://natsci.fullcoll.edu/

## Microbiology Associate in Arts Degree

## Microbiology Courses

## MICR 220 F Medical Microbiology (4)

Advisory: Biological sciences lab course
Three hours lecture and three hours lab per week. 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 two-year allied health professional programs. (CSU) (Degree Credit) CSU GE

## MICR 262 F General Microbiology (5)

Prerequisite: A biological science lab course with a grade of "C" or better that includes cellular structure/function and CHEM 101 F or equivalent with a grade of " $C$ " or better
Three hours of lecture and six hours of lab per week. 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, environment 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) CSU GE, IGETC

## Music (MUS)

Fine Arts Division<br>Office: Bldg 1100, Room 1115<br>714.992.7034<br>Dean: Bob Jensen<br>Website: finearts.fullcoll.edu

Music Associate in Arts Degree<br>Certificate in Piano Teaching<br>Music: Commercial Associate in Arts Degree<br>Recording/Production Certificate

## Music Courses

## MUS 001 F Instrumental Performance Practicum (.5-3)

Letter Grade or Pass/No Pass option
This course is for students who wish to increase their knowledge of Instrumental Performance. 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. Course may be taken four times for credit.

## MUS 002 F Community Band Studies (1)

Three hours lecture and one and one-quarter hours lab per week. Performance of standard repertoire of Concert Band Literature. Emphasis is on developing tone, pitch, balance, blend, and ensemble accuracy in performance. Audition is required for seating placement within the ensemble. Performances off campus and outside of class time are required. Course may be taken four times for credit. (Degree Credit)

## MUS 003 F Community Band Experience (1)

Three hours lecture and one hour lab per week. Performance of standard repertoire of Concert Band Literature. Emphasis is on development of expressive playing, nuance, phrasing, interpretation of music, and accuracy in performance. Music of British composers Ralph Vaughan Williams, Gustav Holst, Sir William Walton and Percy Grainger will be studied throughout this course. Audition is required for seating placement within the ensemble. Course may be taken four times for credit.

## MUS 010 F Percussion Practicum (.5-6)

Letter Grade or Pass/No Pass option
One-half to three units lecture and one-half to three units lab per week. This course is for students who wish to increase their skills and knowledge of Percussion I performance. 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. Course may be taken four times for credit.

## MUS 011 F Spring Opera Studies (3)

Letter Grade or Pass/No Pass option
Three hours lecture plus one hour listening in the Music Lab per week. This course is dedicated to the students' understanding and appreciation of the repertoire, artists, and productions of opera with an emphasis upon the current Metropolitan Opera season. Opportunity for attendance at Metropolitan Opera performances in New York City will be provided. Course may be taken four times for credit.

## MUS 012 F Summer Opera Studies (3)

Letter Grade or Pass/No Pass option
Three hours lecture plus one hour listening in the Music Library per week. This course is dedicated to the students' understanding and appreciation of the repertoire, artists, and productions of opera with an emphasis upon the current Santa Fe Opera season in Santa Fe, New Mexico. Opportunity for attendance at Santa Fe Opera performances will be provided. Course may be taken four times for credit.

MUS 013 F Fall Opera Studies (3)
Letter Grade or Pass/No Pass option
Three hours lecture plus one hour listening in the Music Library per week. This course is dedicated to the students' understanding and appreciation of the repertoire, artists, and productions of opera with an emphasis upon current Opera Pacific and Los Angeles Opera seasons. Opportunities for attendance at local operatic productions will be provided. Course may be taken four times for credit.

## MUS 021 F The Teaching of Piano I (3)

Letter Grade or Pass/No Pass option

## Prerequisite: Piano audition

Three hours lecture per week plus one hour per week in Music Lab. This course is designed to develop skills on methods of teaching beginning and elementary piano students. The emphasis is on comparison of piano books available today; communication skills; networking; and business aspects of maintaining a private piano studio. This course is not for beginning pianists.

## MUS 022 F The Teaching of Piano II (3)

Letter Grade or Pass/No Pass option
Three hours lecture plus one hour per week in Music Lab. This course is an overview of performance practices and musical styles of each musical period. Students will learn pedagogical methods for teaching intermediate to early advanced level piano students through a hands-on study of repertoire, theory and technique from a teaching standpoint. Class participation includes peer teaching, piano competition, and teaching demonstrations. Beginning pianists may not take this course.

MUS 030 F Music Notation Software (2)
Two hours lecture plus two hours arranged in the Music Lab per week. This course offers instruction in the preparation of professional-quality manuscripts, vocal scores, and instrumental scores. This course will include the transposition of instruments and copying from full instrumental scores and is open to all music majors, music teachers, or performers. This is a career-oriented course. (Degree Credit)

## MUS 031 F History and Appreciation Practicum (.5-3)

Letter Grade or Pass/No Pass option
One-half to three units lecture and one-half to three units lab per week. This course is for students who wish to increase their knowledge of Music History and Appreciation. 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. Course may be taken four times for credit.

## MUS 070 F Musical Theatre Techniques (2)

Pass/No Pass only
Two hours lecture per week. 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. Course may be taken four times for credit.

## MUS 072 F Opera Theatre Workshop (2)

Advisory: Students are admitted by audition or by consent of the instructor.
Two lecture hours per week. The student will participate in an in-depth analysis and application of the skills necessary for the performance in the styles of opera theater from audition to performance. Course may be taken four times for credit.

## MUS 080 F Steel Drum Class (1)

One hour lecture and one hour lab per week. This course is intended to give the students the basic skills to play the steel drum. Students will get hands on experience in an ensemble setting. This class is designed to prepare students for the Steel Drum Ensemble. Lectures and demonstrations are combined with hands on experience in learning to play the steel drum. Students will learn music from Trinidad, modern jazz, and classical arrangements. This will be accomplished through sight reading and by traditional rote methods. Course may be taken four times for credit.

## MUS 081 F Music Tour Practicum (.5-3)

Letter Grade or Pass/No Pass option
Zero to three hours lecture per week plus zero-nine hours lab per week. 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. Course may be taken for credit four times.

## MUS 097 F Intermediate Percussion: Drum Set (1)

Prerequisite: MUS 152 F with a grade of "C" or better and audition establishing elementary sight reading skills
One hour lecture and one hour lab per week, plus one hour per week in Practice lab 1114-N. The students will learn popular drum set techniques through lecture, demonstration, text, studio 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. Course may be taken four times for credit.

## MUS 100 F Music Lab (1-2)

Open Entry/Open Exit
Pass/No Pass only
Fifty-four to one hundred eight hours lab required per term in the Computer Lab, Music Library or Practice Room Suite 1114. 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)

Three hours lecture per week. This course is designed as an entry-level music theory course for non-music majors. The course includes basic music terminology, rhythm and pitch notation, clefs, scales, intervals and triads. Concurrent enrollment in MUS 135AF or MUS 135BF is desirable. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 102 F Music Reading (3)

Three hours lecture per week plus one hour in the Rhythm Lab or Music Library per week. Designed for the person whose music reading skills are non-existent 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 104AF Beginning Musicianship (1)

Prerequisite: MUS 106 F with a grade of " $C$ " or better
Corequisite: MUS 107AF

## Advisory: MUS 135AF

Two hours lecture per week plus one hour in the Rhythm/Computer Lab per week. This is the first course in ear training, sight singing, and musicianship for the music major. It includes sight singing, developing melodic and rhythmic performance skills along with melodic, harmonic, and rhythmic dictation. (CSU) (UC) (Degree Credit) AA GE

## MUS 104BF Intermediate Musicianship (1)

Prerequisite: MUS 104AF with a grade of "C" or better

## Corequisite: MUS 107BF

## Advisory: MUS 135AF

Two hours lecture per week plus one hour in the Rhythm/Computer Lab per week. This course is a continuation of MUS 104AF. 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 106 F Introduction to Music Theory (3)

## Advisory: MUS 135AF

Three hours lecture per week plus one hour in the Music Computer Lab per week. Designed as the entry-level music theory class for music major, this course 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)

## MUS 107AF Harmony I (3)

Prerequisite: MUS 106 F with a grade of "C" or better, or the ability to read music in treble and bass clef and to understand basic music terminology, rhythm and pitch notation, clefs, scales, intervals, and

## triads

Corequisite: MUS 104AF
Advisory: MUS 135AF
Three hours lecture per week. 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, nonharmonic tones, harmonic progressions and keyboard harmony. (CSU) (UC) (Degree Credit) AA GE, CSU GE

MUS 107BF Harmony II (3)
Prerequisite: MUS 107AF with a grade of "C" or better
Corequisite: MUS 104BF
Advisory: MUS 135AF
Three hours lecture per week. This course follows MUS 107AF in the music theory sequence. It includes altered non-harmonic tones, and secondary dominants, modulation to closely related keys, borrowed chords, augmented sixth chords, the Neapolitan sixth, and altered dominants. Further studies will include modulation to foreign keys, ninth, eleventh, and thirteenth chords, and two and three part song form. (CSU) (UC) (Degree Credit)

MUS 108 F Introduction to Music Technology (2)
Two hours lecture per week. This course is a prerequisite or concurrent course to recording (MUS 124 F ) and electronic music (MUS 110 F) classes. This course is required of music majors. The course covers 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. (CSU) (Degree Credit)

## MUS 110 F Electronic Music I (3)

## Prerequisite: MUS 108 F

Three hours lecture per week plus two hours arranged per week in the synthesizer lab. This course covers the recent history of electronic music, the classical tape studio, and the analog voltage controlled synthesizer, as well as the fundamentals of electronic music theory and techniques for instrument synthesis and sound design. (CSU) (Degree Credit) CSU GE

MUS 112 F The Music Business (2)
Two hours lecture per week. This course is an introduction to intellectual property law, copyright forms, songwriter, publisher, recording artist, producer, and personal management agreements. This course also includes an explanation of Performance Rights Societies, licensing procedures, the foreign market, record manufacturing and distribution, and an overall look at the dynamics of the music and entertainment industries. Guest speakers will appear according to availability. (CSU) (Degree Credit)

## MUS 113 F Jazz History - An Appreciation (3)

Three hours lecture per week plus one hour listening in the Music Library per week. This course is a historical study of America's only original musical art form: jazz music. The principal focus will be on developing 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 listening will be the primary function in the classroom. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MUS 114 F Women, Music and Society (3)
Three hours lecture plus 30 minutes arranged listening in the Music Lab per week. This course focuses on the contributions women have made as composers and performers as well as the gender-specific problems to which women have been subject. There will be recitals and guest lecturers as well as presentations by students of selected topics. Attendance at two concerts related to women making music. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## MUS 116 F Music Appreciation (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week, plus one hour listening in the Music Library per week. This course is designed for the non-music major, and will cover music materials from the Middle Ages to the present. Emphasis is on listening to and the discussion of choral, orchestral, solo, opera, and chamber works. Concert attendance is required. Open to all students. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

MUS 117 F American Popular Music/Jazz Music Survey (3) Prerequisite: Reading skills evaluation recommended
Three hours lecture per week, plus one hour listening in the Music Library per week. Beginning with the musical influences of India, Africa, and Europe, the course examines the social conditions that made the music happen "that way" and grow into today's music. Includes Ragtime and Storyville, Blues, Spirituals and the Great Awakening, Jazz Age, Depression and Radio, Swing the King, Big Bands, Boogie Woogie, Rhythm 'n Blues, Country and Western, Rock 'n Roll, Progressive Rock, Beatles and Rolling Stones, White Ballad Tradition and Electronic Music. (CSU) (UC) AA GE, CSU GE, IGETC

## MUS 118 F Introduction to Opera (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week plus one hour listening in the Music Library per week. 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)

Three hours lecture per week plus one hour listening in the Music Library per week. A historical study of the rock musician and their music. The principal focus will be on the music with secondary emphasis on the sociological, political, and economic conditions, which so heavily influenced this musical development. Listening will be the primary function in the classroom. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## MUS 120 F Survey of Music History (3)

Three hours lecture per week. 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)

Prerequisite: MUS $112 F$ with a grade of " $C$ " or better
Two hours lecture per week. 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 123 F Concert Hour (1)

One hour lecture per week. Performance-lectures by faculty, guest artists, and students. Designed to provide the opportunity for students to expand their musical horizons by exposure to a wide variety of musical fare, to learn their roles as listeners, and to participate as student recitalists. Required of music majors but open to all students. Course may be taken four times for credit. (CSU) (Degree Credit) AA GE

## MUS 124 F Recording Studio I (3)

Prerequisite: MUS 108 F with a grade of "C" or better
Two hours lecture and four hours lab per week. This course covers the fundamental concepts in audio recording technology. Including studio 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 for Performers (1)

One hour lecture plus one hour lab per week. 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. Course includes recording, use of clic tracks, mike placement/set up, use of headphones, proper overdubbing techniques, lip syncing when needed and developing advanced studio performance skills. Units earned will be one unit of credit for 18 hours of time. 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. (CSU) (Degree Credit)

## MUS 126 F Beginning Voice (1)

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of basic vocal techniques in a class situation. Deals with problems in tone production, breath control, pronunciation and choice of song literature. Preparation for recitals. Open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 130 F Beginning Guitar (1)

Letter Grade or Pass/No Pass option
One hour lecture and one hour lab plus one hour practice in Practice Room Suite 1114 per week. Study focuses on the fundamentals of playing the guitar: technique, note reading, scales, chords, simple picking and strumming patterns. A variety of musical styles, from classical to rock, are included in the repertoire. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 135AF Beginning Piano (1)

Letter Grade or Pass/No Pass option
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. This course will cover the fundamentals of piano playing, posture, keyboard topography, note reading, 5 -finger-pattern exercises, sight reading and piano repertoires. Course involves sight reading, technique and performing of prepared pieces. Required of music majors whose piano skills are non-existent or very limited. Open to all students. (CSU) (UC) (Degree Credit) CSU GE

## MUS 135BF Piano (1)

Letter Grade or Pass/No Pass option
Prerequisite: MUS 135AF with a grade of "C" or better
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Progressive study of basic piano techniques in a class situation. Focuses on developing functional keyboard skills by using basic chordal and scale materials. Involves group and solo playing of familiar melodies such as folk tunes, classical, romantic and contemporary pieces. Required of music majors whose piano skills are very limited. Open to all students. May be taken three times for credit. (CSU) (UC) (Degree Credit)

## MUS 143 F Beginning Strings (1)

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of the violin, viola, cello or string bass in a class situation. No previous experience necessary. Open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 146 F Woodwind Class (1)

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of the flute, oboe, bassoon, clarinet or saxophone in a class situation. No previous woodwind experience necessary. Open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 149 F Brass Class (1)

One hour lecture and one hour lab per week plus one hour practice in practice Room Suite 1114 per week. Study of the trumpet, French horn, trombone, baritone horn, or tuba in a class situation. No previous brass experience necessary. Open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 152 F Percussion Class (1)

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of snare drum, timpani, and keyboard-mallet instruments in a class situation. Emphasis on rhythmic accuracy. No previous percussion experience necessary. Open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 156 F Beginning Jazz Improvisation Instrumental (1)

One hour lecture and two hours lab per week plus one and one-quarter hours in the Rhythm Lab, Recording Studio, or Music Library per week. Emphasis upon beginning techniques of rhythmic, melodic, and harmonic improvisation. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

MUS 157 F Beginning Vocal Styling and Improvisation (1) Advisory: Concurrent or previous enrollment in MUS 126 F One hour lecture and one hour lab per week plus 1-1/4 hours in the Rhythm Lab, Recording Studio or Music Library per week. Designed to give vocal students training in jazz and popular song-styling techniques and to introduce students to rhythmic and melodic word manipulation (improvisation). May be taken twice for credit. (CSU) (UC) (Degree Credit)

## MUS 180 F Collegiate Chorale (1)

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recording, and concerts. Standard choral literature will be rehearsed and performed, with an emphasis on basic choral techniques. Course is open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 181 F Women's Chorale (1)

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recording, and concerts. Women's Chorale 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. Ability to sing accurate pitches is strongly desirable. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

MUS 196HF Honors Creative Arts - Music (3)
Three hours lecture and one hour lab per week. 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)

Prerequisite: MUS 107BF with a grade of "C" or better
Corequisite: MUS 204AF
Advisory: MUS 135AF
Three hours lecture per week. This course introduces the contrapuntal style of 17th and 18th 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 threepart fugue. (CSU) (UC) (Degree Credit)

## MUS 204AF Advanced Musicianship (1)

Prerequisite: MUS 104BF with a grade of " $C$ " or better Advisory: MUS 135AF
Two hour lecture plus one hour in the Music Library or Rhythm Lab per week. This course is a continuation of MUS 104BF. This course 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 204BF Pop/Commercial Musicianship (formerly Advanced Musicianship) (1)

Prerequisite: MUS 104BF with a grade of 'C' or better. Corequisite: MUS 205 F
Two hours lecture plus one hour in the Music Library or Rhythm Lab per week. This course is a continuation of MUS 204AF. 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)

Prerequisite: MUS 107BF with a grade of "C" or better Corequisite: MUS 204BF
Four hours lecture per week plus one hour in the Rhythm Lab or Music Library per week. Study of harmonic material as used in popular music and jazz. Emphasis on aural recognition of chords, harmonic progressions and melodies. Study of chord progressions, substitutions, harmonic alterations and melodic writing. (CSU) (UC) (Degree Credit)

MUS 207 F Pop/Commercial Arranging/Composing (3)
Prerequisite: MUS 205 F with a grade of " C " or better
Four hours per week lecture plus one hour in the Rhythm Lab or Music Library per week. Analysis of contemporary and traditional songs and study of techniques of scoring for various combinations of voices and instruments. Emphasis of using modern orchestration and scoring projects to be performed and recorded for class members. (CSU) (Degree Credit)

## MUS 208 F Music Copying (2)

Two hours lecture per week. Instruction in the preparation of professional-quality manuscripts, vocal scores and instrumental scores. Includes transposition of instruments and copying from full instrumental scores. Open to all music majors, music teachers or performers. This is a vocational, career-oriented course. (CSU)

## MUS 224 F Recording Studio II (3)

Prerequisite: MUS 124 F with a grade of " $C$ " or better
Two hours lecture and four hours lab per week. This course provides an introduction to digital audio concepts, recorders, synchronization, and the digital audio workstation. Students will be assigned projects in the music department's recording facilities. Course may be taken twice for credit. (CSU) (Degree Credit)

## MUS 225 F Applied Music - Private Study (1)

Prerequisite: Audition
One hour lecture per week, plus one half hour lesson with private instructor per week, plus five hours of practice in Practice Room per week. This course is for music majors and it affords them the opportunity to receive private music lessons with a Fullerton College Faculty member. A performance at Faculty Juries is required each semester. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 227 F Intermediate Voice (1)

## Advisory: MUS 126 F

One hour lecture and one hour lab per week plus one hour practice per week in Practice Suite 1114. Study of vocal literature and techniques in a class situation. Emphasis on individual progress in tone production, breath control and diction. Designed for more advanced non-major, or the voice major not yet qualified for Advanced Voice. Preparation for recitals. (CSU) (UC) (Degree Credit)

## MUS 228 F Advanced Voice (1)

Advisory: MUS 227 F or audition
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction in vocal techniques and interpretation of solo voice literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. Designed for music majors but open to all students. Faculty juries requested each semester. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 231 F Intermediate Guitar (1)

Prerequisite: MUS 130 F with a grade of " $C$ " or better
One hour lecture and one hour lab per week. Study of guitar literature and techniques in a class situation. Emphasis on individual progress in execution and interpretation. Designed for more advanced non-guitar major or the guitar major who is not yet qualified for Classical or Jazz Guitar. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 232 F Classical Guitar (1)

Prerequisite: MUS 231 F with a grade of " $C$ " or better
One hour lecture and one hour lab per week. Individual instruction in guitar techniques and interpretation of solo guitar literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 233 F Jazz Guitar (1)

## Prerequisite: Audition

One hour lecture and one hour lab per week. Designed to give a functional knowledge of the guitar and the electric-bass in the jazz and popular idioms. Emphasis upon diatonic scales in all positions, chords, arpeggios and practical theory. In the evening college this class may be offered as guitar only, or electric-bass only if enrollment warrants - see schedule of classes. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

MUS 234 F Intermediate Rock Guitar (1)
Prerequisite: Audition or MUS 130 F with a grade of "C" or better One hour lecture and one hour lab per week. This is a skills course designed for the guitarist who has already mastered the fundamental instrumental technique and basics of music. Study focuses on proceeding from the general study of the guitar to techniques specific to rock, blues, and pop guitar styles. Open to students who have completed at least one semester of MUS 130 F , or to other students by audition. Course may be taken four times for credit. (CSU) (Degree Credit)

## MUS 236 F Intermediate Piano (1)

Prerequisite: MUS 135BF with a grade of "C" or better or audition
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of keyboard literature and techniques in a class situation. Emphasis on individual progress in building musical vocabulary, phrasing, articulations, technique and interpretation. Designed for the more advanced non-piano major or the piano major who is not yet qualified for Advanced Piano. May be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 237 F Advanced Piano (1)

Prerequisite: MUS 236 F with a grade of " $C$ " or better
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction on piano techniques and interpretation of solo piano literature in a class situation. Emphasis will be on building and memorizing piano repertoire and public performance. Performance by memory is required. Designed for music majors but open to all students. May be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 238 F Pop/Commercial Piano (1)

Prerequisite: Audition
One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Exploration and study of basic harmonic and rhythmic concept at the keyboard as applied to jazz and popular music. Emphasis on improvisation. Designed for music majors but open to all students. (CSU) (UC) (Degree Credit)

## MUS 244 F Advanced Strings (1)

Prerequisite: MUS 143 F with a grade of "C" or better or audition One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction in string techniques and interpretation of solo string literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. In the evening college this class may be offered as violin-viola only, cello only, or string bass only if enrollment warrants see schedule of classes. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 247 F Advanced Woodwinds (1)

Prerequisite: MUS 146 F with a grade of " $C$ " or better or audition One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction in woodwind techniques and interpretation of solo woodwind literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. In the evening college this class may be offered as flute only, clarinet only, saxophone only, oboe only, or bassoon only if enrollment warrants - see schedule of classes. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 250 F Advanced Brass (1)

## Prerequisite: MUS 149 F with a grade of "C" or better or audition

 One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction in brass techniques and interpretation of solo brass literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. In the evening college this class may be offered as trumpet only, French horn only, trombone-baritone only, or tuba only if enrollment warrants - see schedule of classes. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)
## MUS 253 F Advanced Percussion (1)

Prerequisite: MUS $152 F$ with a grade of " $C$ " or better or audition One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Individual instruction in percussion techniques and interpretation of solo percussion literature in a class situation. Emphasis upon repertoire and public performance. Participation in recitals is required. In the evening college this class may be offered as keyboard-mallet only, traps only, or other combination of percussion instruments if enrollment warrants. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 256 F Advanced Jazz Improvisation Instrumental (1)

Prerequisite: MUS $156 F$ with a grade of " $C$ " or better or audition One hour lecture and two hours lab per week plus one and one-quarter hours in the Rhythm Lab, Recording Studio, or Music Library per week. Emphasis upon intermediate techniques of rhythmic, melodic, and harmonic improvisation. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## MUS 257 F Advanced Vocal Styling and Improvisation (1)

Advisory: MUS 157 F, two terms with a grade of " $B$ " or better or Audition
One hour lecture and one hour lab per week plus 1-1/4 hours in the Rhythm Lab, Recording Studio or Music Library per week. Designed to give vocal students training in jazz and popular song-styling techniques and to introduce students to advanced rhythmic and melodic word manipulation (improvisation). Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## MUS 258 F Jazz Guitar Reading Ensemble (1)

Advisory: MUS 234 F, MUS 231 F and/or MUS 233 F
Lectures and demonstrations are combined with rehearsals of beginning and intermediate level jazz guitar repertoire. Emphasis is placed on developing reading skills (both rhythm and note recognition), chord knowledge, and improvisation up to the intermediate level. Intermediate guitarists are also given the opportunity to work with a rhythm section and to develop the skills necessary to work effectively with other instrumentalists. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 259 F Steel Drum Ensemble (1)

## Prerequisite: Audition

One hour lecture and one hour lab per week. 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)

Prerequisite: Audition
One hour lecture and one hour lab per week. Rehearsal and performance of original and transcribed guitar ensemble literature. Performances required of all participants. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 261 F String Ensemble (1)

## Prerequisite: Audition

One hour lecture and one hour lab per week. Rehearsal and performance of standard and current string ensemble literature. This course is open to music majors as well as non-music majors and to all residents of the North Orange County Community College District. This course is open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 262 F Woodwind Ensemble (1)

## Prerequisite: Audition

One hour of lecture and one hour of lab per week plus one hour of practice in the Practice Room Suite per week. The 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)

## Prerequisite: Audition

One hour of lecture and one hour of lab per week plus one hour practice in Practice Room per week. The emphasis of this course is on modern brass ensemble literature. This class is open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 264 F Percussion Ensemble (1)

Prerequisite: Audition
One hour lecture and one hour lab per week. Rehearsal and performance of standard and current percussion ensemble literature. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 265 F Piano Ensemble (1)

## Prerequisite: Audition

One hour lecture and one hour lab per week. The course is designed to enhance ensemble-playing skills by focusing on rehearsal technique, balance, and hand coordination. Emphasis is on performing of 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. May be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 266 F Jazz Combo (1)

Prerequisite: Audition
One hour lecture and two hours lab per week. Lecture/demonstrations, combined with student performances, recordings and tours are used to increase understanding and appreciation of many Jazz genres and their relationship to modern American Music. Ability to play suitable instruments is required. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 268 F Jazz Guitar Ensemble (1)

## Prerequisite: MUS $233 F$ with a grade of " $C$ " or better

One hour lecture and one hour lab per week. 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) <br> Prerequisite: Audition

One hour lecture and two hours lab per week. The combination of lecture/demonstrations with student performances are used to increase understanding and appreciation of many musical genres including Fusion, Latin, Rock, Pop, Salsa, Indian, and Afro-Cuban music and their relationship to modern American composition. Ability to play suitable instruments is required. Previous band, jazz ensemble, or orchestra experience and improvisational skills are desirable. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 270 F Electronic Music Ensemble

Prerequisite: Audition


One hour lecture and one hour lab per week plus one hour arranged time for rehearsals and performances. 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. (CSU) (Degree Credit)

## MUS 271 F Fullerton College Symphony (1)

## Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hours per week arranged in rehearsals, studio recording, and concerts. Rehearsal and performance of standard orchestral literature. Performances on Campus and in surrounding communities. Open to all residents of the North Orange County Community College District by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 273 F Concert Band (1)

## Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals and concerts. This course will rehearse and perform standard band literature. Public performances will be held at various locations. Open 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 274 F Fullerton College Symphonic Winds (1) Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, recordings, and concerts. Rehearsals and performance of standard band literature. Performances, which are required of all participants, take place on campus and in the community. This course is open to music majors and non-music majors. An audition is required. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 275 F Bravo Brass (1)

## Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recording, and concerts. Rehearsal and performance of standard brass literature. Includes American popular and jazz music and a variety of ensemble combinations including voice. Open to all residents of the North Orange County Community College District by audition. Course may be taken four times for credit. (Not currently being offered - if interested, contact Division Office.) (CSU) (UC) (Degree Credit)

## MUS 276 F Jazz Band (1)

## Prerequisite: Audition

Advisory: Concurrent enrollment in MUS 274 F
Three hours rehearsal per week plus one and one-quarter hour per week arranged in sectional rehearsals, studio recording, and concerts. Rehearsal, recording, and concert performance of standard and current jazz fusion music. Student compositions and 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)

Prerequisite: Audition
Advisory: Concurrent enrollment in MUS 274 F
Three hours rehearsal per week plus one and one-quarter hour per week arranged sectional in rehearsals, studio recording, and concerts. Rehearsal, recording, and concert performance of standard and current jazz/fusion and swing era big band music. Student composition/ arrangements encouraged. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 281 F Concert Choir (1)

## Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recordings, and concerts. Standard choral literature will be rehearsed and performed with an emphasis on early western music of the Renaissance and Baroque periods. Course is open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 282 F Fullerton College Master Chorale (1)

## Prerequisite: Audition

Three hours rehearsal per week plus 1-1/4 hours per week 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. Performances are required of all participants. Generally the performances are on campus but there may be some performances in the community. This course is open to music majors as well as nonmusic majors and to all residents of the North Orange County Community College District. An audition is required. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE

## MUS 284 F Advanced Topics in Music (.5-3)

One to three hours lecture and one to three hours lab per week. 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. (CSU) (Degree Credit)

## MUS 285 F Chamber Singers (1)

## Advisory: Audition

Three hours rehearsal per week plus 1-1/4 hours per week arranged in rehearsals, studio recording, and concerts. Choral Chamber Music literature will be rehearsed and performed on campus, in surrounding communities and schools, and on occasional tours. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 287 F Vocal Jazz Ensemble (1)

Advisory: Audition
Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recordings, 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. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 288 F BRAVO Song/Dance Ensemble (1)

## Prerequisite: Audition

Three hours rehearsal per week plus one and one-quarter hour per week arranged in rehearsals, studio recordings, and concerts. Singers who dance and dancers who sing will rehearse and perform standard and commercial music. Small instrumental ensembles or sound tracks accompany performances. Literature is chosen with an emphasis on scenes from musical theatre. Instruction includes choreography, staging, vocal and microphone techniques. This course is open to all students by audition. Course may be taken four times for credit. (CSU) (Degree Credit)

## MUS 290 F Musical Theatre Production (3)

Prerequisite: Audition
Twenty hours rehearsal per week during summer session or equivalent (two and one-half hours lecture and seven and one-half hours lab per week per semester). Rehearsal and performance of a musical or opera. Participation in all phases of the production is required. Includes leading roles, under study roles, chorus parts, dance routines, staging, and acting. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## MUS 298 F Music Internship (1-3)



One unit of credit will be awarded for each 54 hours of work experience accomplished per semester. 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. Course may be taken two times for credit. (CSU) (Degree Credit)

## MUS 299 F Music Independent Study (1)

One hour conference per week. For advanced students who wish to pursue a particular area of music through individual study. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## MUS 910 F Electronic Music II (3)

## Prerequisite: MUS 110 F with a grade of " $C$ " or better

Three hours lecture and one hour arranged per week in the synthesizer lab. This class covers the procedures, instruments, and techniques used in a contemporary MIDI synthesizer studio. It includes the use of sequencers, editor/librarians, intelligent arrangers, algorithmic composers, and non-linear editing in a digital audio workstation. Course may be taken three times for credit. (Degree Credit)

## Office Technology (OT)

Business and CIS Division<br>Office: Bldg 300, Room 310<br>714.992.7032<br>Dean: Ann Hovey<br>Website: http://bizdiv.fullcoll.edu

Administrative Office Assistant Associate of Science Degree Administrative Office Assistant Certificate Legal Office Administration Associate in Science Degree Legal Office Administration Certificate Word Processing Associate in Science Degree Word Processing Certificate

## Office Technology Courses

## OT 010 F Computer Concepts (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that allows students to gain knowledge in basic computer concepts through completion of projects and exams. This includes concepts about hardware and software, Internet, networking, multimedia, operating systems, and productivity applications.

## OT 011 F College Keyboarding Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open entry/open-exit course that introduces keyboarding to students with no previous computer experience. Students will develop touch control of the keyboard and will learn proper typing techniques. Students will all also learn to format standard business letters, memorandums and reports using Microsoft Word.

## OT 012 F College Keyboarding Formatting Skills (1)

Open Entry/Open Exit

## Pass/No Pass only

Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit keyboarding formatting course for students with no previous computer experience. Students will continue developing touch control of the keyboard and will learn to format various kinds of business correspondence, electronic forms, and desktop publishing projects from unarranged and rough-draft sources.

## OT 013 F College Keyboarding Speed and Accuracy (1)

## Open Entry/Open Exit

Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that introduces keyboarding to students with no computer skills. This class teaches keyboarding in a hands-on environment through lab projects and exams for student with no previous computer experience. Students who have mastered correct fingering skills for alphabetic and symbol keys will learn how to increase typing speed and accuracy.

## OT 020 F Business Career Success Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that assists students with identifying a satisfying career in business, deciding upon a specific job, and preparing for lifelong learning. Topics include personal strengths and weaknesses, interests and abilities, career fields, job identification, job motivation, and personal assessments.

## OT 021 F Business Resume Writing Skills (1) <br> Open Entry/Open Exit <br> Pass/No Pass only

Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that covers basic resumes, cover letters, and interviewing as students prepare for employment. Topics include employer needs, career objectives, work and educational experiences, personal information, persuasive letters, letter and resume format and mechanics and appearance.

## OT 025 F Basic Internet Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that allows students to gain knowledge in basic Internet concepts through completion of projects and exams. This includes concepts about the history of the Internet, operation of browsers, and the use of email.

## OT 026 F Basic HTML Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This course is an open-entry/open-exit course that introduces students to HTML with no previous computer experience. This class teaches HTML in a handson environment through lab projects and exams for students with no previous computer experience. Students will learn how to create a web page, format a page, set print options, and insert graphics.

## OT 027 F Basic Adobe PageMaker (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This course is an open-entry/open-exit introduction to PageMaker for students with no previous computer experience. Students will learn to create basic documents, perform basic formatting and basic printing.

## OT 028 F Basic Adobe Illustrator (1)

## Open Entry/Open Exit

Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that teaches Adobe Illustrator for students with no previous computer experience. Students will learn to create and edit basic graphic elements, and design graphics for use in various business applications.

## OT 035 F Basic WordPerfect Skills (1)

Open Entry/Open Exit

## Pass/No Pass only

Nine hours lecture and twenty-seven hours lab per semester. This course is an open-entry/open-exit introduction to WordPerfect for students with no previous computer experience. This class teaches WordPerfect in a hands-on environment through lab projects and exams for students with no previous computer experience. Students will learn how to create a document, format a document, set print options, and insert graphics.

## OT 036 F Basic Microsoft Word Skills (1)

## Open Entry/Open Exit

Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that introduces Microsoft Word to students with no previous computer experience. This class teaches Microsoft Word in a hands-on environment through lab projects and exams for students with no previous computer experience. Students will learn how to create a document, format a document, set print options, and insert graphics.

## OT 037 F Basic Microsoft Excel Skills (1)

## Open Entry/Open Exit

Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This course is an open-entry/open-exit introduction to Microsoft Excel for students with no previous computer experience. This class teaches Microsoft Excel in a hands-on environment through lab projects and exams for student with no previous computer experience. Students will learn how to create a worksheet, enter and format data, and create graphs.

## OT 038 F Basic Microsoft Access Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This course is an open-entry/open-exit introduction to Microsoft Access for students with no previous computer experience. This class teaches Microsoft Access in a hands-on environment through lab projects and exams for student with no previous computer experience. Students will learn basic database concepts, use tables and queries, and create forms and reports.

## OT 039 F Basic Microsoft PowerPoint Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that introduces Microsoft PowerPoint to students with no previous computer experience. This class teaches Microsoft PowerPoint in a hands-on environment through lab projects and exams for student with no previous computer experience. Students will learn how to create and edit a presentation and use graphics.

## OT 040 F Basic Microsoft Publisher Skills (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that introduces Microsoft Publisher to students with no previous computer experience. This class teaches Microsoft Publisher in a hands-on environment through lab projects and exams for student with no previous computer experience. Students will learn how to create a document, format a document, set print options, and insert graphics.

## OT 041 F MS Word for Academic Papers (.5-1)

Pass/No Pass only
One-half to one hour lecture per semester. This course will introduce students to research paper development using MS Word. It covers an overview of features used to prepare an academic term paper including footnoting and bibliography. This is a variable unit course; see current class schedule for course information.

## OT 042 F MS Word for Academic Papers (.5-1)

## Open Entry/Open Exit

Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that introduces students to research paper development using Microsoft Word. It covers an overview of features used to prepare an academic term paper including footnoting and bibliography

## OT 043 F Creating Promotional Pieces (1) <br> Open Entry/Open Exit

Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that allows students to grain the knowledge in creating promotional pieces with Microsoft Word. These documents include flyers, brochures, tri-folds and other business-related documents.

## OT 044 F Presentations and Web Pages (1)

Open Entry/Open Exit
Pass/No Pass only
Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that teaches the student how to create Web pages and business presentations by using Microsoft Word. This includes designing a new web page, exporting an existing Word document in web format, designing presentations, and creating presentations.

## OT 060 F Current Issues in Office Technology (1-3)

This course is for students who wish to increase their knowledge and skills in various office technology-related topics. Unit credit may range from one to three units in any given semester. Consult the class schedule to verify course topics being offered for a particular semester. May be taken for credit four times. (Degree Credit)

## OT 070 F Business Protocol and Ethics (2)

One and one-half hour lecture and one and one-half hour lab per week. This course covers the business protocol, etiquette and ethics skills needed to be successful in the business world. This course will give you the skills to present yourself with confidence and authority to succeed in business. Students will study business protocol skills including proper introductions and handshakes, dining skills, dressing for success, gift giving and telephone skills. With the use of a computer, you will learn how to properly use electronic communication and business correspondence. Students will study business ethics and how to appropriately deal with ethical issues in the business world.

## OT 071 F Professional Business Entertaining and Dining: Protocol and Etiquette (.5)

Eight hours lecture per semester. 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 (.5)

Eight hours lecture per semester. 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, Networking, and Techno Etiquette (.5)

Eight hours lecture per semester. 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)

Eight hours lecture per semester. 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 F Keyboarding Beginning (1.5)

One and one-half hour lecture and one hour lab per week. 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 and Accuracy (1.5)

One and one-half hour lecture and one hour lab per week. 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. This course can be taken four times for credit.

## OT 125 F Personal/Typing Keyboarding (2)

Two hours lecture and one hour lab per week. A beginning course intended for students who wish to learn alphanumeric keyboarding skills by touch using a microcomputer including the 10-key pad for personal use. This course is recommended for all college students. (CSU) (Degree Credit)

# Paralegal Studies (PLEG) 

## Business and CIS Division

Office: Bldg 300, Room 310
714.992.7032

Dean: Ann Hovey
Website: http://bizdiv.fullcoll.edu

## Paralegal Studies Associate in Science Degree Paralegal Studies Certificate

## Paralegal Courses

## PLEG 090 F Contemporary Issues in the Law (1-3)

Variable hours of lecture and/or lab. This course offers timely and contemporary law-related topics designed to enhance job skills, expand the student's 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. May be taken four times for credit.

## PLEG 101 F Introduction to Paralegal Studies (3)

Three hours lecture per week. 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 Legal Research and Terminology (3)

Three hours lecture per week. 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)
Prerequisite: ENGL 100 F, PLEG 101 F, and PLEG 104 F, all with a grade of "C" or better
Three hours lecture per week. 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)

Three hours lecture and one hour lab per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F, and PLEG 104 F with a grade of "C" or better
Advisory: Completion of PLEG $201 F$ is strongly advised
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. This course examines 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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 (3)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a "C" or better Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. This course provides an overview of criminal law and procedure. 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 (1-4)

Letter Grade or Pass/No Pass option
Prerequisite: PLEG 101 F, PLEG 104 F, PLEG 105 F, PLEG 201 F, and PLEG 202 F, all with a grade of "C" or better
Eighteen (18) hours of lecture per semester and 60 hours of non-paid supervised employment or work in a legal environment or law office per semester equals one semester credit (unit). An additional 60 hours per semester of supervised employment or work 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. (Degree Credit)

## PLEG 211 F Real Property Law and Procedure (3)

Prerequisite: PLEG 101 F and PLEG 104 F , both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
One and one-half hours lecture per week. 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)
Prerequisite: PLEG 101 F and PLEG 104 F , both with a grade of "C" or better
Three hours lecture per week. 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 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 decertification and ethical issues. (CSU) (Degree Credit)

## PLEG 214 F Contract Law/Procedure (3)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. This course provides an overview of the law of contracts, 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 the Electronic Age (3)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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 electronic and non-electronic documents from opposing parties and nonparties, 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)

Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
Three hours lecture per week. 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)

Prerequisite: PLEG 101 F and PLEG 104 F, both with a grade of "C" or better
One and one-half hours lecture per week. 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 225 F Law Office Management (3)

Three hours lecture per week. 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<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/

## Philosophy Associate in Arts Degree Religious Studies Associate in Arts Degree

## Philosophy and Religious Studies Courses

## PHIL 100 F Introduction to Philosophy (3)

Three hours lecture per week. 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)
Three hours of lecture with discussion per week. 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. 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## PHIL 101 F Introduction to Religious Studies (3)

Three hours lecture per week. 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)

Three hours lecture per week. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. Three hours lecture per week. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. 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

## PHIL 105HF Honors World Religions (3)

Three hours lecture per week. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism, and Buddhism. 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC, MULT CULT REQ

## PHIL 135 F Social and Political Philosophy (3)

Three hours of lecture with discussion per week. 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) (Degree Credit) AA GE, CSU GE

## PHIL 160 F Introduction to Ethics (3)

Three hours lecture with discussion per week. 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 165 F Business and Professional Ethics (3)

Three hours lecture with discussion per week. This course will examine applications of the moral rights and responsibilities of businesses and professions in response to the contemporary problems they face. The topics examined would include bribery, consumer relations, employee relations, kickbacks, whistle blowing, truth and advertising, trader secrets and insider information. (Not currently being offered - if interested, contact Division Office.) (CSU) (UC) (Degree Credit)

## PHIL 170 F Logic and Critical Thinking (3)

Three hours lecture and discussion per week. This course focuses on an understanding of the relationship of language to logic that 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/UC system. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHIL 172 F Critical Thinking/Writing (3)

Prerequisite: ENGL 100 F with a grade of " $C$ " or better
Three hours lecture per week. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PHIL 195 F Women's Issues in Philosophy (3)

Three hours lecture with discussion per week. 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 198AF The Holocaust (3)

Three hours lecture with discussion per week. This course will provide a review of the forces that 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) (Degree Credit)

## PHIL 200 F Introduction to Christianity (3)

Three hours lecture per week. 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: Ancient and Medieval (3) Three hours of lecture with discussion per week. 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)
Three hours lecture with discussion per week. 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) CSU GE

PHIL 210 F Introduction to Judaism (3)
Three hours lecture per week. The 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

PHIL 225 F The American Religious Experience (3)
Three hours lecture per week. 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)

Three hours lecture per week. 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) CSU GE

PHIL 270 F Introduction to the Asian Religions (3)
Three hours lecture per week. 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) CSU GE, MULT CULT REQ

## PHIL 299 F Philosophy Independent Study (1)

One hour lecture or scheduled conference per week. 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 wiil be awarded elective credit in the Social Sciences area. This course may be taken four times for credit. (CSU) (UC review required) (Degree Credit).

## Photography (PHOT)

Technology and Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7122<br>Dean: Scott McKenzie<br>Website: communications.fullcoll.edu

## Photography Associate in Arts Degree <br> Professional Photography Certificate

## Photography Courses

## PHOT 100 F Basic Photography (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. This course is for beginning photographers, and covers basic camera operation, composition, color, lighting, landscapes, portraits, night photography, close-ups, 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)

Two hours lecture and four hours lab per week. This course covers the historical, cultural and aesthetic foundations of photography. Students have the opportunity to acquire knowledge of both traditional and digital photography. Traditional film students must provide their own 35mm cameras with full manual capabilities and digital students may use a variety of digital point and shoot cameras as well as DSLRs. Course may be taken twice for credit. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHOT 103 F Intermediate Photography (3)

Advisory: PHOT 101 F
Two hours lecture and four hours lab per week. This course is an introduction to professional photography. Use of $4^{\prime \prime} \times 5^{\prime \prime}$ camera, and studio lighting techniques will be emphasized. Students will learn to use the camera and studio 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)

Advisory: PHOT 101 F or PHOT 111 F or PHOT 112 F or demonstrate competency in performing a variety of basic camera functions
Two hours lecture and four hours lab per week. 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 cameras with full manual operations and capable of using an external flash. Either film or digital cameras may be used. Students are also required to have a strong understanding of composition, aesthetic values and photographic criticism. Course may be taken four times for credit (CSU) (Degree Credit)

## PHOT 109 F Portrait Photography (3)

Advisory: PHOT 101 F
Two hours lecture and three hours lab per week. 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 35mm camera with adjustable aperture, shutter speed and focus. Course may be taken three times for credit. (CSU) (Degree Credit)

## PHOT 111 F Introduction to Photography from Analog to Digital (3)

Two hours lecture and four hours lab per week. This beginning photography course focuses on the technical and historical aspects of photography from analog to the emergence of digital photography and new media. The course will include lectures and discussions about composition and content, a detailed comparison of the differences and similiarities between analog and digital camera use with an emphasis on digital imaging. Mixed media and experimental forms of photography will also be discussed. A variety of point and shoot cameras may be used. Course may be taken four times for credit. (CSU) (UC) (Degree Credit) AA GE, CSU GE

## PHOT 112 F Introduction to Professional Digital Photography (3)

Two hours lecture and four hours lab per week. The 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. Course may be taken four times for credit. (CSU) (Degree Credit)

PHOT 114 F Professional Portrait Photography I (3)
Advisory: PHOT 101 F or PHOT 111 F or PHOT 112 F or demonstrate competency in performing various basic camera functions
Two hours lecture and four hours lab per week. Emphasis will be placed on portrait photography using strobe lighting, shooting on location, posing, and working with color photography. Photographic subjects will include beauty, theatrical, commercial, fashion, family, and the executive portrait. Students are required to have a camera with full manual capabilities and that is able to use an external flash. Film or digital cameras may be used. Students are also required to have a strong understanding of composition, aesthetic values and photographic criticism. Course may be taken four times for credit. (CSU) (Degree Credit)

## PHOT 196 F Photography Seminar (formerly known as Communications Seminars) (.5-4)

Advisory: PHOT 101 F or PHOT 111 F or advanced knowledge in photograph including both digital and analog applications.
Zero to four hours lecture and zero to twelve hours lab per week. Hours will vary according to the nature of the seminar. This course is designed to expose the students to up-to-date 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. Students may enroll up to a maximum of four semesters. (CSU) (Degree Credit)

## PHOT 216 F Advanced Digital Photography (3)

Advisory: PHOT 111 F or PHOT 112 F with a grade of "C" or better or demonstrate competency in performing a variety of basic digital camera functions
Two hours lecture and four hours lab per week. 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. Students will explore a variety of subjects including fashion, portraiture, Industrial Scientific, and fine-art photography. Students may use a variety of digital cameras including point and shoot as well as digital D'SLR'S. Students are also required to have a strong understanding of composition, aesthetic values, and photographic criticism. Course may be taken four times for credit. (CSU) (Degree Credit)

## PHOT 221 F Studio Specialties I (3)

Two hours lecture and four hours lab per week. An advanced course for students to learn studio practices and lighting techniques. Students will practice studio techniques for a variety of photographic subjects that include commercial table top, architectural, publicity, and fashion. Emphasis will be on the use of strobe lighting, mixed lighting, and special effects. Camera format will range from 35 mm to 4X5. The course incorporates both traditional and digital techniques. Students must have a camera with full manual adjustments and that is capable of using external flash. Students are also required to have a strong understanding of composition, aesthetic values, and photographic criticism. Course may be taken four times for credit. (CSU) (Degree Credit)

## PHOT 290 F Internship in Photography (2-4)

One hour lecture per week and five hours supervised employment or unpaid internship per week in the field of photography. An additional five hours per week of supervised employment or unpaid internship for each additional unit of credit. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

# Physical Education (PE) 

Physical Education Division<br>Office: Bldg 1200, Room 1206<br>714.992.7045<br>Dean: Susan Beers (Interim)<br>Website: pe.fullcoll.edu

Physical Education Associate in Arts Degree<br>Physical Education Fitness Associate in Science Degree<br>Aquatic Specialist Certificate<br>Athletic Coach Certificate<br>Group Fitness Instructor Certificate<br>Personal Trainer Certificate<br>Therapeutic and Sports Massage Therapist -<br>Level I Certificate

## Physical Education Courses

## PE 100 F Adaptive Physical Education Weight Training (1)

Three hours lab per week. This course is designed to give the disabled student the opportunity to participate in resistive exercises with weights. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 102 F Yoga (1)

Three hours lab per week. This is an overview course in 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; improve concentration, circulation, and flexibility; and unify body, mind, and spirit. The hatha yoga portion will also help to tone and strengthen muscles. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 103 F Aikido (1)

Three hours lab per week. Aikido is 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 104 F Spinning (formerly PE 104AF) (1)

Three hours lab per week. Spinning is 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. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 105 F Badminton (1)

Three hours lab per week. There will be an analysis of fundamental strokes with emphasis on court strategy for singles and doubles play. Rules, court etiquette, and different types of tournaments will be introduced to the class. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 107 F Table Tennis (1)

Three hours lab per week. This course offers students the opportunity to learn and improve the essential strokes of table tennis. Emphasis is on game strategies for singles and double play. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 108 F Bowling (1)

Three hours lab per week. This course is designed to develop sufficient knowledge and skill for successful participation in recreational, league and tournament bowling. Emphasis will be placed on the rules, scoring, etiquette, safety, mechanics, ball dynamics and strategy. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 111 F Decathion (1)

Two hours lab per week. Instruction and participation in the fundamentals of track and field. The events covered are sprints, broad jump, high jump, shot put, discus, distance and middle-distance running, pole vault, and javelin. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 112 F Fencing (1)

Two hours lab per week. Instruction will include basic positions weapon, simple and compound actions, defenses, drills, and activity. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 113 F Billiards (1)

This course is designed to develop sufficient knowledge and skills necessary for successful participation in recreational billiards. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 114 F Cardiovascular Conditioning (1)

Three hours lab per week. A program of personalized exercises designed for the student interested in achieving physical fitness through a program of cardiovascular conditioning. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 115 F Golf (1)

Two hours lab per week. The class will stress rules, fundamentals and etiquette of the game of golf. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 117 F Gymnastics (1)

Three hours of lab per week. 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. This course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 120 F Mountain Biking (1)

Two hours lab plus one hour arranged per week. This course examines and analyzes the judgment, knowledge and skill development necessary for safe recreational mountain biking. This course provides hands on experience and instructional techniques required for participation on various Orange County trails. Fee for bike rental if you do not own your own bike. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 121 F Walking for Fitness (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 122 F Surfing (1-2)

Advisory: Swim 50 yards and tread water for five minutes
One half to one hours lecture and one and one half to three hours lab per week. This course offers surfers the opportunity to learn and improve the skills of wave riding. Examination and analysis of paddling, wave selection, water safety, equipment, tides, current, and etiquette are emphasized for long boarding and short boarding. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 123 F Outrigger Canoeing (1-2)

Advisory: Swim 50 yards and tread water for three minutes
One-half to one hours lecture and one and one-half to three hours lab per week. This is an activity course designed to introduce and examine the Polynesian tradition of canoeing. Six-person outrigger canoes, and one- and two-person outriggers are used to introduce and develop individual and team skills. This course includes units on water safety; basic technique; equipment examination; Polynesian history and tradition of the outrigger; roles and responsibilities with each "seat" in the six-person canoe. This class emphasizes a hands-on experience that may prepare students to pursue interests in club competition or other water activities. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 124 F Kayaking (1-2)

Advisory: Swim 50 yards and tread water for three minutes
One hour lecture, two hours lab plus one hour arranged per week. Kayaking examines and analyzes the judgment, knowledge, equipment, and skill development necessary for safe flatwater and ocean kayaking. This course includes units on water safety; basic technique; and how to plan a kayaking trip. This class emphasizes a hands-on experience that may prepare students to pursue interests in white water kayaking and other water activities. Course may be taken four times for credit. $\$ 15$ Facility use fee required. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

## PE 126 F Beach Volleyball (1)

Two hours lab plus one hour arranged per week. 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 time. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

PE 127 F Racquetball - Indoors (1)
Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 129 F Step Aerobics (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 130 F Advanced Fitness Training (2)

One and one-half hour lecture and one and one-half hour lab per week. This course is designed to offer students the core knowledge and skills necessary for instructing group exercise classes and for individuals to develop advanced aerobic skills. Lectures include information on physiology kinesiology and biomechanics of exercises along with safety and sports nutrition. The lab consists of practical application of exercise programming along with instructional experience. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 131 F Bodyboarding (1-2)

One-half to one hour of lecture and one and one-half to three hours of lab per week. This course offers bodyboarders the opportunity to learn and improve the skills of wave riding. Examination and analysis of paddling, kicking, wave selection, water safety, equipment, tides, current and etiquette are emphasized for bodyboarding. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 132 F Skiing (1)

Two hours lab plus one hour arranged per week. One hour lecture and one hour lab per week. This course is designed to teach the beginning and intermediate skier the American technique of skiing. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 133 F Snowboarding (1)

One half hour lecture and one and one half hours lab per week. This course is designed to teach the basic skills of snowboarding. Emphasis on correct body posture in turns and curves, speed control, and basic jumps. Discussion on selection of equipment and apparel, care of equipment, safe snowboarding and back country survival will also be included. Facility fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 134 F Swimming (1)

Two hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 136 F Springboard Diving (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

## PE 137 F Triathlon (1)

Three hours lab per week. 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 is required if you do not own your own bicycle. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

## PE 138 F Ultimate Frisbee (1)

Three hours lab per week. This course is designed to teach the basic skills of the Frisbee disc throw as well as an introduction to Frisbee golf, Frisbee football, and Frisbee basketball. Course may be taken four times for credit. (CSU) (UC Credit Limitation) CSU GE

## PE 139 F Tennis (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 141 F Tennis Workshop (.5-2)

Two hours lab per week for each unit of credit. This class is designed for those students desiring instruction from beginning to 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 142 F Mountaineering/Rock Climbing (1)

One hour lecture and one hour lab per week. There will be 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 144 F Volleyball - Recreational (1)

Three hours of lab per week. This course provides basic instruction and strategies in basic skills, rules and etiquette in volleyball. Students will experience improvement through supervised instruction and participation. This course may be taken two times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 145 F Volleyball - Intermediate/Advanced (1)

Two to six hours lab per week. This course is designed for experienced volleyball players and is designed to give instruction in advanced techniques and game strategies. This course may be taken twice for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 147 F Relaxation and Flexibility Fitness (1)

Three hours lab per week. This course demonstrates the benefits of stretching and relaxation towards a physically and mentally fit lifestyle. Flexion exercises and relaxation techniques are covered as well as their practical application to daily activities. Instruction will be given in the development of an individual program for each student. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

## PE 148 F Non-Impact Aerobics (1)

Three hours lab per week. 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. A class designed for first-time aerobicisers of any age, or those medically restricted or overweight. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

PE 149 F Swim for Fitness (1)
Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 150 F Rhythmic Aerobic Exercise (1)

Three hours lab per week. This course is designed for a group and individual exercise program. Emphasis in class will be on cardiovascular development through rhythm movements. Activities will include stretching, walking, running, and floor exercise in a dance setting to music. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit) CSU GE

## PE 151 F Water Aerobics/Pool Exercise (1)

Two hours lab per week. This 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.) Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 152 F Fitness Training Lab (Circuit) (.5-2)

Open Entry/Open Exit
Letter Grade or Pass/No Pass option
This course is designed as an open entry lab. The equipment and routine utilized in the circuit training facility 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 154 F Fitness Testing w/Exercise Prescription (2)

Two hours lecture and one hour lab per week. Classroom lecture section 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. Course may be taken four times for credit. (CSU) (Degree Credit) CSU GE

## PE 155 F Aquatic Conditioning for Seniors (1)

Two hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 158 F Personalized Fitness (1)

Three hours lab per week. 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. $\$ 15$ lab fee payable in class. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit) CSU GE

## PE 159 F Strength Training (Olympic Weights) (.5-2)

Open Entry/Open Exit
Letter Grade or Pass/No Pass option
Flexible hours and variable units. Eighteen hours required for each $1 / 2$ unit up to 72 hours for a maximum of two units. 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 160 F Basketball - Recreational (1)

Two hours lab per week. This course provides instruction and strategies in the basic skills, rules and etiquette of basketball. Students will receive improvement through supervised instruction and participation. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 161 F Body Conditioning and Fitness (1)

Three hours lab per week. This course will focus on individual exercise for contouring, conditioning, posture, weight training, aerobics and overall fitness. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 162 F Conditioning for Athletes - Strength (1)

Three hours lab per week. This course is designed to organize and implement individual conditioning programs for the team and individual sport athletes, primarily women. 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) CSU GE

## PE 163 F Kickboxing (1)

Two hours lab per week. Instruction in forms of kick-boxing 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 164 F Tai Chi Chuan (1)

Two hours lab per week. Instruction in the 24-style of tai chi chuan, a short form of the health exercise and martial art of tai chi that can easily be learned in one semester. Repeat students have the option of learning the Yang style long form and weapon forms. The course also covers tai chi philosophy and the application of tai chi to daily life. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 165 F Lifetime Fitness (1)

Two hours lab per week. This class 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. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree Credit) CSU GE

## PE 166 F Shao-lin Kung Fu (2)

One hour lecture and three hours lab per week. Instruction in traditional Shao-lin long-fist kung fu, including basics, forms, self-defense and joint locks, as well as the philosophy relevant to martial arts and daily life. Repeat students have the option of testing for rank and advancing towards black belt. The course develops skills and abilities applicable for enhancing all aspects of life (self-confidence, self-discipline, enhanced focus and mental concentration), as well as self-defense abilities. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 167 F Cardio Kickboxing Aerobics (1)

Two hours lab plus one hour arranged per week. 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 kickboxing exercise (no physical contact) set to music. This course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 168 F Boot Camp Workout (1)

Three hours lab per week. This course will focus on individual exercises including obstacle course, calisthenics, conditioning, weight training, aerobics, yoga, Pilates and overall fitness. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 169 F Advanced Water Polo (1)

Advisory: PE 192 F or the equivalent
Three hours lab per week. Instruction will be given in advanced skills, techniques, fundamentals and tactics in the sport of water polo. This course is designed to cover strategies and game-type situations for those with a basic knowledge of the game. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 171 F Soccer - Recreational (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 172 F Softball - Recreational (1)

Two hours lab per week. This course is designed to increase the knowledge of softball strategy through the use of drills. The softball players fundamental skill level will improve through repetition and technique development in throwing, catching, hitting, fielding, base running and bunting. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 174 F Inline Skating (1)

Three hours lab per week. This course is designed to teach the basic skills of inline skating. The skills will include proper skating technique, tuning and stopping. Training and cardiovascular fitness will be discussed. Skate rental fee if you do not own your own skates. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 175 F Volleyball - Team Development (.5-2)

Three hours lab per week. 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) CSU GE

## PE 179 F Spirit Squad (2)

## Prerequisite: Audition

Ten hours lab per week. 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) CSU GE

## PE 180 F Baseball (1)

Two hours lab and one assigned per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 181 F Basketball (1)

Two hours lab per week. The course stresses development of the fundamental skills of basketball and promotes body conditioning. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 182 F Body Building/Body Development and Weight Lifting (1)

Two hours lab per week. Class instruction includes those resistive exercises designed to develop and increase size and strength of muscle tissue with emphasis on safe and proper weight lifting techniques. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 183 F Conditioning for Athletes (1)

Three hours lab per week. This course is designed for instruction and practice in weight training, weight lifting, anaerobic and aerobic fitness, and flexibility for competition in various intercollegiate sports primarily for men. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 184 F Dodgeball (1)

Three hours lab per week. This class will provide instruction and practice in the techniques of dodgeball. Course will develop skills, provide knowledge of the rules, teach students to analyze techniques, solve tactical problems and improve physical fitness. Teamwork and strategies will be emphasized while participating in several varieties of dodgeball. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 185 F Football - Defense (3)

Nine hours lab per week. This class 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 forth by the NCAA and CCCAA. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 186 F Football - Offense (3)

Nine hours lab per week. This class 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). Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 187 F Physical Fitness (1)

Two hours lab per week. Physical fitness for men would be achieved through the use of resistive exercises and body-building routines. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 188 F Self-Defense - Boxing (1)

Three hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 189 F Soccer (1)

Three hours lab per week. 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 men. The course will include interclass competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 191 F Volleyball: Player Development (.5-2)

One and one-half to six hours lab per week. This course is designed for the potential intercollegiate athlete with advanced skill and knowledge in volleyball. Students will receive training in fundamentals and strategies necessary for successful competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 192 F Water Polo (1)

Advisory: Ability to swim 50 yards and able to tread water for 3 minutes
Three hours lab per week. Instruction 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 193 F Weight Training/Weight Lifting (1)

Three lab hours per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 194 F Wrestling (1)

Three hours lab per week. This course will include instruction in the fundamental skills and knowledge necessary for successful participation in amateur wrestling. The class will develop endurance, flexibility and strength. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 195 F Championship Putting (1)

Two hours lab plus one hour arranged per week. The class will stress rules, fundamentals and etiquette of putting. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 196 F Swimming - Recreational (1) <br> Advisory: Ability to swim

Three hours lab per week. Intermediate instruction and practice will be given 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 WaterSafety Instruction (WSI) courses. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 197 F Flag Football (1)

Three hours per week. This course provides basic instruction in the strategies, fundamentals, teamwork execution and the rules of flag football. Emphasis will be placed on offensive, defensive and special team assignments and responsibility. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 199 F Physical Education Independent Study (1-2)

Three to six hours lab per week. Student 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. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

FOR PE 202 F through PE 222 F: In order to be eligible for athletic competition, students must meet the eligibility requirements of the Southern California Football Association and the Orange Empire Conference. Daily after-school practice or play for a minimum of ten hours per week. The following intercollegiate sports offer credit. Physical Education majors - see counselor for transfer requirements.

## PE 202 F Baseball - Men (2)

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 203 F Basketball - Men (2)

Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 204 F Basketball - Women (2)

## Advisory: Tryout

Ten hours lab per week. This course is designed for advanced female basketball players wanting to participate on the intercollegiate basketball team. Daily practice or 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 CCCAA and Orange Empire Conference. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 205 F Cross-Country - Men and Women (2)

Ten hours lab per week. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and the Orange Empire 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 week. 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)

## PE 207 F Football (2)

Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 208 F Golf - Intercollegiate (2)

Ten hours per week. In order to be eligible for athletic competition, students must meet the eligibility requirements of the Orange Empire Conference, including passing a physical exam given by the team doctor. Daily after-school practice or play. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 209 F Soccer - Intercollegiate (2)

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 210 F Softball - Women (2)

Advisory: Subject to audition
Ten hours lab per week. 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 and the Orange Empire Conference. 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 211 F Swimming - Men (2)

Advisory: Try-out required
Ten hours per week. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and 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 week. Team standards and expectations established. Competition versus local college teams. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 212 F Swimming - Women (2)

Ten hours per week. In order to be eligible for athletic competition, students must meet the eligibility requirements of the CCCAA and 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 week. Team standards and expectations established. Competition versus local college teams. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 214 F Intercollegiate Tennis (2)

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 week. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 215 F Track - Men/Women (2)

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 216 F Outrigger Canoeing - Team Competition Women (2)

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 218 F Intercollegiate Women's Volleyball (2)

Advisory: Try-out required
Ten hours per week. Students must meet the eligibility requirements of the Orange Empire Conference and the CCCAA. Student athlete will need to pass the sports physical administered by a team physician prior to competition. Students are required to participate in daily practice and required contests for a minimum of ten hours per week. This course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 219 F Intercollegiate Water Polo (2)

Advisory: Ability to swim 50 yards and tread water three minutes.
Ten hours per week. 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 CCCAA. They will also be governed by the Orange Empire Conference rules and regulations. Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 222 F Badminton - Women (2)

## Advisory: Audition

Ten hours of lab per week. 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)

Three hours lab per week. A course 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) CSU GE

## PE 224 F Pilates Mat II (1)

## Prerequisite: PE 223 F with a grade of " $C$ " or better

Three hours lab per week. A course in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The 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. This course may be taken two times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 225 F Pilates Reformer (2)

Prerequisite: PE 224 F with a grade of " $C$ " or better
Three hours lab per week. A course in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include exercises in mat work and on the reformer, and will emphasize exercises for improved body alignment, strength, flexibility, control, coordination and breathing. This course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 226 F Pilates Apparatus (2)

Prerequisite: PE 225 F with a grade of " $C$ " or better
Six hours lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 227 F Effective Teaching Methods for Pilates (2)

Prerequisite: PE 226 F with a minimum grade of " $C$ " or better
One hour lecture and three hours lab per week. Students will learn principles, sequencing, progressions, cues, modifications, muscular integration and appropriate terminology to effectively teach Pilates exercises. (CSU) (Degree Credit)

## PE 228 F Pilates Internship (2)

Prerequisite: PE 226 F with a grade of " $C$ " or better
One hour lecture per week. Students are required to observe and/or assist 70 hours lab outside of the lecture. Students will have the opportunity to learn how to 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)

Prerequisite: PE 228 F and WELL 265 F, both with a grade of " $C$ " or better
One hour lecture and three hours lab per week. 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 (2)

Two hours lecture per week. 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 (3)

Two hours lecture and three hours lab arranged per week. The lab consists of training room observations and practical work. This course is designed to give the student a 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 Credit Limitation) (Degree Credit)

## PE 238 F Water Safety Instruction (3)

Prerequisite: Ability to swim
Two hours lecture and two hours lab per week. 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)

## Advisory: Ability to swim 50 yards and tread water for 3 minutes

 Two hours lecture and four hours lab per week. 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. Course can be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)
## PE 240 F Sports Officiating for Men (2)

Two hours lecture plus two hours arranged per week in officiating. The basic rules and mechanics of officiating the sports of football, basketball, baseball, and softball are covered. Students will receive practical experiences in officiating. Course may be taken twice for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 241 F Sports Officiating for Women (2)

Two hours lecture plus two hours arranged per week in officiating. This course includes a study of the rules of basketball and volleyball, first semester; and softball in the second semester. This class provides an opportunity to obtain officiating ratings in basketball volleyball and softball. (Not currently being offered - if interested, contact Division Office.) Course may be taken twice for credit. (CSU) (UC Credit Limitation) (Degree Credit)

PE 243 F Stress Management Through Physical Activity (2) One hour lecture and two hours lab per week. Instruction and practice will be given in identifying major sources and types of stress. Each student will develop an individual program suited to his/her needs. Lab instruction will include practice in stretching, progressive relaxation, action, autogeneses, biofeedback, differential relaxation as well as mental imagery and rehearsal techniques. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 245 F Lifesaving, Basic Rescue/CPR (2) <br> Prerequisite: Ability to swim

Two hours lecture and one hour lab per week. 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 246 F Advanced/Master SCUBA Diver (3)

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.
Two hours lecture and four hours lab per week. The Advanced/Master SCUBA diving 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## PE 247 F Sports Management (3)

Three hours lecture and two hours arranged per week. 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)

## PE 248 F Psychology of Sport (3)

Three hours lecture per week. 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 249 F International Diving Tour (3)

Letter Grade or Pass/No Pass option

## Advisory: Ability to swim

Two hours lecture and four hours lab per week. Introductory lectures and pool/beach labs will instruct the student in fundamental SCUBA diving skills prior to the start of the tour. The tour will consist of traveling to an international destination where the students will study the various elements of its environment while applying basic diving skills. NAUI coursework, testing and training standards will be utilized. Students that meet requirements can receive certification on various levels when tour is completed and dive logs are authenticated. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 250 F Sport and the United States Society (3)

Three hours lecture per week. This course examines sport in the United States society, and how various ethnic and minority groups have influenced sport participation at the local, state, and national levels. Influences of other cultures outside of the United States will be reviewed and analyzed. A review of sport history from both the national and international perspective will be conducted with communication and media influences also examined. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree Credit) MULT CULT REQ

## PE 251 F Philosophy of Martial Arts (3)

Three hours lecture per week. This course is an overview of the philosophy of the martial arts, intended to develop an understanding of the integrated human being as a physical and psychological organism. Relevant philosophies include Zen and Taoism, and the relationship to humanistic psychology. The course focuses on self-mastery through the martial arts in areas including focus, self-discipline, expanded awareness and achieving one's personal best. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 252 F Introduction to Physical Education (2)

Two hours lecture per week. Introduction and orientation to physical education as a profession and as an academic discipline. Explores subdisciplines, opportunities in the field, philosophy, scientific foundation, and analyzes and evaluates individuals that have influenced these trends and issues in the 21st century. Course may be taken four times for credit. (CSU) (Degree Credit)

## PE 266 F Physical Fitness as a Lifelong Concept (2)

Two hours lecture per week. This course will 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) CSU GE

## PE 270 F Diet and Exercise for Athletes (3)

Two hours lecture and three hours lab per week. This course is designed to help understand the concept of lifelong weight management. The goal is to learn to combine the good nutritional habits along with a quality exercise regime to meet weight control goals. The class will include comprehensive lectures with an affecting weight-related problem with athletes. The 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 280 F Professional Activities - Theory of Baseball (2)

One-hour lecture and two hours lab per week. A course 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 (2)

One-hour lecture and two hours lab per week. 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 Professional Activities - Theory of Softball (2)

One-hour lecture and two hours lab per week. This course is designed to prepare present and future players, physical-education teachers and coaches in the theory of coaching softball. The course includes the mental and physical preparation of becoming a softball player; the theory and practical experience pertaining to the offense and defense; individual technique drills for each of the nine softball positions. (CSU) (UC Credit Limitation) (Degree Credit)

## PE 283 F Professional Activities - Theory of Football (2)

Two hours lecture per week. 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 Professional Activities - Theory of Soccer (2)
One hour lecture and two hours lab per week. This course is designed to prepare 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 Volleyball (2)

One hour lecture and two hours lab per week. 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 299 F Physical Education Independent Study (1-2)

Three to seven hours lab per week in interest area plus scheduled conferences. For students who wish to participate in acceptable noncurricular physical activities or who wish to work in the field as a teaching assistant or official or to study special programs in physical education. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

# Physical Sciences (PHSC) 

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

## Physical Sciences Courses

## PHSC 050 F Success in Science (1)

Pass/No Pass only
One hour lecture per week. This course is designed to prepare students for any introductory course within the Natural Science Division. Topics include using and converting units, converting written statements into algebraic or graphical statements, interpreting scientific data, calculating areas and volumes, estimating answers, using scientific notation and significant figures, critical thinking and problem solving. Under no circumstances will this course take the place of the math prerequisite (MATH 020 F, MATH 040 F, MATH 142 F, or MATH 150AF) listed for any science course.

## PHSC 051 F Success in Physical Science (1)

Pass/No Pass only
One hour lecture per week. This course is designed to prepare students to take physics or chemistry courses. It is a continuation of PHSC 050 F Success in Science, using units and dimensional analysis with more complex problems. Other topics include more complex science problem solving, checking solutions in error, 3-dimensional visualization, growth and decay processes, proportional reasoning, using angles and vectors in mechanics, and extracting information from graphs of experimental data. Under no circumstances will this course take the place of the math prerequisite (MATH 020 F, MATH 040 F, MATH 142 F, or MATH 150AF) listed for any science course.

## PHSC 102 F Physical Science Survey (4)

Three hours lecture and three hours lab per week. This course integrates instructor-guided concept exploration, problem solving, small group investigation, and class presentation. This activity-based course will examine physical science concepts in real-world contexts such as global warming, household science and the automobile. (CSU) (UC; no credit if taken after a college course in astronomy, chemistry, geology, or physics.) (Degree Credit) AA GE, CSU GE, IGETC

PHSC 103AF Physical Sciences for Teachers - Physics (2) Prerequisite: MATH 020 F with a grade of "C" or better One and one-half hours of lecture and one and one-half hours of lab per week. This course covers conservation laws, Newton's laws of motion, gravity, electromagnetism, and optics. It is designed for students who want to become multiple-subject school teachers, but is open to all students. General education transfer credit acceptable only if PHSC 103BF is also completed. (CSU)

## PHSC 103BF Physical Sciences for Teachers Chemistry (2)

Prerequisite: MATH 020 F with a grade of "C" or better and PHSC $103 A F$ with a grade of " $C$ " or better
Advisory: This course should be taken the same semester as PHSC 103AF
One and one-half hours of lecture and one and one-half hours of lab per week. This activity-based course provides an introduction to the basic concepts of chemistry including atoms, bonding and chemical reactions. Instructor-guided concept exploration, problem solving, small group investigation, and class presentation are integrated within the context of real-world applications of chemical concepts. It is designed for students who want to become multiple-subject school teachers but is open to all students. General education transfer credit acceptable only if PHSC 103AF is also completed. (CSU) (Degree Credit)

## PHSC 299 F Physical Sciences Independent Study (1)

Prerequisite: Demonstrated scholarship in courses in the Physical Sciences Division
One hour lecture or scheduled conference or three hours lab research per week. For able students who wish to increase their knowledge of the sciences through individual study and small group conferences. Independent lab 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)

## Physics (PHYS)

Natural Sciences Division<br>Office: Bldg 400, Room 411<br>714.992.7043<br>Dean: Carol Mattson (Interim)<br>Website: http://natsci.fullcoll.edu/

## Physics Associate in Arts Degree

## Physics Courses

## PHYS 130 F Elementary Physics (4)

Letter Grade or Pass/No Pass option
Prerequisite: MATH 020 F with a grade of " $C$ " or better
Three hours lecture, three hours lab per week. 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 collegelevel 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 (4) Letter Grade or Pass/No Pass option
Prerequisite: MATH 141 F and MATH 142 F, both with a grade of " $C$ " or better
Three hours of lecture and three hours of lab per week. 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)

Letter Grade or Pass/No Pass option
Prerequisite: PHYS 205 F with a grade of "C" or better
Three hours of lecture and three hours of lab per week. 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 algebrabased 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) CSU GE, IGETC

## PHYS 210 F Physics with Calculus for the <br> Life Sciences I (4)

Corequisite: MATH 150AF
Three hours of lecture and three hours of lab per week. 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 (4)

Prerequisite: PHYS 210 F with a grade of "C" or better

## Corequisite: MATH 150BF

Three hours of lecture and three hours of lab per week. 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 calculusbased 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) CSU GE, IGETC

## PHYS 221 F General Physics I (4)

Prerequisite: MATH 150AF with a grade of " $C$ " or better or math skills clearance.
Three hours lecture and three hours lab per week. Mechanics, vibrations, properties of matter. The laboratory provides students with handson 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 222 F General Physics II (4)

Prerequisite: PHYS 221 F and MATH 150BF, both with a grade of "C" or better
Three hours lecture and three hours lab per week. 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) CSU GE, IGETC

## PHYS 223 F General Physics III (4)

Prerequisite: PHYS 222 F with a grade of " $C$ " or better
Three hours lecture and three hours lab per week. 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) CSU GE, IGETC

## Political Science (POSC)

## Social Sciences Division

Office: Bldg 1400, Room 1415
714.992.7047

Dean: Dan Tesar
Website: http://socsci.fullcoll.edu/
Political Science Associate in Arts Degree

## Political Science Courses

POSC 100 F American Government (3)
Three hours lecture and discussion per week. 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) (Degree Credit) AA, GE, CSU, GE, IGETC

## POSC 100HF Honors American Government (3)

Three hours lecture per week. This course has been enhanced for Honors students. 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. This 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 government 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) (Degree Credit) AA GE, CSU GE, IGETC

## POSC 110 F Contemporary American Politics (3)

Three hours lecture and discussion per week. 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) CSU GE, IGETC

## POSC 120 F Introduction to Political Theory (3)

Three hours lecture and discussion per week. 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 \& Politics (3)

Three hours lecture and discussion per week 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 (3)

Two hours lecture and three hours lab per week or equivalent. A total of 36 hours per trip required. 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 200 F Introduction to the Study of Politics (3)

Three hours lecture and discussion per week. 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 Political Systems (3)

Three hours lecture per week. 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) CSU GE, AA GE, IGETC

POSC 216 F Government and Politics of the Middle East (3) Three hours lecture per week. 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 (3)

Three hours lecture per week. Topics analyzed include 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. the 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 Relations (3)
Three hours lecture per week. 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-ofpower 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, and engage in an individual research project. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

POSC 275 F Introduction to Public Law (3)
Three hours lecture and discussion per week. The 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, federalstate 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 (1)

Two hours lecture per week. 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. Course may be taken four times for credit. (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)

Letter Grade or Pass/No Pass option
Five hours lecture plus one hour arranged lab per week. 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 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 (5)

Letter Grade or Pass/No Pass option
Prerequisite: PORT 101 F with a grade of "C" or better or one year of high school Portuguese with a grade of " $C$ " or better
Five hours lecture plus one hour arranged lab per week. The 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

# Printing Technology (PRNT) 

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7588

Dean: Scott McKenzie
Website: techneng.fullcoll.edu

Printing Technology Associate in Science Degree<br>Advanced Offset Presswork Certificate<br>Customer Service Training Skills Certificate<br>Digital Printing Certificate<br>Electronic Imaging Certificate<br>Flexography Skills Certificate<br>Graphic Communications Skills Certificate<br>Offset Duplicator Training Skills Certificate<br>Printing Technology (General) Certificate<br>Quick Print/In-Plant Graphics Certificate<br>Screen Printing Certificate

## Printing Technology Courses

## PRNT 056 F Digital Printing (2.5)

Two hours lecture and one and one half hours lab per week. This introductory course will provide students with a basic theory of digital printing. Emphasis will be placed on the operation of a Xerox Docutech digital printing machine. Other related topics to be covered include digital history, image assembly and composition, digital quality, machine features, bindery operations, paper specifications, and digital machine maintenance. (Degree Credit)

## PRNT 070 F Quick Printing and In-Plant Graphics (2)

One hour lecture and three hours lab per week. 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. Course may be taken four times for credit. (Degree Credit)

## PRNT 072AF Screen Printing I (formerly Photo-Silk

 Screen) (2)One hour lecture and three hours laboratory per week. A basic course which introduces the principle, basic methods and techniques of preparing designs and placing stencils on a screen printing frame. also establishing register systems and printing on various substrates as per industrial procedures. Care, use, and safety precautions in operating and cleaning of the screen printing frames, equipment, and supplies. (Degree Credit)

## PRNT 072BF Screen Printing II (formerly Intermediate Photo-Silk Screen) (2)

Prerequisite: PRNT 072AF with a grade of "C" or better.
One hour lecture and three hours lab per week. 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 (formerly Advanced Photo-Silk Screen) (2)

Prerequisite: PRNT 072BF with a grade of "C" or better.
One hour lecture and three hours lab per week. 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 and Conventional Pre-Press (6-6-6)

Four hours lecture and eight hours lab per week. This course has extensive instruction in electronic prepress page layout, color scanning and conventional prepress operations. Typesetting, proof reading and image manipulation via files, to merge copy and graphics, is an integral part of this course. Design and creativity is not the intent of this course. Instructions will be given in film assembly of negatives and positive for the purpose of preparing printing plates for sheetfed offset presswork by both conventional and electronic processes. This course will present the theory of color and how it applies to the lithographic process. Special emphasis is placed on direct and indirect key line techniques and advance contacting procedures. A variety of daylight films will be accurately calibrated with the use of an electronic densitometer. (Graphic Arts Technical Foundation - GATF Certification in Film Assembly and Fullerton College certification in Conventional and Electronic Prepress). Course may be taken three times for credit. (Degree Credit)

## PRNT 085 F Introduction to Flexography (4)

Three hours lecture and three hours lab per week. 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)

Advisory: PRNT 085 F
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. Course may be taken four times for credit. (Degree Credit)

## PRNT 090 F Printing Skills Lab (.5-6)

Advisory: Any printing technology class, except screen printing classes One half hour to eighteen hours lab per week. 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. Course may be taken four times for credit (maximum 24 units). (Degree Credit)

## PRNT 091 F Advanced Topics in Printing (.5-6)

Zero to three hours of lecture and zero to nine hours of lab per week. 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. Course may be taken four times for credit. (Degree Credit)

## PRNT 101 F Introduction to Printing (3)

Two hours lecture and four hours lab per week. 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 Quark XPRESS, 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 130 F Graphics (2)

One and one-half hour lecture and one and one-half hour lab per week. Introduces to the industrial arts teaching major and the non-printing major the broad field of graphic arts. Included are experiences in hand composition, copy fitting, paste-up, offset camera stripping, and bindery operation. The course is arranged for students majoring in industrial arts, technical illustration, journalism, commercial art, and merchandising whom in their vocation will work with or furnish materials to the printer. (CSU) (Degree Credit)

## PRNT 151 F Introduction to Pre-Press (4)

Advisory: PRNT 101 F or one year of industrial experience or two years of high school graphic arts
A basic course, which covers the technical aspects of conventional prepress. 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 offset plates are taught. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 152 F Introduction to Electronic Pre-Press (4)

Advisory: PRNT 151 F or one year industrial experience and basic computer knowledge
This is an introductory course, which covers the technical aspects of electronic pre-press. The use of both Mac's 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. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 161 F Sheetfed Offset Presswork (4)

## Advisory: PRNT 101 F and PRNT 070 F

Three hours lecture and three hours lab per week. This course is designed to introduce the technical aspects of lithographic sheet-fed 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 Presswork (4)

## Prerequisite: PRNT $161 F$ with a grade of " $C$ " or better

Three hours lecture and three hours lab per week. 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)

## PRNT 171 F Offset Presswork (7)

Advisory: PRNT 101 F or PRNT 070 F or one year industrial experience or two semesters of articulated high school graphics
Four and one half hours lecture and seven and one half hours lab per week. 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 Offset Presswork (6)

Prerequisite: PRNT $171 F$ with a grade of " $C$ " or better
Four hours lecture and eight hours lab per week. 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 171 prerequisite. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 190 F Basic Printing Estimating (2)

Corequisite: PRNT 101 F or one year experience in the printing industry
Two hours lecture per week. This course is designed for students to develop expertise in the field of printing cost estimating and receive an introduction to basic printing management techniques. Practical examples from current printing jobs in industry are utilized to assist the student in developing meaningful and accurate cost estimates to include environmental considerations. The class will include all facets of the industry including typesetting, computer generated imaging, camera, film assembly, proofing, plate making, sheet and web fed lithographic presswork, bindery and finishing operations. The class will stress current paper and ink estimating techniques using accepted trade standards. (CSU) (Degree Credit)

PRNT 953 F Advanced Electronic Pre-Press (4)
Prerequisite: PRNT $152 F$ with a grade of " $C$ " or better
Three hours lecture and three hours lab per week. This is an advanced course which covers the technical aspects of color specifications, illustration software, typography and font management, color reproduction, introduction to color management, digital file transport, pre-flight of files, proofing, quality control, digital workflow, file servers and networks. Imagesetter, digital trapping, digital imposition and the use of postscripts are taught. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 963 F Advanced Sheetfed Offset Presswork (4)

Prerequisite: PRNT 162 F with a grade of " $C$ " or better
Three hours lecture and three hours lab per week. An advanced course which 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. (Graphic Arts Technical Foundation - GATF - Certification) (CSU) (Degree Credit)

## PRNT 973 F Advanced Offset Presswork (6)

Prerequisite: PRNT $172 F$ with a grade of "C" or better
Four hours lecture and eight hours lab per week. 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. Course may be taken twice for credit. (Graphic Arts Technical Foundation - GATF Certification) (CSU) (Degree Credit)

# Psychology (PSY) 

## Social Sciences Division

Office: Bldg 1400, Room 1415
714.992.7047

Dean: Dan Tesar
Website: http://socsci.fullcoll.edu/

## Psychology Associate in Arts Degree

## Psychology Courses

## PSY 101 F General Psychology (3)

Three hours lecture per week. 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)

Three hours lecture per week. This course, enriched for Honors students, 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 (3)

Three hours lecture/discussion per week. 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 (3)

Three hours lecture per week. This course offers 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)

## Prerequisite: PSY 101 F

Three hours lecture per week. 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 nonjudgmental 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) MULT CULT REQ

## PSY 139 F Developmental Psychology: Life Cycle (3)

Prerequisite: PSY 101 F with a grade of " $C$ " or better
Three hours lecture per week. The 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 development, social and emotional development, intellectual and cognitive development, and moral development are among the topics covered. Students will study and evaluate research methodologies, and will study many factors thought to influence healthy development. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 145 F Child Psychology (3)

Corequisite: PSY 101 F or PSY 110 F
Three hours lecture per week. The psychology of development will be studied from the prenatal stage through adolescence across the domains of physical, cognitive and psychological changes. Theoretical viewpoints and research findings will be applied to real-life situations in the context of a cross-cultural perspective, the dominant U.S., Asian and Latino cultures, in addition to Russian, Indian, African, German, Chinese, Australian, and French cultures. This course fulfills the Multicultural Education Requirement of graduation. (CSU) (UC) (Degree Credit) CSU GE, IGETC, MULT CULT REQ

## PSY 161 F Elementary Statistics for Behavioral Science (3)

## Prerequisite: MATH 040 F or math skills clearance

Three hours lecture per week. 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 and MATH 120 F combined; maximum credit one course) (Degree Credit) CSU GE, IGETC

## PSY 199 F Psychology Independent Study I (1)

One hour lecture or scheduled conference per week. 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 wiil be awarded elective credit in the Social Sciences area. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## PSY 202 F Research Methods in Psychology (3)

Prerequisite: PSY 101 F with a grade of "C" or better.
Corequisite: Completion of or concurrent enrollment in PSY 161 F .
Two hours lecture and three hours lab per week. 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 219 F The Human Services (3)

Three hours of lecture per week. Material covered includes discussions of the history and philosophy of the human services. Goals of various human service agencies will be explored through field trips and guest speakers. Career requirements for various human service occupations will be covered including licensing and educational requirements. By the end of the course the student will be able to identify human service opportunities at various public and private agencies. (CSU) (Degree Credit)

## PSY 221 F The Brain and Behavior (3)

Prerequisite: PSY 101 F or PSY 101HF with a grade of " $C$ " or better Three hours lecture per week. 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 (3)

Prerequisite: PSY 101 F or PSY 101HF with a grade of "C" or better Three hours lecture per week. This course presents a scientific survey of the subfield 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. Ethical issues related research, treatment and forensic psychology are considered. (CSU) (UC) (Degree Credit) CSU GE, AA GE, IGETC

## PSY 233 F The Psychology of Adjustment

Three lecture hours per week. The primary emphasis in this course is for students to experience personal growth and adjustment in small discussion groups. The course provides students with opportunities for selfawareness, recognizing their own potentials, and applying adjustment techniques in an informal setting. Through lectures, films and tapes, students will learn about and evaluate the theories and research on human adjustment. The principles covered can be applied to such topics as breaking bad habits or more effectively handling family arguments. (CSU) (Degree Credit)

## PSY 251 F Social Psychology (3)

Three hours lecture per week. This course presents a scientific survey of the subfield 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 (3)

Three hours lecture per week. This course presents a scientific survey of the subfield 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, by-stander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## PSY 299 F Psychology Independent Study II (1)

One hour lecture per week. This course is offered to 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. Course may be taken three times for credit. (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)

Pass/No Pass only
Three hours lecture and one hour lab per week. 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)

Pass/No Pass only
Three hours lecture and two hours lab per week. This course is designed for native speakers of English who require instruction in basic reading. The course includes such areas as word recognition, literal comprehension, vocabulary development, and study techniques. The course accommodates the wide range of individual adult literacy needs.

## READ 056 F Developmental Reading (3)

Pass/No Pass only
Prerequisite: READ 036 F with a grade of " $C$ " or better or recommended score on the reading placement test
Three hours lecture and two hours lab per week. 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)

Letter Grade or Pass/No Pass option
Prerequisite: READ 056 F with a grade of " $C$ " or better or recommended score on the reading placement test
Three hours lecture and one hour lab per week. This course will prepare students for the demands of college reading and vocabulary in various academic subjects. Content area reading, essays, and journal articles will be critically analyzed with an emphasis placed on fundamental comprehension reading skills, both general and academic vocabulary enhancement, study skills strategies, and principles of study reading. Written summaries and demonstration of organizational structure of reading materials will be required.

## READ 127 F College Study Skills (2)

Letter Grade or Pass/No Pass option
Prerequisite: READ 096 F with a grade of "C" or better or recommended score on the reading placement test
Two hours lecture and one hour lab per week. 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 (3)

Letter Grade or Pass/No Pass option
Prerequisite: READ 096 F with a grade of " $C$ " or better or recommended score on the reading placement test
Three hours lecture per week. 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 and Evaluation (3)

Letter Grade or Pass/No Pass option
Prerequisite: READ 096 F with a grade of " $C$ " or better or recommended score on the reading placement test
Three hours lecture and one hour lab per week. This course offers the student the opportunity to increase critical reading ability, vocabulary, and reading speed. Emphasis is placed on learning the strategies necessary to analyze and evaluate the validity and logic of written communication. (CSU) (Degree Credit) AA GE, CSU GE

## READ 165 F Advanced Vocabulary for Power Reading (3)

 Letter Grade or Pass/No Pass optionPrerequisite: READ 096 F with a grade of " $C$ " or better or recommended score on the reading placement test
Three hours lecture per week. 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 insure lifelong vocabulary growth. (CSU) (Degree Credit)

## Real Estate (RE)

## Business and CIS Division

Office: Bldg 300, Room 310
714.992.7032

Dean: Ann Hovey
Website: http://bizdiv.fullcoll.edu

## Real Estate Management Associate in Science Degree <br> Real Estate Management Certificate <br> Real Estate Sales Skills Certificate

## Real Estate Courses

## RE 090 F Current Issues in Real Estate (.5-3)

Zero to three hours lecture plus 0-9 hours lab per week. This course offers timely real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. 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. Course may be taken four times for credit. (Degree Credit)

## RE 101 F Principles of Real Estate (3)

Three hours lecture per week. A beginning course in real estate fundamentals and principles. 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. Course fulfills educational prerequisite for California state licensure. (CSU) (Degree Credit)

## RE 102 F Legal Aspects of Real Estate (3)

Three hours lecture per week. This course covers California real 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. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

## RE 201 F Real Estate Practice (3)

Three hours lecture per week. This course is designed to interpret real estate valuation procedures, examine real estate appraisal ethical standards, develop an understanding of the principles and methods of 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 and income approaches to value, and the appraisal report. NOTE: Course is approved for partial fulfillment of real estate broker, salesperson, and appraiser licenses, and it qualifies for continuing education for real estate licensees.

## RE 202 F Real Estate Finance (3)

Three hours lecture per week. 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 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. 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 203 F Appraisal - Residential (3)

Three hours lecture per week. This course is designed to interpret real estate valuation procedures, examine real estate appraisal ethical standards, develop an understanding of the principles and methods of 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 and income approaches to value, and the appraisal report. NOTE: Course is approved for partial fulfillment of real estate broker, salesperson, and appraiser licenses, and it 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)

Three hours lecture per week. This course is a continuation of the appraisal techniques studied in RE 203 F (Appraisal - Residential), and covers property other than single-family residential. 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)

Three hours lecture per week. 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. 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 206 F Real Estate Economics (3)

Three hours lecture per week. 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 in an actual multi-unit apartment building. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree Credit)

## RE 207 F Mortgage Loan Brokering in California (3)

Three hours lecture per week. 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 requires; 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 (3.5) Three and one half hours lecture per week. This course focuses on developing an understanding of the principles/procedures of basic residential 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 209 F Residential Real Estate Appraisal ( 3.5)

Three and one half hours lecture per week. 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 Applications and Residential Report Writing (3.5)

Three and one half hours lecture per week. This course focuses on developing an understanding of the principles/procedures of advanced residential applications and report writing. Course meets the license requirements for all appraisal licenses, as well as Fullerton College certificate requirements. (CSU) (Degree Credit)

## RE 212 F Uniform Standards of Professional Appraisal Practice (USPAP) (1)

One hour lecture per week. 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 (.5-3)

Zero to three hours lecture and/or zero to nine hours lab per week. This course offers advanced real estate topics designed to enhance job skills, expand the student's knowledge of the marketplace, and increase employment opportunities. Unit credits may range from .5 to 3 units in any given semester. Consult the class schedule to verify specific topic area and credit for a particular semester. (CSU) (Degree Credit)

## Recreation (REC)

Physical Education Division<br>Office: Bldg 1200, Room 1206<br>714.992.7045<br>Dean: Susan Beers (Interim)<br>Website: pe.fullcoll.edu<br>\section*{Outdoor Recreation and Safety Certificate}<br>\section*{Recreation Courses}

REC 100 F Introduction to Leisure Services/Recreation (3) Three hours lecture per week. This course is designed to introduce the students to the history, scope, significance and trends of recreation in our contemporary society. Students will study the institutions and agencies, which provide leisure opportunities for the community. They will survey career opportunities and educational requirements for recreational leaders. (CSU) (Degree Credit)

## REC 104 F The Zen of Camping (1)

One-half hour lecture, one and one-half hour lab per week. Instruction in the skills, techniques and methods specific to Zen and Taoism as related to their origin in nature and the martial arts. Includes elements of kung fu and tai chi relevant to wilderness experiences as well as philosophical practices oriented towards self-discovery and self-mastery. May include one camping trip. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE

## REC 105 F Survival Arts (1)

One-half hour lecture, two hours lab per week. Students learn longterm 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## REC 107 F Wilderness Survival (1)

One-half hour lecture, two hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit) CSU GE

## REC 108 F Backpacking (1)

One-half hour lecture, two hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit) CSU GE

REC 109 F Camping and Our Surfing Environment (1)
One hour lecture and two hours lab per week. This course combines surf travel and environmental issues concerning our surfing culture. The class will emphasize safe camping and safe surfing, while incorporating units on water safety, ocean currents, surfing technique, camping planning and organization, international travel, water pollution, water treatment and beach protection and beach erosion. \$100 facility fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree Credit)

## REC 110 F Camping and Our Kayaking Environment (1)

One half hour lecture and one and one half hour lab per week. This course combines travel and environmental issues concerning our ocean kayaking population. The class will emphasize safe camping and safe kayaking, while incorporating units on water safety, ocean currents, kayaking technique, camp planning and organization, international travel, water pollution, water treatment, and beach protection. Course may be taken four times for credit. $\$ 400$ facility fee required. (CSU) (UC Credit Limitation) (Degree Credit)

REC 111 F Camping and Our Bodyboarding Environment (1) Two hours lab plus one hour arranged per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## Russian (RUSS)

## Humanities Division

Office: Bldg 500, Room 522-O
714.992.7036

Dean: Dan Willoughby
Website: www.humanities.fullcoll.edu

## Russian Courses

## RUSS 101 F Elementary Russian I (5)

Letter Grade or Pass/No Pass option
Prerequisite: Reading clearance is recommended
Five hours lecture plus one arranged lab hour per week. 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 Russian-speaking countries. This course is conducted primarily in Russian. NOTE: This course is currently not being offered at Fullerton College. AA GE, CSU GE

## RUSS 102 F Elementary Russian II (5)

Letter Grade or Pass/No Pass option
Prerequisite: RUSS 101 F with a grade of "C" or better or one year of high school Russian with a grade of " $C$ " or better
Five hours lecture plus one arranged lab hour per week. 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 Russian-speaking countries. This course is conducted primarily in Russian. NOTE: This course is currently not being offered at Fullerton College. (CSU) (UC) AA GE, CSU GE, IGETC

## RUSS 299 F Russian Independent Study (1)

Prerequisite: Four semesters of the language
One hour lecture or scheduled conference per week. For able students who wish to increase their knowledge of literature, culture, language, or composition through individual study or research. Elective credit in the humanities area. Course may be taken three times for credit. NOTE: This course is currently not being offered at Fullerton College.

## Social Sciences (SOSC)

## Social Sciences Division

Office: Bldg 1400, Room 1415
714.992.7047

Dean: Dan Tesar
Website: http://socsci.fullcoll.edu/

## Social Sciences Courses

## SOSC 120 F Introduction to Probability and Statistics I (4)

 Prerequisite: MATH 040 F with a grade of " $C$ " or betterFour hours lecture per week. 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 this course. Students who receive credit for this course may not receive credit for MATH 120 F. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

# Sociology (SOC) 

Social Sciences Division<br>Office: Bldg 1400, Room 1415<br>714.992.7047<br>Dean: Dan Tesar<br>Website: http://socsci.fullcoll.edu/<br>Sociology Associate in Arts Degree<br>\section*{Sociology Courses}

## SOC 101 F Introduction to Sociology (3)

Three hours lecture per week. 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)
Three hours lecture per week. 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. 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

## SOC 102 F Social Problems (3)

Three hours lecture per week. 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 133 F Introduction to Gerontology (3)

Three hours lecture per week. This course is an introduction to 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, care giving, living arrangements, economics and end-of-life issues will also be discussed. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SOC 199 F Sociology Independent Study (1)

One hour lecture per week. 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. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## SOC 201 F Dying and Death (3)

Three hours lecture per week. 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)

Three hours lecture per week. The course includes identification and analysis of the status of women in American society, and a survey of the cultural, social, psychological and economic history of women. Contemporary issues and their relation to the role definition of women today are explored. (CSU) (UC Credit Limitation - Same as WMNS 225 F) (Degree Credit) CSU GE, AA GE

## SOC 225HF Honors Sociology of Women (3)

Three hours lecture per week. 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. 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. (CSU) (UC Credit Limitation) (Degree Credit) CSU GE, AA GE

## SOC 275 F Marriage and Family (3)

Three hours lecture per week. This course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include:gender roles, love, single hood, 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)

Three hours lecture per week. This course is a sociological exploration of the topics related to the institutions of marriage and family. These topics include: gender roles, love, single hood, 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. 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) CSU GE, AA GE, IGETC, MULT CULT REQ

## SOC 277 F Sociology of Religion (3)

Three hours lecture per week. 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)


Three hours lecture per week. 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. 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

## SOC 285 F Drugs and Society (3)

Three hours lecture per week. 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. (UC) (CSU) (Degree Credit) CSU GE, AA GE, IGETC

## SOC 292 F Introduction to Criminology (3)

Three hours lecture per week. 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 (1)

One hour lecture per week. 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. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## Spanish (SPAN)

## Humanities Division

Office: Bldg 500, Room 522-O
714.992.7036

Dean: Dan Willoughby
Website: humanities.fullcoll.edu

## Spanish Courses

## SPAN 050AF Public-Service Spanish I (3)

Letter Grade or Pass/No Pass option
Three hours lecture per week. An introductory oral course open to students with no previous exposure to Spanish who want a speaking knowledge for vocational needs in the fields of medicine, social welfare, law enforcement, business, etc. No prerequisite required.

## SPAN 050BF Public-Service Spanish II (3)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 050AF with a grade of "C" or better or previous experience with Spanish
Three hours of lecture per week. Continuation of SPAN 050AF PublicService Spanish.

## SPAN 101 F Elementary Spanish I (5)

Letter Grade or Pass/No Pass option
Five hours lecture per week plus one arranged lab hour per week. 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## SPAN 101 HF Honors Elementary Spanish I (5)

Five hours lecture per week and one arranged lab hour per week. A college level course enhanced for honor students. This 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE

## SPAN 102 F Elementary Spanish II (5)

## Letter Grade or Pass/No Pass option

Prerequisite: SPAN 101 F with a grade of " $C$ " or better or one year of high school Spanish with a grade of " $C$ " or better
Five hours lecture per week plus one arranged lab hour per week. The 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 102HF Honors Elementary Spanish II (5)

Prerequisite: SPAN $101 F$ with a grade of " $C$ " or better or one year of high school Spanish with a grade of "C" or better
Five hours lecture per week plus one arranged lab hour per week. A college level course enhanced for honors students. This course requires significant individual projects and study plans on the part of the student. The 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. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 130 F Spanish History and Culture (3)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 101 F with a grade of " $C$ " or better
Three hours lecture per week. This course studies major historical events, archaeological sites, geographical areas and cultural points of interest in Spanish-speaking countries. It is designed to immerse the student in direct study of a land, its people and its culture. Eight hours of lecture will precede the on-site experience. (Note: This course is currently not being offered at FC - if interested, contact Division Office.) (CSU) (Degree Credit)

## SPAN 200 F Conversational Spanish (2)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 102 F with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better
Two hours lecture per week. This course will focus on improving listening comprehension and speaking skills in simulated real-life situations within the framework of the ACTFL Proficiency Guide lines. Reading, writing and cultural components will be included. This course may be taken concurrently with SPAN 203 F, SPAN 204 F, SPAN 205 F, and SPAN 206 F. Instruction will be in Spanish. Course may be taken four times for credit. (CSU) (Degree Credit)

## SPAN 201 F Spanish for the Spanish Speaker (5)

Letter Grade or Pass/No Pass option
Prerequisite: A native-speaking knowledge of Spanish for those who have had little or no education in a Spanish-speaking country
Advisory: Two years of high school Spanish
Five hours lecture per week. This is an intensive course designed to improve the communicative skills in Spanish for bilingual students. Although the course addresses all four skills of language learning listening comprehension, 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)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 102 F with a grade of "C" or better or two years of high school Spanish with a grade of " $C$ " or better
Four hours lecture per week. Further development of listening and reading comprehension, speaking and writing Spanish 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 203 F and SPAN 201 F combined; maximum credit, one course) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 204 F Intermediate Spanish IV (4)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 201 F or 203 F with a grade of "C" or better or three years of high school Spanish with a grade of "C" or better Four hours lecture per week. The course continues to emphasize acquisition of the more formal aspects of literary analysis and cultural appreciation through a selection of advanced readings by modern Spanish and Spanish American authors. It also provides extensive practice in oral and written expression and a thorough review of grammatical concepts. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPAN 205 F Introduction to Spanish Literature (3)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 204 F with a grade of "C" or better or four years of high school Spanish with a grade of "C" or better
Three hours lecture per week. Introductory Spanish Literature survey course spanning from the Middle Ages to the present covering history, culture and literary writings from Spain. The instruction is in Spanish. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## SPAN 206 F Introduction to Latin-American Literature (3)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 204 F with a grade of "C" or better or four years of high school Spanish with a grade of "C" or better
Three hours lecture per week. Introductory Latin American Literature survey course spanning from 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) CSU GE, IGETC, MULT CULT REQ

## SPAN 207 F Children's Literature in Spanish (3)

Letter Grade or Pass/No Pass option
Prerequisite: SPAN 203 F with a grade of " $C$ " or better
Three hours lecture per week. 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) CSU GE

## SPAN 299 F Spanish Independent Study (1)

Prerequisite: Four semesters of the language
One hour lecture or scheduled conference per week. For able students who wish to increase their knowledge of composition, literature, culture, or language through individual study or research. Elective credit in the humanities area. Course may be taken three times for credit. (CSU) (UC review required) (Degree Credit)

# Speech (SPCH) 

Humanities Division
Office: Bldg 500, Room 522-O
714.992.7036

Dean: Dan Willoughby
Website: humanities.fullcoll.edu

## Speech Associate in Arts Degree

## Speech Courses

## SPCH 100 F Public Speaking (4)

Advisory: College level reading and writing
Four hours lecture per week. The purpose of the 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)

Advisory: College level reading and completion of ENGL 060 F
Three hours lecture per week. The 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 (3)

Advisory: College level reading and completion of ENGL 060 F Three hours lecture per week. 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, MULT CULT REQ

## SPCH 124 F Small Group Communication (3)

Advisory: College level reading and completion of ENGL 060 F
Three hours lecture per week. 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 (4)

## Advisory: College level reading and writing

Four hours lecture per week. 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. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## SPCH 138 F Forensics (.5-1)

Advisory: College level reading and writing
One to two hours lab per week plus one half to one hour arranged lab per week. 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. (CSU) (Degree Credit)

## Student Support Services (STSV)

Counseling and Guidance

Office: Bldg 2000, Room 2022
714.992.7084

Dean: Lisa Campbell
Website: counseling.fullcoll.edu

## Student Support Services Courses

## STSV 071 F Adaptive Computer Access:

Word Processing (.5-2)
Open Entry/Open Exit
Pass/No Pass only
One to six hours of guided instruction, depending on units attempted and flexible hours by arrangement. 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. Course may be taken four times for credit.

## STSV 072 F Learning Assessment (.5)

Open Entry/Open Exit
Pass/No Pass only
Eight hours arranged. This course is an intensive diagnostic learning assessment for students with learning disabilities which have had the effect of impeding academic performance. Emphasis will be placed on assessing specific academic and learning modality strengths and weaknesses. A student educational contract (SSEC) outlining long term goals/ short term objectives for identified eligible students with learning disabilities will be developed.

## STSV 075 F Adaptive Computer: Learning Strategies (.5-2)

## Open Entry/Open Exit

Pass/No Pass only
One to six hours of guided instruction per week depending on units attempted and flexible hours by arrangement. Students will receive computer-assisted instruction to improve learning strategies, problem solving and cognitive skills and proficiency in basic skills areas.

## STSV 135 F Introduction to Leadership Development (same as COUN 135 F) (3)

Three hours lecture per week. 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, selfassessment, 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

(same as COUN 136 F) (3)
One hour lecture and two hours participation in campus organizations required each week. 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. Course may be taken two times for credit. (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)

Three hours lecture and discussion per week. 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 and used in providing services in a helping relationship. (CSU) (Degree Credit)

## STSV 299 F EOPS Independent Study (1)

Three hours independent research per week per unit of credit. 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. Course may be taken three times for credit. (CSU) (UC review required) (Degree Credit)

# Technology-Related Courses (TECH) 

Technology and Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7051<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu

## Technology-Related Courses

## TECH 081 F Technical Mathematics I (3)

Prerequisite: Math clearance or MATH 010 F with a grade of "C" or better
Three hours lecture per week. 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. This course does not transfer to CSU. (Degree Credit) AA GE

## TECH 082 F Technical Mathematics II (3)

Prerequisite: TECH $081 F$ with a grade of "C" or better
Three hours lecture per week. 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)

Three hours lecture per week. A course in the fundamental principles of physics, mechanics, heat, light, and strength of materials as applied to practical shop problems. (Degree Credit) AA GE

## TECH 108 F Manufacturing Processes (3)

Three hours lecture per week. 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)

Two hours lecture per week for nine weeks. As it 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 199 F Technology and Engineering Independent

 Study (1-3)Prerequisite: Introductory course in appropriate subject area One hour lecture of scheduled conference or three hours independent lab research per week per unit of credit. 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. Course may be taken three times for credit. (CSU) (UC review required.) (Degree Credit)

## TECH 299 F Technology and Engineering Independent

## Study (1-3)

Prerequisite: Introductory course in appropriate subject area One hour lecture of scheduled conference or three hours independent lab research per week per unit of credit. 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. Course may be taken three times for credit. (CSU) (UC review required) (Degree Credit)

# Theatre Arts Drama (THEA) 

## Fine Arts Division

Theatre Office: Bldg 1300, Room 1316
714.992.7034

Dean: Bob Jensen
Website: finearts.fullcoll.edu

Theatre Arts (Drama) Associate in Arts Degree<br>Assistant Costume Designer Certificate<br>Costume Cutter/Draper Certificate<br>Costume Stitcher Certificate<br>Costume Wardrobe Certificate<br>Lighting Technician Certificate<br>Musical Theatre Certificate<br>Advanced Musical Theatre Certificate<br>Scenic Artist Certificate<br>Sound Technician Certificate<br>Stage Management Certificate<br>Technical Theatre Certificate<br>Theatrical Costumer Certificate<br>Advanced Theatrical Costumer Certificate

## Theatre Arts Courses

## THEA 072 F Movement and Performance Skills for

 Musical Theatre (1)One hour lecture and one hour lab per week. This exciting summer theatre program is an in-depth analysis and application of the techniques and skills necessary for the creation of, and execution of, choreography for Musical Theatre. Emphasis is on analyzing and performing a variety of styles, culminating in a fully staged performance. Course may be taken four times for credit.

## THEA 075 F Theatrical City Tours: New York (2)

One hour lecture and one hour lab per week. This course features theatrical city tours to New York City and offers a study of current, classical, and musical plays at Broadway and off-Broadway 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 $\$ 1500$. This course may be taken four times for credit.

## THEA 076 F Theatrical City Tours: London (2)

One hour lecture and one hour lab per week. This course features theatrical city tours to London, England and Stratford-upon-Avon and offers a study of current, classical, and musical plays. 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 $\$ 2000$. This course may be taken four times for credit.

## THEA 090 F Advanced Topics in Theatre Technology (.5-3)

One to three hours lecture and one to three hours lab per week. This course is designed to meet the various needs of technical theatre areas that require advanced training, continuing education and provide professional growth for persons employed in technical theatre. 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. Course may be taken four times for credit. (Degree Credit)

## THEA 100 F Introduction to the Theatre (3)

Three hours lecture per week. 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)

Letter Grade or Pass/No Pass option
Two hours lecture and three hours lab arranged per week. A study of the combined elements of contemporary theatre through examination of audience/performer relationships and the organization of support personnel. A study of current and classical plays, with special emphasis on dramatic analysis and cultural significance. Mandatory attendance at a selected group of live theatrical productions required. Approximate cost of semester admissions is $\$ 100$. (CSU) (UC) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 105 F Musical Theatre History (3)

Three hours lecture per week. 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 contribution to the formation and the population of musical theatre as it exists today. (CSU) (UC) (Degree Credit) CSU GE, IGETC

## THEA 106 F Principles of Playwriting (3)

Three hours lecture per week. This is a practical class designed to introduce 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 (3)

Three hours lecture per week. 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 multiethnic 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)

Three hours of lecture per week. 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. (UC) (Degree Credit) AA GE, CSU GE

## THEA 120AF Beginning Principles of Acting (3)

Corequisite: THEA 149 F (. 5 units)
Two hours lecture plus four lab per week. This course is an examination and application of theatre elements that relate directly to the actor including but not limited to criticism, emotion, stage movement, vocal techniques, theatrical terminology, rehearsal and performance techniques and script analysis. Open to all majors. (CSU) (UC) (Degree Credit)

## THEA 120BF Intermediate Principles of Acting (3)

Prerequisite: THEA 120AF with a grade of "C" or better Corequisite: Technical theatre class
Two hours lecture and four hours lab per week. Advanced study in the principles and practices of contemporary acting techniques. Students will analyze and evaluate the acting theories of the Stanislavski system of acting, as assessed by the 20th century American acting leaders, i.e., Uta Hagen, Stella Adler, Robert Benedetti, Lee Strasberg, and Boleslavski. Students will apply these principles to their scene work, improvisations, workshop exercises and evaluate their progress and that of their classmates. This class is required for the major. (CSU) (UC) (Degree Credit)

THEA 120CF Advanced Principles of Acting I (3)
Prerequisite: THEA 120BF with a grade of "C" or better
Corequisite: Technical theatre class
Two hours lecture and four hours lab per week. Continuation of acting skills with emphasis on the applications of stylistic techniques for the classics. Individual exercises and scene work in Elizabethan, Restoration, Greek plays as well as exploration of French farce, comedy of manners, and Chekhov. (CSU) (UC) (Degree Credit)

## THEA 120DF Advanced Principles of Acting II (3)

Prerequisite: THEA 120BF with a grade of " $C$ " or better
Corequisite: Technical theatre class
Two hours lecture and four hours lab per week. 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 121 F Movement For Actors (3)

Two hours lecture plus three hours lab per week. 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, choreography, 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 focusing on 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. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## THEA 122 F Improvisation for Television, Film and

 Theatre (2)One hour lecture plus three hours lab per week. The principles and techniques of improvisational acting designed to increase the actor's creativity, problem solving, and performance skills. This course 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. This course emphasizes 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)

One hour lecture and three hours lab per week. This course explores acting for the modern stage through scene study and performance. It incorporates play analysis, character development, improvisation and staging. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

THEA 125 F Musical Theatre Performance Techniques (2) One hour lecture plus three hours lab per week. This course explores the development of the fundamentals of acting, singing, and movement for musical theatre through exercises, auditions, solo performances and full staged scenes. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 127 F Oral Interpretation (3)

Three hours lecture per week. This course explores the fundamentals of the effective presentation of oral literature before an audience. It includes the study of voice and diction for the purpose of developing effective reading and correct habits of speech. It develops an appreciation of literature through oral expression and a historical overview of literary genres. Recommended for teaching majors both elementary and secondary. (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 Beginning Voice for Actors (3)

Three hours lecture per week. This course will include academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the special demands of acting for the stage. Along with a thorough introduction to the International Phonetic Alphabet, study 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. Stress 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. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## THEA 130 F Acting Workshop (3)

Three hours lecture and six hours lab per week plus two hours per week arranged. A continuation of acting fundamentals with increased emphasis on the application of the principles and theories of creative acting. Additional performance and technical support work in workshop theatre is required. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 133 F Theatre Practicum (2)

Advisory: Admission by audition or interview only
Twelve hours lab per week for nine weeks. This course provides the study and lab exploration of all aspects of theatre production, culminating in a series of public performances. Enrollment is by audition or interview only. Actors audition for acting, singing or dancing roles. Students interested in technical work interview for back stage positions in stage management, set construction, scene painting, costumes, make-up, lighting, sound, and publicity. This course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 135 F Resident Theatre Company (3)

Advisory: Admission by audition or interview only
Two hours lecture plus three hours lab per week. 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 and administrative production assistants. Enrollment is by audition or interview only. This course may be taken four times for credit. (CSU) (Degree Credit)

## THEA 136 F Touring Theatre Productions: Rehearsal and Performance (2)

Six hours lab per week. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## THEA 137 F Summer Theatre Workshop (3)

Advisory: Admission/interview
Twenty hours lab per week for five weeks plus no less than forty-five hours of arranged time for production. This course is only offered during the summer session. This course involves the study and lab exploration of all aspects of theatre production, culminating in a series of public performances. Actions audition for acting, singing or dancing roles. Students interested in technical work will interview for backstage positions in stage management, set construction, scene painting, costumes, makeup, lighting, sound and publicity. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 138 F Musical Theatre Workshop (2)

Prerequisite: THEA 125 F with a grade of " $C$ " or better
 Advisory: THEA 150 F
One hour lecture and three hours lab per week. This course is an indepth study of audition and performance skills that includes acting, singing, and movement for musical theatre. Students will utilize exercise, audition techniques as well as solo and group performances in order to become more proficient as musical theatre artists. Course may be taken two times for credit. (CSU) (Degree Credit) AA GE

## THEA 141 F Introduction to Technical Theatre (3)

Three hours lecture and three hours lab per week. This course introduces the student to the study and execution of technical theater principles. Using a lecture/lab format, and through project-based learning, students will learn theatrical design and technical practices that apply to scenery, lighting, sound, costumes, make-up, properties and scene painting. (CSU) (UC) (Degree Credit)

## THEA 142 F Theatre Crafts Lab (1-2)

One hour lecture and two hours lab per week arranged (one unit class). Two hours lecture and four hours lab per week arranged (two unit class). Design, construction, and operation in all areas of scenery, lighting, sound, costumes, and properties. Students are given practical experience in each area of production. Offers a theatre arts major the opportunity to develop confidence in his personal skills and technical capabilities. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 143 F Stagecraft (3)

Three hours lecture plus three hours lab per week. This course involves the study and execution of theatrical scenery with emphasis on construction, drafting, tools, materials and their relationship to the design and implementation process. Students enrolling in the course will be given hands-on practical experience in all the practical aspects of designing scenery for the theatre. (CSU) (UC) (Degree Credit)

## THEA 144 F Lighting (3)

Corequisite: THEA 149 F (. 5 units) ( $11 / 2$ hours per week)
Two hours lecture and three hours lab per week, plus one and one-half hours per week in THEA 149 F . This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## THEA 145 F Theatrical Costuming (3)

## Corequisite: THEA 149 F (. 5 units)

Two hours of lecture and two hours of lab per week. This course is an introduction to basic theatrical costuming. This course is designed to teach the student about costume design, history, and the use of sewing machines, pattern making and fabric selection. The course will culminate in a final project that reflects the student's creativity. May be taken twice for credit. (CSU) (UC) (Degree Credit)

## THEA 146 F Scene Painting (3)

## Corequisite: THEA 149 F (. 5 units)

Consisting of two hours of lecture and three hours of lab per week, 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 147AF Stage Makeup (3)

Corequisite: THEA 149 F (. 5 units)
Two hours of lecture and three hours of lab per week. 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. (CSU) (UC) (Degree Credit)

## THEA 149 F Stage Crew Activity (.5-3)

Open Entry/Open Exit
One to six lab hours per week based on the number of units enrolled. Practical lab experience in the technical aspects of theatre resulting in public performances of theatrical productions. Students may choose from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, makeup, management, audience development and promotion. Enrolling in .5 units requires 27 hours per term, 1 unit requires 54 hours per term, 2 units require 108 hours per term, 3 units requires 162 hours per term. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 150 F Performance Lab (1)

Three hours of lab per week. This course features rehearsals, performances, and studio recording of standard and current commercial music for singers who dance. Accompanied by a small instrument group, the class includes choreography, staging and microphone techniques. Student compositions and arrangements are encouraged. May be taken four times for credit. (CSU) (Degree Credit)

## THEA 151 F Properties: Design and Construction (3)

Three hours lecture and two hours lab per week. 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 and puppetry, 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) AA GE

## THEA 160 F Introduction to Sound Technology (2)

Two hours of lecture per week. 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 concert hall. (CSU) (Degree Credit) AA GE

## THEA 161 F Sound Reinforcement Techniques (2)

Two hours lecture per week. 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 Theater (3)

Two hours lecture and three hours lab per week. This course develops the student's 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 196HF Honors Creative Arts - Theater (3)

Three hours lecture per week plus one hour arranged in attendance at museums, concerts, and theatrical performances. This course explores the nature of creativity through exposure to the performing arts, literature, and the fine arts. Honors 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 ART 196HF or MUS 196HF. (CSU) (UC Credit Limitation) (Degree Credit) AA GE, CSU GE, IGETC

## THEA 222 F Acting for the Camera (3)

Two hours lecture and four hours lab per week. Study and exercise in the special techniques of acting for the motion picture and television camera. Emphasis will be placed on gaining an understanding of the various camera angles, shots, positions, and actor behavior: philosophies and approaches unique to acting before a camera. Practical work with the camera required. Course may be taken twice for credit. (CSU) (UC) (Degree Credit)

## THEA 225 F Stage Directing (3)

Prerequisite: THEA 120AF with a grade of "C" or better
Corequisite: THEA 141 F or THEA 142 F or THEA 143 F or THEA 144 F or THEA 145 F or THEA 146 F or THEA 147 F or THEA 255 F or THEA 265 F or THEA 900 F
Two hours lecture and three hours lab per week. This course is a study of the background and techniques of the director in theatre with an emphasis on practical experience in directing through class projects and public performance. (CSU) (UC) (Degree Credit)

## THEA 235 F Experimental Theatre (2)

Advisory: Admission by audition or interview only
Six hours lab per week. This course involves the study and lab exploration of student directed and produced productions. Enrollment is by audition or interview only. Directors are interviewed and accepted for specific projects, actors audition for acting, singing, or dancing roles and students interested in technical and design work interview for production positions. Course may be taken four times for credit. (CSU) (UC) (Degree Credit)

## THEA 255 F Theatrical Costume Construction (2)

Two hours lecture and two hours lab per week. This course offers continued research and application of costume construction techniques and design elements unique to historical periods and their application to present day costume construction and design. May be taken four times for credit. (CSU) (Degree Credit)

## THEA 265 F Theatre Management (2)

Two hours lecture per week. This course is designed to teach the business of "show business" in educational, community, and professional theatre. 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 290 F Theatre Arts Seminar (1-3)

Lecture/lab hours may vary with credit given. This course allows for flexibility in designing special activities for beginning students and special topic classes for advanced students. Course may be taken four times for credit. (CSU) (Degree Credit)

## THEA 298 F Theatre Arts Internship (1-3)



Advisory: Completion of 10-12 units of any theater course listed in the technical theatre certificates with a grade of "C" or better.
Three to nine hours lab per week. 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. Course may be taken two times for credit. (CSU) (Degree Credit)

## THEA 299 F Theatre Arts Independent Study (.5-2)

Prerequisite: All classes listed in specific performance area
One hour conference per week. Designed for capable students who wish to increase their knowledge and experience in theatre. Unit credit may range from $1 / 2$ to 2 units in any given semester. Consult class schedule to verify credit for that particular term. Course may be taken four times for credit. (CSU) (UC review required) (Degree Credit)

## THEA 900 F Stage Management (2)

Two hours lecture per week. This course involves the study and the practical application of the practices of the stage manager as they pertain to the theatrical production process. Emphasis is placed on the duties, responsibilities and procedures from pre-production to postproduction. The course is required of all students who are interested in stage management positions for the Theatre Arts Department productions. (Degree Credit)

## Vietnamese (VIET)

## Humanities Division

Office: Bldg 500
714.992.7036

Dean: Dan Willoughby
Website: humanities.fullcoll.edu

## Vietnamese Courses

VIET 050AF Vietnamese for Public Personnel (3)
Letter Grade or Pass/No Pass option
Three hours lecture per week. An introductory oral course open to students with no previous exposure to Vietnamese who want a speaking knowledge for vocational needs in the fields of medicine, social welfare, public safety, law enforcement, business, etc. NOTE: This course is currently not offered at Fullerton College. AA GE

## VIET 050BF Vietnamese for Public Personnel (3)

Letter Grade or Pass/No Pass option
Prerequisite: VIET 050AF with a grade of "C" or better or previous experience with Vietnamese
Three hours lecture per week. This course is a continuation of VIET 050AF. NOTE: This course is currently not offered at Fullerton College. AA GE

# Welding (WELD) 

Technology and Engineering Division<br>Office: Bldg 1000, Room 1005<br>714.992.7594<br>Dean: Scott McKenzie<br>Website: techneng.fullcoll.edu

## Welding Technology Certificate

## Welding Courses

## WELD 091AF Industrial Welding Fundamentals (5)

Three hours lecture and six hours lab per week. This course is designed to give students, with interest in welding as an occupation, a broad outlook on 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)

Prerequisite: WELD 091AF or WELD 121AF and WELD 121BF with a grade of " $C$ " or better
Three hours lecture and six hours lab per week. 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 axes on plate, Flux Cored Arc Welding (FCAW) on intermediate and unlimited thicknesses in all axes on plate. (Degree Credit)

## WELD 091CF Manual Arc Welding Fundamentals (5)

Prerequisite: WELD 091BF with a grade of " $C$ " or better
Three hours lecture and six hours lab per week. 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 nonferrous metals. (Degree Credit)

## WELD 091DF Structural Welding Certification (5)

Prerequisite: WELD 091CF with a grade of "C" or better
Three hours lecture and six hours lab per week. Topics covered include 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 (.5-2)

Open Entry/Open Exit
Corequisite: WELD 121AF, WELD 121BF, WELD 091AF, WELD 091BF, WELD 091CF, WELD 091DF with a grade of "C" or better, or any other Fullerton College welding class
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. Course may be taken four times for credit. (Degree Credit)

## WELD 096 F Welding Inspection Technology (5)

Five hours lecture per week. This class will aid in preparation for the American Welding Society's AWS Certified Welding Inspector's CWI exam. Fundamentals of visual welding inspection per nationallyrecognized 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)
Prerequisite: WELD 091AF with a grade of " $C$ " or better
One hour lecture and three hours lab per week. 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 121 AF Introduction to Welding (2)

One hour lecture and three hours lab per week. The 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 121 BF Fundamentals of Inert Gas Welding (2)
Prerequisite: WELD 121AF with a grade of " $C$ " or better
One hour lecture and three hours lab per week. 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. (Degree Credit)

## Wellness (WELL)

## Physical Education Division

Office: Bldg 1200, Room 1206
714.992.7045

Dean: Susan Beers (Interim)
Website: pe.fullcoll.edu

## Wellness Courses

## WELL 020 F Fitness Assessment (.5)

Thirty minutes lecture and one hour lab per week. 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 <br> Assessment (1)

One hour lecture and one hour lab per week. 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 Connection (3)

Three hours lecture per week. 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)

Two hours lecture per week. 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)

Two hours lecture per week. 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)

WELL 220 F Exercise and Aging (2)
Two hours lecture per week. 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)

## WELL 221 F Personal Training Internship (2)

Prerequisite: Completion of ANAT 231 F; NUTR 210 F; PE 154 F, PE 235 F; WELL 040 F, WELL 119 F, WELL 200 F with a grade of "C" or better. Plus two units of restricted electives from: PE 147 F , PE 152 F, PE 159 F, PE 199 F, PE 243 F, PE 266 F; WELL 242 F with a grade of "C" or better
Two hours lecture, two hours lab per week. 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 twice for credit. (CSU) (PE 199 F UC review required.) (Degree Credit)

## WELL 230 F The Body-Mind Connection (3)

Three hours lecture per week. 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 our lives; physical, mental, emotional, and spiritual. (CSU) (Degree Credit) CSU GE

## WELL 232 F Introduction to Massage (4)

Four hours lecture per week. 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)

## Advisory: WELL 238 F

Three hours lecture per week. 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, craniosacral motion and aromatherapy. Special attention is given to palpatory skills. (CSU) (Degree Credit)

## WELL 234 F Advanced Massage (3)

Advisory: WELL 238 F
Three hours lecture per week. This hands-on course explores a variety of techniques appropriate to the spa setting. This course includes Advanced Massage is a course 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)

Three hours lecture per week. 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 238 F Massage and Bodywork Lab (2)

Advisory: WELL 232 F and WELL 236 F
One hour lecture and three hours lab per week. 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. Course may be taken three times for credit. (CSU) (Degree Credit)

## WELL 239 F Internship Massage and Bodywork (1-4)

Prerequisite: WELL 233 F or WELL 234 F with a grade of "C" or better One hour lecture and three hours lab per week. Students apply their knowledge and skills working directly with the public in supervised settings. Students independently perform field work under supervision in various settings (i.e., community agencies, with athletic teams, spas, chiropractors or healthcare facilities). Students are required to complete four units for the Therapeutic and Sports Massage Certificate. Course may be taken four times for a maximum of eight units. (CSU) (Degree Credit)

## WELL 242 F Stress Management and Relaxation Training (1.5)

One and one-half hour lecture per week. 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) CSU GE

## WELL 265 F Kinesiology (3)

Three hours lecture per week. 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)

# Wood Technology (WOOD) 

Technology and Engineering Division
Office: Bldg 1000, Room 1005
714.992.7576

Dean: Scott McKenzie
Website: techneng.fullcoll.edu
Cabinetmaking and Millwork Technology Certificate Wood Technology: Woodcarving Specialist Certificate

## Wood Technology Courses

## WOOD 012 F Cabinetmaking/Millwork (4)

Advisory: WOOD 110 F or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours shop practice per week. This course provides the students with on-site cabinetmaking and installation experience at the Construction Technology student-built house. Students will be involved in a three-phase cabinetmaking project. PHASE I: Design, layout, cost estimating and material analysis. PHASE II: Students will construct kitchen cabinets, base moldings, and mill all interior trim. PHASE III: Surface preparation, staining, finishing, hardware, and installation of cabinets, millwork, and interior finish carpentry. Course may be taken three times for credit. (Degree Credit)

## WOOD 013 F Introduction to 32mm Cabinetmaking (4)

Advisory: WOOD 110 F with a grade of " C " or better or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours lab per week. This is an introduction to the European style of cabinetmaking based on a system of holes drilled at 32 mm increments. Design considerations and materials selection, including hardware, will be covered, along with the proper layout, sizing, and drilling of cabinet parts. Special emphasis is given to the safe and correct use of equipment that is specific for this type of cabinetmaking. (Degree Credit)

## WOOD 014 F Cabinetmaking/Millwork (House Project) (4)

Advisory: WOOD 110 F or equivalent Wood Technology course or two years of woodworking experience
Two hours lecture and six hours shop practice per week. This course provides the students with on-site cabinetmaking and installation experience at the Construction Technology student-built house. Students will be involved in a three-phase cabinetmaking project. PHASE I: Design, layout, cost estimating, and material analysis. PHASE II: Students will construct kitchen cabinets, base moldings, and mill all interior trim. PHASE III: Surface preparation staining, finishing, hardware, and installation of cabinets, millwork, and interior finish carpentry. Course may be taken three times for credit. (Degree Credit)

## WOOD 015 F 32mm Cabinetmaking/Millwork-House Project (4)

Advisory: WOOD 110 F with a grade of " C " or better or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours lab per week. This course provides the students with on-site 32 mm cabinetmaking experience at the Construction Technology student-built house and installation experience. Students will be involved in a three-phase cabinetmaking project. PHASE I: Design, layout, cost estimating, and material analysis. PHASE II: Students will construct 32 mm kitchen cabinets, bathroom vanities, base moldings, and mill all interior trim. PHASE III: Surface preparation, staining, finishing, hardware, and installation of 32 mm cabinets, millwork, and interior finish carpentry. (Degree Credit)

## WOOD 016 F Machine Woodworking/Furniture (4)

Advisory: WOOD 110 F or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours shop practice per week. This course is a three-phase study of intermediate wood technology, wood machinery, and fine furniture construction, emphasizing craftsmanship and professional preparation. PHASE I: Wood technology, identification, and terminology; lumber grades, principles of design, working drawings, bill of materials, use and care of hand tools, and joinery exercises. PHASE II: Operation and maintenance of woodworking power machines, safety precautions, design and construction of jigs and fixtures, machine joinery, and millwork as related to furniture production. PHASE III: Finish carpentry, door and drawer construction, molding, trim, frame, and panels. Properties of adhesives, stains, sealers, and finishes. Study of trade skills and career opportunities in industrial woodworking. Course may be taken three times for credit. (Degree Credit)

## WOOD 017 F Table Construction (4)

Advisory: WOOD 110 F with a grade of " C " or better or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours lab per week. This is an intermediate course that covers the history, design, and construction of tables for office and residential and residential applications. Special emphasis is given to ergonomic considerations, proper choice of materials, and correct machining operations to successfully complete a project. Each student builds a table of the student's own design. Course may be taken twice for credit. (Degree Credit)

## WOOD 018 F Advanced Machine Woodworking/ Furniture (4) <br> Advisory: WOOD 016 F

Two hours lecture and six hours shop practice per week. This course will put emphasis on more advanced furniture design and joinery, employing more sophisticated and advanced hand and machine tool operation. (Degree Credit)

## WOOD 019 F Chair Construction (4)

Advisory: WOOD 110 F with a grade of " C " or better or equivalent introductory Wood Technology course or two years of woodworking experience
Two hours lecture and six hours lab per week. This is an intermediate course that covers the history, design, and construction of chairs for office and residential applications. Special emphasis is given to ergonomic considerations, proper choice of materials, and correct machining operations to successfully complete a project. Each student builds a chair of the student's own design. (Degree Credit)

WOOD 021 F Tool and Jig Production (2)
Advisory: WOOD 110 F or equivalent introductory Wood Technology course or two years of woodworking experience
One hour lecture and three hours of shop practice per week. This course offers the study of design considerations and materials selection for constructing woodshop tools and jigs. As one of the principle instructional objectives, students will build a series of tools and jigs. Emphasis is placed on tools and jigs for the table saw and hand-held router. Course may be taken three times for credit. (Degree Credit)

## WOOD 025 F Cabinet Vision/Planit Solutions (2)

One and one-half hours lecture and two and one-half hours lab per week. This course will include the use of the Cabinet Vision software program for creating room layouts and designing cabinets. Students will work with 2D and 3D CAD to produce bids, estimates and presentations. (Degree Credit)

## WOOD 026 F Cabinet Vision/Intermediate Programs

 (formerly Computer Applications for Cabinetmaking) (2) Advisory: WOOD 025 F or equivalent Cabinet Vision computer course or two years of Cabinet Vision work experienceOne and one-half hours lecture and two and one-half hours lab per week. This intermediate course explores the use of the Cabinet Vision CAD/CAM software to design and manufacture residential and commercial cabinetry. Students will configure the software to build cabinetry to a more advanced specification and to produce accurate cutlists for manufacture, produce more complex room and cabinetry layouts, create reuseable cabinets with an introduction to part logic and object intelligence, explore the use of User Created Standards to customize and automate design to manufacture and produce customer drawings and reports needed for manufacture, assembly, and installation. Course may be taken three times for credit. (Degree Credit)

## WOOD 031 F Woodworking Skills LAB (.5-8)

## Open Entry/Open Exit

## Letter Grade or Pass/No Pass option

Corequisite: Concurrent enrollment in any Wood Technology course Advisory: WOOD 110 F
One and one-half hours to twenty-four hours of lab per week. This course offers students the opportunity to further develop their skills at hand and machine tool operations and to devote more time to project work. One-half unit of credit will be given for each 24 hours of lab participation per term. Course may be taken four times for credit.

## WOOD 032 F Advanced Skills Lab (.5-4)

Open Entry/Open Exit
Letter Grade or Pass/No Pass option
Corequisite: Concurrent enrollment in any Wood Technology course Advisory: WOOD 110 F
One to four hours lab per week. This course provides students the opportunity to develop advanced skills in hand and machine tool use, machinery setup and safety, project planning, construction, and assembly, and the application of appropriate finishes to a project. One-half unit of credit will be given for each 27 hours of laboratory participation per term. Course may be taken four times for credit.

## WOOD 041 F Introduction to Woodcarving (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours lab per week. This is an introductory course designed to develop the basic skills of woodcarving. Topics covered include the selection of appropriate carving woods, basic carving knife skills, basic project layout, and simple project finishing application. Lab Fee: \$15 (Degree Credit)

## WOOD 042 F Intermediate Woodcarving (2)

Letter Grade or Pass/No Pass option
One hour lecture and three hours lab per week. This is an intermediate course in woodcarving, designed for the student who has some experience with woodcarving and wishes to build on those skills and knowledge. Intermediate carving tools and techniques will be covered, including face carving. Students will complete a series of intermediate woodcarving projects for the semester, using materials provided. Lab Fee: \$15 (Degree Credit)

## WOOD 043 F Advanced Woodcarving (2)

Letter Grade or Pass/No Pass option

## Advisory: WOOD 042 F

One hour lecture and three hours lab per week. This is an advanced course in woodcarving, designed for the student with strong carving skills and experience. The student is expected to have mastery of low and shallow relief carving techniques, and the tools necessary to achieve those techniques. This course will focus on more advanced carving techniques necessary to achieve full-figure and mid-relief carving, including projects with multiple faces and/or figures. Students will complete a series of advanced woodcarving projects for the semester, using materials provided. Course may be taken three times for credit. Lab Fee: \$15 (Degree Credit)

## WOOD 044 F In-the-Round Woodcarving (2)

Advisory: WOOD 043 F
One hour lecture and three hours lab per week. This is an advanced course in woodcarving, designed for the student who has mastered the tools and techniques for relief carving and who wishes to pursue in-theround carving. This course will focus on the advanced tools and techniques necessary for 3-D carving, such as full-figure, decoy and furniture carving. Students will complete a series of advanced carving projects for the semester, using materials provided by the student. Course may be taken three times for credit. Lab Fee: $\$ 15$ (Degree Credit)

## WOOD 110 F Fundamentals of Woodwork (4)

Two hours lecture and six hours shop practice per week. Practice in 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 CIS Division<br>Office: Bldg 300, Room 310<br>714.992.7032<br>Dean: Ann Hovey<br>Website: http://bizdiv.fullcoll.edu

## WKEX 091 F Work Experience/Vocational (1-4)

One hour lecture and five to twenty (or more) hours of employment per week required. One unit of credit for each five hours worked per week to a maximum of four units each semester. Course is designed to provide instruction and general advisement related to actual work experience. Employment and major must be related. Students must carry a minimum of seven units, which may include Work Experience, and be appropriately declared in a major. Students may enroll up to a maximum of four semesters, earning up to a maximum of sixteen units over that time. (Degree Credit)

## WKEX 092 F Work Experience/General (1-3)

One hour lecture and five to fifteen (or more) hours of employment per week required. One unit of credit for each five hours worked per week to a maximum of three units each semester. Course is designed to provide instruction and general advisement related to actual work experience. For the employed student who has either not yet declared a major or whose employment and major are not related. Students must carry a minimum of seven units, which may include Work Experience. Students may enroll up to a maximum of two semesters, earning up to a maximum of six units over that time. (Degree Credit)

## WKEX 191 F Work Experience/Internship Vocational (1-4)

One hour lecture and five to twenty (or more) hours of employment per week required. 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. Course may be taken four times for credit. (CSU) (Degree Credit)

## WKEX 192 F Work Experience/Internship Vocational (1-3)



One hour lecture and five to fifteen (or more) hours of employment per week required. 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. Course may be taken four times for credit. (CSU) (Degree Credit)


## Faculty and Administration

## -A-

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ANSARI, MOHD — Natural Sciences
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ARCHER-HETLAND, BERNADETTE - Counseling \& Student Dev

## Counseling

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M.A., PhD., University of California Santa Barbara

ASSEF, CELIA - Technology and Engineering
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M.A., University of California, Irvine

BURGER, MARKUS - Fine Arts
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M.A., Folkwangschule Essen, Germany

BYDE, ROBERT W. - Social Sciences Psychology
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BYRNES, TIMOTHY - Physical Education M.Ed., Azusa Pacific University

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HUCK, BETTY S. - Natural Sciences Chemistry
B.A., University of California, Berkeley
M.S., California State University, Long Beach

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

## -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
Library Technology
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

JAUREQUI, ROBERT - Counseling/Student Development Counseling
M.A., California State University, Los Angeles
M.S., University of La Verne

Ed.D., Nova Southeastern University
JENSEN, DARLENE — Director, Student Affairs
A.A., Santa Ana College
B.A., California State University, Fullerton
M.A., California State University, Long Beach

JENSEN, ROBERT R. - Dean, Fine Arts
B.A., Washington and Lee University
M.Ed., University of Virginia

JESPERSEN, JEFFREY A. - Physical Education B.S., Westminster College, University of Utah

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

JOHNSON, KATHI A. - Humanities
English as a Second Language (ESL)
B.A., San Diego State University
M.S., California State University, Fullerton
-K-
KANE, LENA T. - Technology and Engineering Photography
A.A., Solano College
B.A., M.A., California State University, Fullerton

KANEKO, BRIAN - Technology \& Engineering Interior Design B.A., M.A., California State University, Los Angeles

KANG, KELLY - Humanities
Foreign Language
A.A., Saddleback College
B.A., M.A., Ph.D., University of California, 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

KETTER, CHARLES D. - Fine Arts
Theatre Arts
B.A., California State Polytechnic University, Pomona M.F.A., California State University, Fullerton

KIGER, CHRISTINE D. - Director, Health Services
B.S.N., California State University, Chico
M.S.N., West Haven University

KIMURA, STEWART - Counseling/Student Development Counseling
B.A., University of California, Santa Barbara
M.A., California Lutheran University

KIRKHAM, RICHARD A. - Humanities
Speech
B.A., M.A., University of Southern California

KISZELY, LIZ - Humanities
English
B.A., University of Wisconsin, Milwaukee
M.A., Ph.D., University of California, Irvine

KLASSEN, KELLY - Mathematics and Computer Science Mathematics
B.A., California State University, Fullerton
M.S., San Diego State University

KLENTOS, GUS - Mathematics and Computer Science Mathematics
B.A., University of Tulsa
M.A.T., Tulane University

KNOERNSCHILD, MARK A. - Humanities
English
B.A., M.A., California State University, Long Beach

KOMINEK, BRIDGET - Humanities
English
B.A., M.A., University of California, Fullerton

KONG, WEI-PING - Humanities
Foreign Language
M.S., California State University, Fullerton

KRESSE, DOUGLAS - Humanities
Speech
M.A., California State University, Fullerton

KRINKE, GARY - Fine Arts
Theatre Arts
B.A., Linfield College

KVASKA, COLLEEN - Natural Sciences
Foods \& 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

LAMM, CHRISTINE — Social Sciences
Child Development
B.S., Maryville College
M.A., Pacific Oaks College

Ph.D., The Claremont Graduate 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

LARIOS, ARLENE - Mathematics and Computer Science Mathematics
B.S., M.S., Western Washington University

LARSEN, CHRIS - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton

LEAVELL, CHARLES - Natural Sciences
Anatomy/Physiology; Ecology; Biology B.A., M.A., California State University, Fullerton

LEBSACK, JOAN — Natural Sciences Chemistry
B.A., Immaculate Heart College
M.S., Washington State University

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

LOPEZ, ADELA G. - Social Sciences Ethnic Studies B.A., M.A., California State University, Long Beach

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

LOWE, CLAUDIA - Social Sciences Geography
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

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-
MAGEE, D. B. - Humanities
English
B.B.A., University of Louisiana, Monroe
M.A., The University of Alabama

Ph.D., Texas Christian University
MAJORS, GENE W. - Mathematics and Computer Science Mathematics
A.A., Long Beach City College
B.A., M.A., California State University, Long Beach

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

MARKLEY, KAREN — Social Sciences
Anthropology
B.A., M.A., California State University, Fullerton

MATTSON, CAROL - Dean, Natural Sciences (Interim) 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

McCLOUD, EDWARD - Business and CIS Accounting
B.A., M.S., California State University, Fullerton

McGREW, PATRICK A. - Technology and Engineering Construction Technology
A.A., San Diego Mesa College
A.S., Fullerton College
B.S., University of Phoenix

McKENZIE, SCOTT V. - Dean, Tech and Engineering
A.A., Fullerton College
B.A., M.A., California State University, Long Beach

McKINLEY, PAUL - Director, Disability Support Services and Veterans Resource Center
B.A., M.S., California State University, Fullerton

McMILLAN, RICHARD - Fine Arts
Art and Graphic Design
B.A., Birmingham City University, Birmingham, U.K.

McQUEEN, DEBORAH - Mathematics and Computer Science Mathematics
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

MEEHAN, KENNETH A. - Director, Institutional Research
B.S., Georgetown University
M.A., California State University, Fullerton

Ph.D., University of Hawaii at Manoa
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

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, ROBERT - Dean, Student Support Svs/EOPS Director
A.A., Cerritos College
B.A., M.P.A., California State University, Dominguez Hills

MOLINA, ROSA - Technology and Engineering
Cosmetology
A.A., Riverside Community College
B.S., M.A., California State University, San Bernardino

MONREAL, M. LEONOR — Social Sciences
Anthropology
A.A., Fullerton College
B.A., M.A., California State University, Fullerton

MOORE, MICHAEL - Technology and Engineering Communications
A.A., Fullerton College
B.A., Antioch University
M.Ed., University of La Verne

MORGAN, REBECCA - Counseling and Student Development Counseling
B.S., Columbia International University
M.A., Psy.D., Biola University

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

MUMMERY, FRANCIS — Social Sciences
Economics
A.S., Cypress College
B.A., M.A., M.B.A., California State University, Fullerton
-N-
NACK, SUSAN - Mathematics and Computer Science Mathematics and Computer Science
B.A., Queens College of City University of New York
B.S., M.S., California State University, Long Beach

NAUER, KATHLEEN Y. - Fine Arts
Computer Graphics
B.F.A., University of Illinois
M.F.A., University of Arizona

NEGRETE, RENA - Registrar
A.A., Fullerton College
B.A., American Public University

NEGUS, A. LYNNE - Social Sciences History
B.A., M.A., University of California, Berkeley
M.A., Ph.D., University of California, Los Angeles

NELSON, LEVONNE — Social Sciences
Philosophy
M.A. (Philosophy), Ohio University
M.A. (English), Ohio University

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 and Student Development Counseling
B.A., M.A., University of San Diego

NOLAN-RIEGLE, MARY C. - Natural Sciences Biology
B.A., Montclair State University
M.A., Ph.D., Rutgers University
-0-
O'BRIEN, DAN - Technology and Engineering
Machine Tools
A.A., Orange Coast College
B.A., California State University, Long Beach

O'DONNELL, CATHRYN COLLOPY - Humanities Foreign Language
B.S., New York State University, Buffalo
M.A., New York University

Ph.D., University of California, Irvine
OGLESBY, EDGAR - Technology and Engineering
Administration of Justice
A.A., East Los Angeles College
B.A., California State University, Los Angeles
M.P.A., University of Southern California

OKAMURA, JILL — Library/Learning Resources Library Technology
B.A., M.L.I.S., University of California, Los Angeles

ORLIJAN, KIMBERLY — Humanities English
B.A., M.A., Ph.D., University of California, Riverside

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

PELLEGRINO, ELMER - Technology and Engineering
Administration of Justice
A.A., College of The Siskiyous
B.S., California State University, Long Beach
M.A., 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 State Polytechnic University, Pomona

PEREZ, MICHAEL - Vice President, Administrative Services
B.S., California Polytechnic University, Pomona
B.A., Keller Graduate School of Management

PETERSON, QUEEN - Counseling/Student Development Counseling
M.A., Chapman University

Ed.D., Argosy University
PIAZZA, STEPHANIE - Humanities
Reading
B.A., M.S., California State University, Fullerton

PIMENTEL, SYLVIA - Student Development Counseling 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

PORTMAN, SHARON - Humanities
English as a Second Language (ESL)
B.A., California State University, Long Beach
M.S., California State University, Fullerton

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

PUMMER, JOHN JOSEPH - Technology and Engineering Welding
A.A., John Patterson College; Montgomery, Alabama
B.S., Auburn University, Auburn, Alabama

## -Q-

QUIRK, SHAWN C. - Humanities
English
B.A., University of Wisconsin
M.A., University of Connecticut

## -R-

RAMSEY, PEGGY M. - Natural Sciences
Nutrition and Foods
B.S., M.S., University of Tennessee

RAPP, EDWARD - Physical Education B.S., California State University, San Diego M.Ed., Azusa Pacific University

REHA, DELORES - Business and CIS
Business Management
B.A., University of California, Irvine
M.A., National University

REILLY, JOSEPH — Social Sciences
History; Political Science
B.A., M.A., University of California, Los Angeles

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

REYNOLDS, CAROL W. - Natural Sciences
Nutrition and Foods
B.S., Marymount College
M.A., New York University

RITTER, WALLACE - Business and CIS
Business Management
B.A., M.B.A., California Polytechnic University, Pomona

Ph.D., Claremont Graduate School
ROBINSON, KAREN - Natural Sciences
Nutrition and Foods
B.S., California State University, Long Beach
M.S., California State University, Northridge

RODGERS, CAROLANNE - Business and CIS
Computer Information Systems
B.A., State University of New York, Buffalo
M.A., California State University, San Bernardino

RODINE, JEFFREY - Humanities
Reading
B.A., California State Polytechnic University, Pomona
M.A., United States International University

ROSA, MELANIE K. - Physical Education
Dance
B.A., M.A., M.F.A., University of California, Irvine

ROSE, KAREN — Director, Office of Special Projects
B.A., University of Oklahoma
M.S., Central State University, Oklahoma

ROSEN, ELLEN M. - Humanities
English as a Second Language (ESL)
B.A., Calvin College, Grand Rapids, Michigan
M.A., University of California, Los Angeles

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

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 and Student Development Counseling
B.S., California State University, Fullerton
M.S., California State University, Long Beach

Ed.D., Argosy University
SANCHEZ, VIRGINIA - EOPS/Student Services
Counseling
A.A., Fullerton College
B.S., California State University, Fullerton
M.S., 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

SCOTT, MICHAEL — Fine Arts
Music
B.M., M.M., University of Southern California

SEATON, DERRY D. - Social Sciences Philosophy and Religious Studies
B.A., Oklahoma Baptist University
M.Div., Southern Theological Seminary
M.A., The Claremont Graduate University

SEE, ROGER - Physical Education
B.A., M.A. (History), 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

SHERMAN, GEORGE C. - Natural Sciences
Physics
B.S., Stanford University
M.S., Ph.D., University of California, Los Angeles

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

SIERRA, JAVIER - Manager, Maintenance and Operations B.A., University of Phoenix

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

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 Nazarine University
M.A., California State University, Fullerton
M.S., Walden University

SMITSON, ROBERT M. - Technology and Engineering
Administration of Justice
A.A., Los Angeles City College
B.S., California State University, Los Angeles
M.P.A., University of Southern California

SNYDER, PETER - Physical Education
B.A., M.A., Stanford University

Ph.D., University of California, Santa Barbara
SOLOMON-MARINO, BETH R. - Fine Arts
Art
B.A., San Diego State University
M.F.A., California State University, Fullerton

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

STANGER, CLAUDIA — Humanities
English
A.B., University of California, Berkeley
M.A., Ph.D., University of Southern California

STOKES, JERRY - Technology and Engineering A.A., Prairie View A\&M College

STRONG, ANDRE - Interim, EOPS Manager A.A., Santa Ana College
B.A., California State University, Fullerton M.S., University of La Verne
-T-
TACKABURY, PAMELA - Humanities English
B.A., University of Denver
M.A., University of Nevada

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. - Fine Arts
Music
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
TESAR, DANIEL — Dean, Social Sciences
B.A., Cornell College
M.A., University of Iowa

THOMAS, DAVID A. - Technology and Engineering Construction Technology; Engineering B.A., California State University, Los Angeles
M.A., Ed.D., Alliant International University

THOMAS, PATRICIA — Humanities English
B.S., M.Ed., Auburn University

Ph.D., Texas A \& M University
TROOP, JANE - Business and CIS CIS
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

TURNER, ARIENNE K. - Social Sciences
Economics
A.B., California State University, Chico
M.A., California State University, Long Beach

## -U-

UYEDA, ELEANOR M. - Business and CIS
Office Administration
A.A., Orange Coast College
B.S., University of California, Los Angeles
M.A., Chapman University
-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

VELOZ, OLIVIA - Director, Academic Support Center
A.A., Cerritos College
B.A., M.B.A., University of Phoenix

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, LENNY — Natural Sciences
Biology
B.A., California State University, Northridge
M.S., University of California, Davis

Ph.D., University of California, Berkeley
VINCENT, SUSAN — EOPS/Student Services
Counseling
B.A., University of the Pacific
M.S., California State University, Los Angeles

VORNICEL-GUTHMANN, VIOLETTE - Humanities
Foreign Language
FrenchDUEL, Strasbourg, France
Licence `es Lettres Modernes, Aix-En-Provence, France
M.A., Ph.D., University of California, Irvine

VURDIEN, RAJEN - President
B.A., M.A., University of Upper Brittany (France)
M.Ed., Ph.D., Temple University
M.B.A., Long Island University

## -W-

WALKER, JOHN T. — Social Sciences History
B.A., Dartmouth College
M.A., University of Southern California
M.A., Ph.D., University of California, Irvine

WALZER-PRIETO, AMANDA - Humanities English
B.A., University of California, Los Angeles M.F.A., Antioch University

WAN, PETER P. - Social Sciences History
B.A., East China Normal University Ph.D., Harvard University

WARD, CAROL - Technology and Engineering Cosmetology
A.A., Fullerton College
B.V.E., M.A., California State University, Long Beach

Whalen, Kathleen A. - Physical Education
A.A., Fullerton College
B.A., California State University, Long Beach
M.A., California State University, Fullerton

WILLOUGHBY, DAN - Dean, Humanities B.A., University of California, Berkeley M.S., California State University, Fullerton

WILSON, MARCUS - Business and CIS Business
B.S., M.B.A., University of Southern California
J.D. Law Center, University of Southern California

WOELKE, DEBORAH - Physical Education A.A., Fullerton College
B.S., M.S., California State University, Fullerton

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

WRIGHT, DORIS - Technology and Engineering Cosmetology B.A., Union Institute and University

WU, JO WEN - Natural Sciences Biology
B.S., University of Missouri, Columbia Ph.D., University of California, Irvine
-Y-
YAMAGUCHI, ROBERT - Business and CIS
Business Management
D.B.A., United States International University, San Diego

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

## -Z-

ZARSKE, CINDY - Mathematics and Computer Science Mathematics
B.A., M.A., California State University, Fullerton


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