



FULLERTON  
COLLEGE

# FULLERTON COLLEGE

2004-2005 CATALOG

# Dear Fullerton College Student:



Dear Fullerton College Student:

At Fullerton College, we prepare students to be successful learners. No matter what your academic goal, at Fullerton College you will find a wide-range of courses suited to meet your academic needs. If you are interested in transferring to a four-year institution, we have a variety of general education and lower division elective courses as well as articulation agreements with several major universities. You may also choose to earn your Associates degree in one of our over 90 majors.

Fullerton College also offers excellent career certificate programs. If this is your goal, enroll in one of these programs. We offer programs including automotive technology, computer programming, construction, fashion design, printing, welding, and real estate management.

The college's 20,000 students enjoy numerous opportunities to become involved in extra curricular activities. Student government, the campus newspaper, championship intercollegiate athletics, theatre and music performance groups, cultural groups, radio production, and television broadcasting are only a sampling of the activities which enable the college to maintain a collegiate environment.

Fullerton College's educational programs are designed to give our students the ability to apply their intelligence, creativity, and skills to the challenges of an increasingly complex and technology-driven world. Our faculty are dedicated to building bridges across disciplines, all with the goal of shaping a better future. It is this commitment which gives the college its unique character — an institution designed to bring out the best in all who join this academic community.

A handwritten signature in black ink that reads "Kathleen O'Connell Hodge". The signature is fluid and cursive.

Kathleen O'Connell Hodge, Ed.D.  
President

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## Fullerton College...

- A public two-year college paralleling the lower division of university education and offering vocational, and general education programs.
- Tuition-free to residents of California.
- Low enrollment fee.
- A part of the North Orange County Community College District, which serves Anaheim, Brea-Olinda, Buena Park, Centralia, Cypress, Fullerton, Garden Grove, La Habra, Los Alamitos, Lowell, Magnolia, Placentia, Savanna and Yorba Linda School Districts.
- Organized 1913.
- Accredited by the Western Association of Schools and Colleges and the California State Department of Education.

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**FULLERTON**  
C O L L E G E

# **CATALOG**

**2004-2005**

**VOLUME XCI**  
**(Based on Years in Operation)**

## **Fullerton College**

North Orange County Community College District

321 East Chapman Avenue

Fullerton, California 92832-2095

(714) 992-7000

Telecommunication Device for the Deaf

(714) 871-9192

**[www.fullcoll.edu](http://www.fullcoll.edu)**

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# Table of Contents

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CALENDAR . . . . .	4,5
ADMINISTRATION . . . . .	6,7
ABOUT THE COLLEGE . . . . .	11
GENERAL INFORMATION . . . . .	11
SCHOLARSHIPS, AWARDS, GRANTS . . . . .	15
ADMISSION AND REGISTRATION . . . . .	17
SPECIAL ADMIT STUDENTS – (formerly Bridge Program) . . . . .	17
BEING A STUDENT . . . . .	27
RESPONSIBILITIES OF STUDENTS . . . . .	35
CAMPUS PROCEDURES. . . . .	39
STUDENT SUPPORT PROGRAMS AND SERVICES. . . . .	47
SPECIAL PROGRAMS. . . . .	53
INTERCOLLEGIATE ATHLETES. . . . .	59
GRADUATION REQUIREMENTS . . . . .	63
TRANSFERABILITY OF COURSES . . . . .	73
GENERAL EDUCATION REQUIREMENTS OF FOUR-YEAR COLLEGES AND UNIVERSITIES. . . . .	75
DEGREES AND CERTIFICATES. . . . .	87
PROGRAMS OF STUDY –	
Associate of Arts Degree . . . . .	91
Associate in Science Degree . . . . .	92
Vocational Certificate Programs . . . . .	93
ANNOUNCEMENT OF COURSES, DEGREES AND CERTIFICATES . . . . .	97
FACULTY AND ADMINISTRATION . . . . .	277
INDEX . . . . .	289

## **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.

# College Calendar 2004-2005

## North Orange County Community College District

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First Day of Classes —	
Fall Semester	Monday, August 23, 2004
Labor Day Holiday	Monday, September 6, 2004
College Hour (12n-1p) and Homecoming	Wednesday, November 10, 2004
Veterans' Day Holiday	Friday, November 12, 2004
Thanksgiving Recess	Thursday and Friday, November 25 and 26, 2004
Fall Final Exams	Tuesday, December 14 through Wednesday, December 22, 2004
Last Day of Fall Semester	Wednesday, December 22, 2004
Winter Recess	Thursday, December 23, 2004 through Monday, January 17, 2005
First Day of Classes —	
Spring Semester	Tuesday, January 18, 2005
Lincoln's Birthday Holiday	Friday, February 18, 2005
Presidents' Day Holiday	Monday, February 21, 2005
Spring Recess	Monday, March 21 through Saturday, March 26, 2005
College Hour (12n-1p) and Festival of Diversity	Thursday, April 28, 2005
Spring Final Exams	Wednesday, May 19 through Thursday, May 26, 2005
Commencement	Wednesday, May 25, 2005
Last Day of Spring Semester	Friday, May 27, 2005
Memorial Day Holiday	Monday, May 30, 2005
First Day of Summer Term (Tentative)	Tuesday, May 31, 2005

All calendar dates are subject to change without notice.

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# Administration

(As of May, 2004)

The following dedicated community citizens are currently serving as members of the North Orange County Community College District:

## Board of Trustees

Otto J. Lacayo . . . . .	Area No. II
Leonard Lahtinen . . . . .	Area No. I
Molly McClanahan . . . . .	Area No. IV
Donna Miller . . . . .	Area No. IV
Manuel Ontiveros . . . . .	Area No. I
Nancy Rice . . . . .	Area No. III
Jeffrey P. Brown . . . . .	Area No. III
Karen Johnson . . . . .	Cypress College, Student Member
Victoria Rizo . . . . .	Fullerton College, Student Member
Jerome Hunter . . . . .	Chancellor and Executive Secretary

District Telephone No: (714) 808-4500

## District Administration North Orange County Community College District

Jerome Hunter, Ed.D. . . . .	Chancellor
Rodney Fleeman, Ph.D. . . . .	Vice Chancellor, Finance and Facilities
Jeff Horsley, M.B.A. . . . .	Vice Chancellor, Human Resources

## Fullerton College Administration

President	Kathleen O'Connell Hodge, Ed.D.
Executive Vice President, Educational Programs and Student Services (Interim)	Elisabeth Leyson, M.A.
Vice President, Educational Support & Planning	Janet S. Portolan, Ed.D.
Director, Budget and Finance	Adam O'Connor, B.S.
Dean, Academic Services	Susan B. Clifford, Ed.D.
Dean, Admissions and Records	Peter Fong, M.A.
Dean, Business and Computer Information Systems	Deborah Ludford, M.S.
Dean, Counseling and Student Development	Ricardo Perez, Ed.D.
Dean, Fine Arts (Interim)	Terry Blackley, M.M.E.
Dean, Humanities	Elisabeth Leyson, M.A.
Dean, Library	John Ayala, M.P.A.
Dean, Mathematics and Computer Science	Robert Simpson, Ed.D.
Dean, Natural Sciences (Acting)	Robert Simpson, Ed.D.
Dean, Physical Education	Susan Beers, Ed.D.
Dean, Social Sciences	Daniel Tesar, M.A.
Dean, Student Services	Richard M. Ramirez, Ed.D.
Dean, Technology and Engineering	Mike Burns, M.A.
Director, Academic Computing Technologies	Nilo Niccolai, Ph.D.
Director, Academic Support Center	John Orr, M.A.
Director, Bookstore	Vacant
Director, Cadena/Transfer Center	Heidi Lockhart, M.A.
Director, Campus Diversity	Cindy Vyskocil, M.P.A.
Director, Campus Health Services	Lorain Brault, M.S.
Director, Campus Safety	Russell Collins, M.P.A.
Director, Child Development Center	Renee Swain, M.A.
Director, Financial Aid and Veterans' Services	Robert Miranda, M.P.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	Kris Burns, A.A.
Manager, Campus Accounting	Lexi Donovan, B.S.
Manager, Child Development Center	Diana Montano, A.A.
Manager, Distance Learning	Angela Hazel, Ed.D.
Manager, EOPS	Vacant
Manager, Instructional Technology Services	Robert Morison
Manager, International Student Center	Jessie Blank, B.A.
Manager, Maintenance and Operations	Kenneth McAlpin, A.A.
Manager, Marketing and Outreach	Cristina Fernandez, M.A.
Manager, Systems Technology Services	Co Ho, M.B.A.
Public Information Officer	Andrea Hanstein, B.A.

## **The Divisions and Departments**

Courses of study are grouped as follows:

### **The Division of Academic Services**

Cosmetology

### **The Division of Business and Computer Information Systems**

Accounting  
Business Management  
Computer Information Systems  
Marketing Management  
Office Technology  
Paralegal Studies  
Real Estate

### **The Division of Fine Arts**

Art  
Computer Graphics  
Music  
Music Materials and Literature  
Applied Music  
Musical Performing Groups  
Theatre Arts

### **The Division of Humanities**

English  
English as a Second Language (ESL)  
Foreign Languages  
Reading  
Speech

### **The Division of Library Technology**

Research

### **The Division of Mathematics and Computer Science**

Computer Science  
Mathematics

### **The Division of Natural Sciences**

Anatomy and Physiology  
Biology  
Chemistry  
Earth Sciences  
Environmental Sciences  
Environmental Technology  
Health Education  
Horticulture  
Microbiology  
Nutrition and Foods  
Physical Sciences  
Physics

### **The Division of Physical Education**

Physical Education Activities  
Dance  
Intercollegiate Sports  
Theory – Physical Education  
Recreation  
Wellness

### **The Division of Social Sciences**

Anthropology  
Child Development and Family Life  
Economics  
Ethnic Studies  
Geography  
History  
International and Global Studies  
Philosophy and Religious Studies  
Political Science  
Psychology  
Sociology  
Women's Studies

### **The Division of Counseling and Student Development**

Counseling and Guidance  
Student Services  
University Transfer Studies

### **The Division of Technology and Engineering**

Administration of Justice  
Architecture  
Auto Mechanics  
Cinema-Radio-Television  
Construction Technology  
Drafting Technology  
Electronics and Computer Technology  
Engineering  
Fashion  
Interior Design  
Journalism  
Machine Technology  
Metallurgy  
Photography  
Printing Technology  
Welding  
Woodworking

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**About the College**

**Admission and Registration**

**Being a Student**

**Responsibilities of Students**

**Campus Procedures**

**Student Support Programs  
and Services**

**Special Programs**

**Graduation Requirements**

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# About the College

## Location

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

For commuters, the beautifully landscaped 63-acre 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 the 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 city.

## History

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Fullerton College, the oldest community college in continuous operation in California, is an integral part of both the public school and higher education systems of California. It was established as a department of the Fullerton Union High School on April 25, 1913, and was reorganized as a district junior college on March 31, 1922. In the spring of 1964 the residents of the Anaheim Union High School District, the Brea-Olinda Unified School District, and the Placentia Unified District elected to form an interim junior college district to be merged with the existing Fullerton College District to form a larger organization. Subsequently, an election was held and the North Orange County Community College District came into existence, encompassing an area of 150 square miles. Cypress College, in the city of Cypress, opened its doors in September 1966, as the second college in the district. A portion of Garden Grove was annexed to North Orange County Community College District, effective July 1, 1976. Courses and curriculum have been expanded to include a wide range of well-balanced programs.

A guiding principle in the selection of instructors has been the building of a faculty who are highly knowledgeable in their disciplines and committed to teaching as a career. Fullerton College's faculty members reflect the diversified needs of today's college students. They are experts in their fields of specialty and bring a wealth of experience to the classroom. Many of our renowned instructors cultivate and maintain networks in the professional world in addition to their academic preparation.

## Accreditation

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Fullerton College is accredited by the Accrediting Commission for the Community and Junior Colleges of the Western Association of Schools and Colleges, (10 Commercial Blvd., Suite 204, Novato, CA 94949), 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.

## College Goals and Objectives

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As an institution, Fullerton College is committed to three major areas of activity as reflected in the following goals and objectives:

### **Focus: Student Access and Success**

**Goal: Fullerton College is committed to enhancing student access and success in order to meet the lifelong learning needs of the community.**

- The College will provide programs and services to better meet the needs of students. Key components include recruitment, marketing, outreach, responsive scheduling of programs and services, and elimination of access barriers.
- The College will provide programs and services which assist students in defining and achieving their educational goals.

### **Focus: Serving the Community**

**Goal: Fullerton College is committed to serving the community through active involvement in its social, cultural arts, economic and educational life, thereby adding value to both the community and the college.**

- The College will provide opportunities to bring community members onto our campus for dialogue and interaction.
- The College will establish partnerships in the community to enhance programs and services that respond directly to community needs.
- The College will develop partnerships that enhance the ability to train students for the future.
- The College will engage in activities that promote resource development.
- The College will mirror the diversity and cultural values of the community.

## Focus: Faculty and Staff Development

**Goal: Fullerton College is committed to encouraging, developing, and implementing strategic staff development to maximize the effectiveness of all college personnel.**

- The College will provide activities and opportunities that create an environment of innovation.
- The College will establish programs that enhance the ability of each employee to perform effectively.
- The College will establish programs and opportunities to inspire teaching and learning excellence. Particular emphasis will be given to the value of technology as a means of improving student outcomes.
- The College will use the evaluation processes to encourage professional growth.
- The College will provide activities and opportunities to improve awareness and appreciation of the diversity of the campus.

## Statement of Vision, Mission, and Core Values

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### Vision

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

### Mission

We prepare students to be successful learners.

### 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.

## Statement of Ethics

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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.

## Library Services

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200 Building

Web Page: <http://library.fullcoll.edu>

The mission of the William T. Boyce Library is to assist students, faculty, and staff to attain their educational and informational goals in a supportive library environment. The library offers traditional services such as a large circulating book and audiovisual collection, periodicals, interlibrary loan service, reserve materials, reference and research assistance. Technology has been incorporated into the library's services, available both on campus and off campus via the library's web page. These include the library catalog, numerous online databases for periodicals and in-depth subject resources, as well as Internet searching and documentation assistance.

In the library building itself, located at the south end of the Fullerton College quad, the staff is on duty to assist students with their research needs. There are over forty computers with Internet connections for student research use, as well as several email express and word processing stations. Computers have printing available for a fee. Four coin-operated photocopy machines are also available for student use.

Library instruction sessions are offered throughout the semester to assist students wishing to learn to use the online catalog and periodical databases, to upgrade their Internet skills, and to learn bibliographic citation formats needed for research papers.

A campus photo ID card is required to checkout any library material.

Hours:	Monday – Thursday	7:30 am – 9:00 pm
	Friday	7:30 am – 4:00 pm
	Saturday	10:00 am – 3:00 pm

## Parking

A permit is needed to park on the Fullerton College campus. The fee (subject to change) is \$35\* per semester for vehicles and \$20 for motorcycles. These fees are used for the operation and maintenance of Campus parking facilities. **Parking regulations are strictly enforced by the Campus Safety Department.** Physically disabled students may request special parking permits through the Adaptive Student Services Center (Room 804) located next to the Mailroom. Students are urged to use alternate transportation methods — such as walking, riding bicycles or other two-wheelers, carpooling, or using public transportation — to reduce parking congestion and pollution and to help conserve energy.

\*Students with BOGW fee waiver \$20

Parking information is available by contacting the Campus Safety Department at (714) 992-7341.

## Smoking Areas

Fullerton College has approved designated smoking areas on the campus. In an effort to support smokers and non-smokers, seven areas around the campus have been identified for smoking. Signs, benches and cigarette disposal containers mark the areas. The Designated Smoking Areas are located geographically as follows:

- North of the 700 building on the patio
- East of the 1200 building (across from Tennis Courts)
- West of the 100 building on the patio
- South of the 2000 building in the outside patio

- Southeast: Between Library and 400 building between the planters
- Central: Grass area south of the Library/Learning Resource Center construction area
- Wilshire Auditorium area: North of the auditorium — the benches at the base of the ramp

## Campus Dining

Located in the 800 building, Campus Dining offers breakfast, lunch and dinner featuring Grill Station Diner, A Taste of Mexico, Asian Delights, On Display cooking, Footers sandwiches, Pizza Parlor, Garden Fresh Choices, Sweet Impressions and Starbucks Coffee. In addition, convenience and grab and go items are also available including chips, snacks, beverages and school supplies. Hours during the fall and spring semesters are Monday through Thursday 8:00 a.m. to 9:00 pm, Friday 7:00 a.m. to 3:00 pm, and Saturday 8:00 a.m. to 1:00 pm. Holiday hours are posted in advance.

Also available for limited hours is a convenience food cart on the quad.

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

## Fullerton College Foundation, Inc.

The Fullerton College Foundation was incorporated in 1959 under the laws of California as a non-profit organization for the following general purposes: (1) to assist students who are attending or have attended Fullerton College to continue their education at upper division or graduate levels; (2) to promote the educational welfare of students at Fullerton College; (3) to assist Fullerton College in rendering its educational services. The corporation has the power and responsibility to receive bequests, gifts, donations, legacies, and funds for the carrying out of these objectives. Members of the Board of Directors are Chuck Allen, Toland Hiltcher, Jane B. Cheadle, Margaux Jordan – ex officio, Dr. Phil Borst, Dr. Richard DeVecchio, Carol Dodson, Dr. Kathleen Hodge, Molly McClanahan, Robert Miranda, Nancie Mitchell, Mary Shaw, Kathryn Turner – ex officio, Mark Von Esch, and Laura Wiggins,

Students wishing to apply for scholarships or a loan should contact the Foundation Office.

Tax-deductible donations to the Foundation to establish grant or loan funds may be arranged through the same office.

The awards currently available through the Foundation are the following:

**Business and Computer Information Systems Division:**

Ethel Birchfield Cooper Memorial Business Award  
L.O. Culp Memorial Business Award  
J.H. Denson International Business/Foreign Language Scholarship  
Donald Lebsack Memorial Scholarship in Computer Science  
James E. Mieras Memorial Business Education Award  
Joyce Morton Scholarship  
Phi Beta Lambda Business Award  
Charles Ruby Scholarship Fund  
E. Alva Straw Business Award  
Charles Shellenberger Memorial Accounting Scholarship  
Irma Laws Tapp Business Education Teacher Scholarship  
Ronald Zarett Memorial Accounting Scholarship

**Counseling Division:**

Lola Brown Scholarship  
Sandra Gabel Scholarship  
SPSA Scholarship  
Tom Cantrell Memorial Scholarship

**Fine Arts Division:**

Graham Booth Scholarship  
California China Painters' Art Association Scholarship  
Bronwyn Dodson Memorial Award  
Ethel Ann Fengler-Nelson Bonar Music Award  
Esther and Vernon Hatch Drama Scholarship  
Ken Helvey Scholarship  
Don W. Hendricks Memorial Art Scholarship  
Glen Lukens Ceramics Award  
McFerrin Vocal Scholarship  
Dumont Hogue Scott Stringed Instrument Award  
Wilbur J. Streech Memorial Scholarship  
Fine Arts Wirzbicki Scholarship

**Humanities Division:**

William T. Boyce Creative Writing Award  
English Department Scholarship  
Fullerton College Speech Department Scholarship  
Geneva Johnson Foreign Language Scholarship  
William B. Meyer Memorial Freshman Writing Award  
Frank Palko Scholarship  
Phyllis Sanderson Memorial Scholarship  
Dorcas Turner Memorial Scholarship

**Mathematics and Computer Science Division:**

Betty P. Ribal Award  
Wilber and Ellen Selfridge Memorial Mathematics Scholarship  
Nilane Lee Scholarship  
Amatyc Scholarship

**Natural Sciences:**

Beckman Industrial Science & Engineering Scholarship  
Biological Sciences Faculty Scholarship  
Joyce Boyajian Scholarship  
Steven Goffin Memorial Fund  
Joel Hail Memorial Scholarship  
Lloyd J. Meuli Memorial Agriculture Award  
Prospectors Club Mabel A. Myers Memorial Geology Award  
Schlinger Environmental Science Award  
Albert M. Williams Chemistry Scholarship  
Elizabeth V. Wright Life Science Scholarship

**Physical Education Division:**

Ed Carroll Student Athlete of the Year  
William H. Chambers Athletic Trainer Award  
Bud Dawson Memorial Scholarship  
Scott Hershey Memorial Golf Award  
First Lt. Stephen D. Joyner Memorial Football Award  
Dr. Philip McFarland Scholarship Fund  
Ernie Polte Aquatic Scholarship  
Marty Orner Women's Volleyball Scholarship  
Ann Read Women's Tennis Scholarship  
Colleen Riley Women's Basketball Scholarship  
Max O. Royer Most Valuable Offensive Football Player Award  
Hal Sherbeck Scholarship  
Mike Steinkellner Scholarship for Excellence & Character in Athletics & Academics  
Steve Van Horn Memorial Athletic Scholarship  
Women's Badminton Scholarship  
Women's Soccer Scholarship  
Women's Softball Scholarship  
Women's Swimming and Water Polo Scholarship  
Women's Track & Field Cross Country Scholarship

**Social Sciences Division:**

J.S. Arnold-O.P. LeRoss Social Sciences Scholarship  
Family Science Award  
Martin & Lotte Hebeling Scholarship  
History Scholarship  
William Klaustermeyer Memorial Scholarship  
Eugene & Donna McKibbin Scholarship  
Amy Stump Behavioral Sciences Scholarship

**Technology and Engineering Division:**

Alexander Anderson Memorial Engineering Scholarship  
John C. Bain Memorial Broadcasting Award  
George S. Conner Memorial Architecture Scholarship  
Graphic Arts Award  
Howard C. Hall Memorial Journalism Award  
Hornet Golden Anniversary Journalism Award  
Leif Johnson Memorial Journalism Award  
Amy Kamka Memorial Award  
Littlejohn Award  
C. Robert McCormick Memorial Award  
Betty McKown Memorial Home Economics Scholarship  
Everis Nelson Memorial Technical Education Award  
Brian M. Scully Memorial Journalism Scholarship  
Stack/Reynolds Engineering Scholarship  
Douglas L. Suppa Memorial Scholarship  
Television/Video Scholarship

**General Scholarships:**

Benevolent Gentleman  
 William T. & Vera Boyce Memorial Scholarship  
 Christopher Breuning Memorial Scholarship  
 Jack & Mary Chapman Memorial Scholarship  
 Janet Carter Scholarship  
 Art & Jane Dickenson Scholarship  
 Marilyn Ediss Scholarship  
 M. Fred Engle Memorial Scholarship  
 Eleanor Fitch Memorial Scholarship  
 Fullerton College Alumni Association Scholarship  
 Fullerton College Foundation Memorial Scholarship  
 Fullerton College President's Scholarship Fund  
 Dr. Tom K. Harris Scholarship  
 Roland and Diane Hill Scholarship  
 Wanda A. Hunter Memorial Scholarship  
 Joe Johnson Memorial Scholarship  
 Nancie & Warren Mitchell Scholarship  
 Mabel & Florence Myers Memorial Scholarship  
 June Norby Scholarship Fund  
 Returning Women's Scholarship Fund  
 Lena & Fay Reynolds Memorial Scholarship  
 H. Lynn Sheller Memorial Scholarship  
 Ralph R. Snyder Memorial Scholarship  
 Donald E. Spencer Memorial Scholarship  
 Agnes C. Streech Fund  
 Donald J. Sweet Memorial Scholarship  
 Three M's Scholarship  
 Waltmar Foundation Scholarship  
 Maria Kit Wah Yeung Scholarship  
 Charles H. Wilson Memorial Award  
 Jack Wright Memorial Scholarship

**Special Purpose:**

Sandra Baird Allen Scholarship  
 ALPHA Educational Assistance Award  
 Associated Student Body Scholarship for Leadership  
 Dr. Shirley Bernard Scholarship  
 Molly Bickford Memorial Award  
 Earl & Florence Dysinger Award  
 Ebell Club of Fullerton Grant  
 Fullerton College Faculty Association Scholarship  
 Fullerton College Faculty Wives Scholarship  
 High School Honor Scholarship  
 Kiwanis Club of Fullerton  
 Jason Horn Memorial Scholarship  
 International Student Program Fund  
 Shawna Morrill Memorial Scholarship  
 Leo M. O'Connor Memorial Scholarship  
 William Mohr Patton Family Scholarship  
 Placentia Round Table Woman's Club Scholarship  
 Louis E. Plummer Memorial Grant  
 Neva & Joseph Shaw Award  
 H. Lynn Sheller Memorial Opportunity Award  
 Student Personnel Services Association Award  
 Francis Wahl Scholarship  
 Jody Lynn White Memorial Scholarship  
 Maria Kit Wah Yeung Memorial Scholarship

The Foundation also administers many funds provided for scholarships and grants by off-campus organizations or individuals.

**Delta Kappa Gamma Scholarship**

Rho Chapter of Delta Kappa Gamma, International Honorary Society for women in education, offers a grant-in-aid of \$200 each year to an outstanding woman member of the graduating class of one of Orange County's five community colleges. The recipient must be preparing for the teaching profession.

**Fullerton Kiwanis Scholarship Foundation**

The Fullerton Kiwanis Scholarship Foundation, Inc., has established a scholarship loan fund for graduates of the college who need assistance to complete their education in a four-year college. Loans are made on a non-interest basis during the period necessary for completion of requirements for the Bachelor's Degree. Loans up to \$2,000 are granted according to the student's need. A responsible co-signer must guarantee the loan.

Each year the Foundation awards several scholarships to members of the graduating class. These awards, for students transferring to a four-year college or university, are made on the basis of character, scholastic performance, need, and promise of future success.

**Institutional Grants**

Four-year colleges and universities as well as a number of local and national organizations offer scholarships available to community college students. Sophomores are urged to contact their scholarship adviser early in the fall semester regarding scholarships.

**California State Scholarships**

The State of California offers scholarships to community college graduates transferring to public and private colleges in California. Applications must be filed in January of the student's sophomore year and no later than February 11 of that year.

**Lost and Found**

The central location for all lost and found articles is the Campus Safety Department located in Building T-8. Articles will be tagged, logged, and properly secured. Items can be claimed at the Campus Safety Department.



# Admission and 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.

## Admission to the College

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### 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

### Special Admit Students (formerly Bridge Program)

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 to enroll in college classes, 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

**Students on an F-1 visa are not eligible to enroll as Special Admit students.**

**Special Admit students may enroll in up to 11 units per semester as a part-time student or enroll in 12 or more units as a full-time student.**

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

For further information on the Special Admit Program, please contact the Admissions and Records Office at (714) 992-7568 or the Counseling Division at (714) 992-7010.

### 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 June 1 (Fall) and November 15 (Spring). Current F-1 visa holders currently in the U.S. must apply by August 1 (Fall) and December 15 (Spring). There is a \$40 non-refundable application fee that must be paid when the visa application is submitted.
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 (12 units or more) each Fall and Spring semester. In accordance with SEVIS regulations, failure to do so will be reported to the Bureau of Immigration and Customs Enforcement and status will be terminated.
4. Enrollment of 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 (paper-based) or 173 (CBT). Applicants currently in the U.S. may take the Fullerton College ESL placement test to substitute for the TOEFL test.

- b. The applicant must offer evidence of a degree of academic achievement the equivalent to an American high school education. 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. The applicant must offer evidence of financial responsibility.
- d. F-1 visa applicants who have attended other American schools or colleges may be considered for admission provided the applicant meets Fullerton College admission requirements and is in status with U.S. Immigration and Citizenship Services. 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.

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 will be recommended for employment only in accordance with the rules and regulations established by the United States Citizenship and Immigration Service.
9. F-1 visa students will not be accepted for admission into any program where applications by qualified U.S. citizens exceed spaces available.

Exceptions to the international student regulations may be granted for extenuating circumstances by petition to the Dean of Admissions and Records.

#### **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 fees.

#### **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 F-1 or 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 714-992-7580 or [isc@fullcoll.edu](mailto:isc@fullcoll.edu). The ISC is located in room 712 in the 700 building.**

#### **Permanent Visa:**

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

#### **Other Visas:**

Contact the Admissions and Records Office for further information.

#### **All Visas:**

Visa regulations subject to change.

## Determination of Student Residency for Tuition Purposes

This statement is a general summary of the principal rules on residency and their exceptions and should not be construed as the actual expression of California State laws used by admissions officers for residency determination.

If a student is classified as a **resident**, admission to the college will be accomplished without **non-resident** tuition. Students classified as **non-residents** will be required to pay tuition in an amount set by the Board of Trustees.

The **residence determination date** is the day immediately preceding the opening day of instruction of the semester or term as set by the Board of Trustees. Generally, **residency** requires actual physical presence in California at least one year prior to the residence determination date, coupled with an intent to make one's home here. One's state of mind is subjective; hence, it is necessary to look at objective indications of the student's intent. The burden of proof to clearly demonstrate both physical presence and intent to establish California residence lies with the student.

Some examples of evidence that aid the college admissions officer in identifying that intent, but which are not individually decisive nor exclusive, are possession of two documents of California origin such as a driver's license, a voter registration, residential property ownership, or bank account. The Admissions and Records Office has a checklist of documents that indicate intent.

There are specific regulations guiding the admissions officer in determining the residency status of **unmarried minors** (under 19 years of age), **military personnel**, and **non-immigrant visa holders**. Contact the Admissions and Records Office for specific information.

On October 12, 2001, Governor Davis signed into law Assembly Bill 540 (Stats. 2001, ch.814) which adds a new section 68130.5 to the California Education Code. Section 68103.5 creates a new exemption from payment of non-resident tuition for certain non-resident students who have attended high school in California and receive a high school diploma or its equivalent.

Students who are non-immigrants (most commonly F and B visa holders) are not eligible for this exemption. Students who meet the exemption requirements and who are unlawful immigrants are not eligible for any federal or state financial aid programs.

Contact the Admissions and Records Office for further detailed information.

## 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.

## Corrections to Student Information

Name changes will be recorded only for students who are currently enrolled. 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.

## Verification of Student Status

The Admissions and Records Office verifies current term registration and dates of enrollment for non-campus certification. Photo ID is required for service. There is a \$3.00 verification fee per request. Rush requests are an additional \$10. Verifications for loan forms are processed in the Financial Aid Office.

To conveniently serve our students, enrollment verification may also be obtained through the National Student Clearinghouse website at [www.studentclearinghouse.org](http://www.studentclearinghouse.org). This service is available 24 hours a day-7 days a week for a fee of \$3 per verification. Step by step instructions are available at <http://admissions.fullcoll.edu/verification>.

## 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.

**NOTE: The posting of Advanced Placement credit for courses on the Fullerton College transcript does not ensure its 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.

AP Examination	Credit Allowed	Units
Art (History)	ART 112 F and 113 F	6
Art (Studio Drawing)	ART 182 F	3
Biology (Score of 4)	BIOL 101 F	5
Chemistry (Score of 4)	CHEM 107 F	5
Chemistry (Score of 5)	CHEM 111AF	5
Computer Science A	See Computer Science Dept.	
Computer Science AB	See Computer Science Dept.	
Economics — Micro	ECON 101 F	3
Economics — Macro	ECON 102 F	3
English Language & Comp	ENGL 100 F	3
English Comp & Literature	ENGL 100 F	3
English Comp & Literature (Score of 4 or 5)	ENGL 100 F and 102 F	6
French (Language)	FREN 101 F and 102 F	10
German (Language)	GERM 101 F and 102 F	10
Government & Politics (U.S.)	POSC 100 F	3
Government & Politics (Comparative)	POSC 215 F	3
History (U.S.)	HIST 170 F and 171 F	6
History (European)	HIST 110 F and 111 F	6
Mathematics: Calculus AB	MATH 150AF	4
Mathematics: Calculus BC	MATH 150AF and 150BF	8
Physics (B) (Score of 3 or 4)	PHYS 205 F	4
Physics (B) (Score of 5)	PHYS 205 F and 206 F	8
Physics (C — Mechanics) (Score of 5)	PHYS 210 F or 221 F	4
Physics (C — Elec & Mag) (Score of 5)	PHYS 211 F or 222 F	4
Spanish (Language)	SPAN 101 F and 102 F	10
Spanish (Literature)	SPAN 205 F and 206 F	6
English Composition Exam with Essay (Score of 51% or better)	ENGL 100 F and 102 F	6

Equivalency for courses not listed above will be determined by the appropriate academic department.

## Credit for Foreign Colleges and Universities

The Admissions and Records Office reserves the right to determine the acceptability of course work from foreign colleges and universities.

## Credit for Military Experience

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

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

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

## Credit for Non-Collegiate Sponsored Instruction

Courses offered by business and governmental agencies other than accredited, post secondary institutions, and listed in *The Directory of the National Program on Non-collegiate Sponsored Instruction* will be accepted for credit as shown in the Directory.

## Academic Accommodations for Students with Disabilities

In accordance with Federal and State regulations, procedural language has been established to address the provision of 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.

## Matriculation

In compliance with the State Matriculation 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

Each student at the time of admission is a "Matriculated" student.

STUDENTS MAY BE EXEMPT FROM SOME OR ALL OF MATRICULATION 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 skills tests taken within the last two years.
- D. Enrollment in one job related or performance based class (i.e., 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 MATRICULATION by completing and filing a "MATRICULATION EXEMPTION PETITION FORM." These forms are available from the Admissions and Records and Counseling offices. The completed form must be filed with the Dean of Counseling/Matriculation Coordinator. Students will be notified of action on their petition no later than three days after the petition is filed.

## Matriculated Student Status

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

1. **Skills Assessment** — Evaluation of learning skills in reading, writing, English as a Second Language (ESL) and mathematics. This is done by 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 those with limited English proficiency.
2. **Orientation** — Overview of college services, programs, certificates, degrees and majors, and registration procedures. Assessment test scores are explained as guides for registering for writing, reading and mathematics courses. Orientation is completed online at the time of assessment testing or by logging on at <http://www.teachinggear.net/orientation/launch/start.php>.
3. **Counseling** — Students 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 for 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 at the following link: <http://counseling.fullcoll.edu/counseling%20online/index.htm>.
4. **Student Educational Program Plan** — New students are encouraged to see a counselor before registration to help plan their courses. In the semester after 15 units are completed students should declare an educational goal and see a counselor to assist them in completing a Student Educational Program Plan (SEPP).
5. **Follow-Up** — Progress checks and assistance by counselors and instructors help students make successful progress towards their goals. Students on probation or academic/progress dismissal are notified each year in the Spring term. Students encountering difficulties are referred to Counseling or appropriate college resources as needed.

These matriculation requirements 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/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 to be exempt** — Students classified as matriculated may petition to be exempt from assessment, orientation and/or counseling. The student shall complete and file a “Matriculation Status Petition for Exemption” form with the Dean of Counseling/Matriculation Coordinator. The Dean of Counseling/Matriculation Coordinator will notify the student within three days at 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 Mathematics. 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. **Waiver of prerequisites** — Under Title V, Matriculation Regulations, students are entitled to enroll in any course for which they can meet necessary and valid prerequisites. A prerequisite is a course that must be completed before a more difficult course is attempted. 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 58106 of the Matriculation Regulations permit the following types of prerequisites:

(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. For example, 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) Prerequisites may also include corequisites, which 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.

**Student Rights to Request Waiver of Prerequisites:** Section 55534 of the Matriculation Regulations states: “Where students are required by a community college district to meet prerequisites...a student may object to such requirement on the grounds that the necessary course is not available.”

- When the prerequisite for a course as defined above in (2) or (3) is not offered in a given semester, the student may request a waiver of the prerequisite.
- Prerequisites may also be challenged by the student on the following grounds:
  1. the prerequisite is not valid because it is not necessary for success in the course for which it is required;
  2. the student has the knowledge or ability to succeed in the course despite not meeting the prerequisite;
  3. the prerequisite is discriminatory or is being applied in a discriminatory manner.

### How To Request a Waiver of Prerequisites:

- A petition to waive a prerequisite 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.
- The petition to waive prerequisites because it is not valid or because the student has prior knowledge or ability may be filed with the Dean of the division responsible for the course.
- The petition to waive a prerequisite 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 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 Executive Vice President. Students wishing to appeal the decision of the committee 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 Coordinator and an additional member from the Matriculation Advisory Committee 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.

## Matriculation 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 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) 992-7532.

## Registration

Registration is the process of becoming officially enrolled in college. **A student has not completed registration until the enrollment fee, health fee, and non-resident tuition, if applicable, are paid. It is strongly recommended to purchase a campus photo ID card. Continuing students must clear all materials or fines owed prior to registration.**

All new and former (returning) students must file an application for admission and be admitted to the college before they may register or add and drop classes. An application should be submitted electronically through the online application system, CCCApply. Visit the website at [www.fullcoll.edu](http://www.fullcoll.edu) for information and instructions. For students without Internet access, computer terminals and printed applications 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, permits and registration appointments are issued on a first-come, first-served basis. Special Admit students are not eligible for priority registration.

Throughout the registration process (including class petitioning), certain deadlines must be established. These deadlines are necessary in order to comply with State attendance laws and must be adhered to by all students. Failure to comply with these deadlines may mean that the student will not be registered and will not receive credit or be allowed to attend classes.

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

## 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.

### Enrollment Fee

The enrollment fee is \$18 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 \$13 per semester and \$10 for Summer Session. 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. The following students are exempted from paying health fees in accordance with Section 76355 of the Education Code:

1. Students who receive Board of Governors (BOGW) Enrollment Fee Waivers, including students who demonstrate financial need in accordance with the methodology set forth in Federal law or regulation for determining the expected family contribution of students seeking financial aid and students who demonstrate eligibility according to income standards established by the Board of Governors and contained in Section 58620 of Title 5 of the California Code of Regulations.
2. Students who depend upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization.
3. Students who are attending community college under an approved apprenticeship training program.

**Non-resident Tuition Fee**

Non-resident students will be charged a tuition fee of \$149 per semester unit for the 2004-2005 school year. Non-resident students who are citizens and residents of a foreign country will be charged a tuition fee of \$169 per semester unit.

All non-residents must also pay the enrollment fee and health fee.

**Course Fee**

These fees are noted in the class schedule.

**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.

**A.S. Benefits Validation**

See "Student Affairs and Activities."

**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 "Student Services."

**Bursar's Office**

This office is located in the Student Services Building (2000). Accounting services are provided for student activities, distribution of payroll and grant checks to students, and bus pass sales. The office accepts ATM cards for payments. Hours are 8:00 am to 5:00 pm, Monday through Thursday, and 8:00 am to 12:00 pm, Friday.

**ATM**

The campus has two full-service Automatic Teller Machines (ATMs) with 24-hour access. One is located in front of the Library, building 200. 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 Orange County Teachers Federal Credit Union 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 of \$1.50 for non-members of the credit union. All full-time students are eligible for membership.

**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.

## Transcripts

**High School Transcripts:** All matriculated students should have official transcripts sent to the Counseling Office from their high schools. **College Transcripts:** Students with previous college units should have transcripts from all colleges previously 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 tests, 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. The Admissions and Records Office prepares and permanently retains a record of each student's academic work. A student's transcript reflects all work taken at Fullerton College during regular and summer sessions. It lists chronologically the courses, units, grades, cumulative grade point average, transfer credits and total units.

The usual period required for processing and issuing transcripts for current and non-current students is within 7-10 business days (not including the mailing time). Forms for requesting transcripts in person are available in the Admissions and Records Office. Mail requests must include the current name and all names used in the past, current address, phone number, date of birth, social security number, dates of attendance, where transcript is to be sent, number of copies needed, any instructions for special handling, and the student's full signature. Send requests to: Fullerton College, Admissions and Records Office, 321 East Chapman Avenue, Fullerton, CA 92832-2095.

Students are entitled to two free copies of their transcript. Starting with the third request, the fee is \$3 per copy.

If a student needs a transcript sent in less than 10 business days, a rush request may be made. The transcript will be mailed within three (3) business days after the request is received. However, this service is an additional \$10 and also applies to the free copies.

Students who have completed General Education Certification requirements (for additional information, refer to General Education Breadth Requirements — Four Year Colleges and Universities), need to request that an evaluation is included with the transcript when it is sent to the university. Due to the need for accuracy in this evaluation, rush service is not available. Processing time is 7-10 business days.

Make checks or money orders payable to: Fullerton College. All transcript requests must include payment. Requests will not be processed if the student has outstanding financial obligations to the college.

In accordance with the Family Educational Rights and Privacy Act of 1974, 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 is required when requesting transcripts in person.



# Being a Student

## Orientation for New Students

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See Matriculation under Admission and Registration.

## Academic Honors

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### Deans' Honor Roll

Those 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 Deans' Honor Roll.

### President's Honor Roll

Those 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 Roll.

### 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.

## Acceptance of Transfer Credits

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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 credit for up to 30 units of lower division coursework.

Transferring units will be posted at the time of graduation.

## Adding or Dropping a Class

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All adds, drops and withdrawals are to be completed ONLINE through WebStar 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 WebStar on or before the deadline. Failure to do so will result in not being officially added to the class.

A student will not be permitted to add a new full-semester class after the end of the second 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 dates and/or contact the Admissions and Records Office for further deadline information.

### 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.

## Attendance

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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. **However, it is the student's responsibility to officially drop the class.**

### 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 an excessive number of unexcused absences in any class (more than the number of times the class meets per week), an instructor **may** file an Instructor Drop Form in the Admissions and Records Office requesting this student be withdrawn from the class. The absences may be consecutive or nonconsecutive. This request will be processed by the Admissions and Records Office and the student will be withdrawn from the class. Refer to the course syllabus for class attendance policy.

## 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.

For additional information, refer to the Withdrawal Policy.

## 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.

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 for auditing college courses are \$18 per unit (subject to change). Students not enrolled in the college will pay \$18 per unit (subject to change) plus the 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.

## Class Load

### Classification of Students

Students are classified 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:

**Athletic Eligibility** — Full time: 12 units including P.E. classes.

**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.

**Veterans Benefits** — Full time: 12 units per semester; 3/4 time: 9 units per semester; 1/2 time: 6 units per semester.

Associated Students Elected Office: 9 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

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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 — Substandard Grade

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A student **may not repeat** more than once a course in which a substandard grade of “D,” “F,” or “NC” has been assigned.

Students will be blocked from registering in classes in which they have completed the maximum number of times allowed. Students may petition for an exception in the Admissions and Records Office. This petition must be approved before the student will be permitted to register into the course.

### Petition to Exclude “D,” “F,” or “NC” Grades

If a student previously received a “D,” “F,” or “NC” in a course taken at Fullerton College, and repeats the same course and earns a higher letter grade, the student should file a Petition to Exclude “D,” “F,” or “NC” Grades. The original grade, grade points and units, on written petition by the student, will be excluded from the computation of the student’s grade point average. Only a grade earned in the first repetition may be used to alleviate a prior substandard grade. (T5, Section 55761-55763). Only the first substandard grade can be disregarded in the grade point average calculation. Subsequent substandard Grades must be included in the grade point average calculation. The former grade is not removed from the permanent record, but is 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. Petitions to exclude “D,” “F” or “NC” grades can be obtained in the Admissions and Records Office.

## Course Repetition — Passing Grade

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A course in which a grade of A, B, C, CR or I has been earned may not be repeated, unless 5 years have lapsed or course content has changed significantly. A petition must be filed in Admissions and Records and must be *approved for special circumstances*. The new grade earned will not be counted in GPA.

## Course Repetition — Skill, Performance, or Activity

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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 sequence of repeatable courses are indicated with course titles such as “Beginning,” “Intermediate,” and “Advanced.” 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 the number of times the college has specified, but for no more than a total of four times altogether.

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

## Credit By Examination

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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 credit (CR) 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. Resident students must pay enrollment and health fees; non-resident students must pay the enrollment fee, health fee, and non-resident per-unit tuition.
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.

## Grading System

### Grades and Grade Point Average

Grades are based upon the quality of work done, that is, upon actual accomplishment in courses offered for credit. The grade point average is computed by dividing all units attempted into all grade points received. The meaning of each grade and its value in grade points is as follows:

Symbol	Definition	Grade Points Per Unit
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing, less than Satisfactory	1
F	Failing	0
CR	Credit	at least satisfactory — units awarded not counted in GPA
NC	No Credit	less than satisfactory, or failing — units not counted in GPA

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.

## Credit/No Credit Policy

All courses are for college credit. Courses in which **CR (Credit)/NC (No Credit)** grading is allowed are designated in the class schedule and in the course descriptions in this catalog. CR/NC is not the same as auditing.

**CR** — Credit is equivalent to the satisfactory grade of “C.” CR will award units completed, but will not be computed into the grade point average.

**NC** — No Credit is a substandard grade, equivalent to the grades of “D” or “F.” NC 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 Credit/No Credit Option,” a student choosing to take the course with a CR/NC grade must file a “Credit/No Credit 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 CREDIT/NO CREDIT option.

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

## Non Evaluative Grades

**I** — Incomplete. Incomplete academic work at the end of the term caused by unforeseeable, emergency and justifiable reasons may result in an “I” symbol being entered in the student’s record. The condition of removal of the “I” and the grade to be assigned shall be stated by the instructor in a written record. This record must be given to the student with a copy on file with the Admissions and Records Office until the “I” is made up or the 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 “I” must be made up no later than one year following the end of the term in which it was assigned.**

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 “I” 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.

**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.

**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, CR, NC, 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 except by the special permission of the teacher of the more advanced course.

## Non-Degree Credit Courses

Non-degree credit courses are courses that earn credit, are **not** counted toward the 60 units required for the associate degree, nor are they included in GPA. Non-degree courses are intended to assist students in performing the skills needed for college level courses. Non-degree courses do apply toward: residency, athletic eligibility, work study and financial aid, veterans benefits, associated student body office, and full-time status. The degree or non-degree credit status is indicated at the end of every course description.

## 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).

### Pre-Collegiate Basic Skills Courses

Pre-College/basic skills courses are defined as those two or more levels below college level English and one or more levels below elementary 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.

### Exemptions

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

## Review and Release of Information

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

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

Name • Date and Place of Birth • Major Field of Study • Dates of Attendance • Degrees and Awards Received • Previous Educational Institutions Attended • Participation in Officially Recognized Activities and Sports • Weight and Height of Members of Athletic Teams.

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.

## 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 term, a student **may** be withdrawn if no longer participating in the course. Definitions of non-participation shall include, but one 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 WebStar 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. **Semester Length Courses:** withdrawal during the first three weeks of the semester.
- B. **Short Term Courses** (courses less than a semester in 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.

**ALERT: Withdrawing from a course after the above deadlines requires that a student receive a letter grade other than a “W.”** Under certain circumstances (such as accident or serious illness), withdrawals are permitted after the drop deadline. A student must file a petition with Admissions and Records to request such a withdrawal.



# Responsibilities of Students

## Academic Honesty

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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 (as in cases where there is reasonable doubt that the student knew that the action violated the standards of honesty); assign an "F" on all or part of a particular paper, project, or exam (for example, where it was felt that it was a one-time occurrence); or assign an "F" in the course (as in cases where the dishonesty was serious, premeditated, or part of an ongoing scheme).

2. 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.

## Student Conduct

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Students have an obligation to familiarize themselves with the College's policies, rules and regulations and to conduct themselves in a reasonable, respectful manner, which is conducive toward attaining their educational goal. Upon registration, each student should obtain a copy of the **College Policies and Regulations: Standards of Student Conduct and Discipline Policy**. Contained therein are the policies approved by the Board of Trustees governing student behavior and the applicable penalties for violations of these policies. Copies are available in the Student Affairs Office, the Office of Equity and Diversity, all division offices, and the Student Services office. See Standards of Student Conduct and Discipline under College Policies.

## Probation and Dismissal Policy

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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," or "NC" 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," or "NC" 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 1.75 or lower 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.**

## Academic Renewal Policy

The Academic Renewal Procedure (51318, California Administrative Code) permits the alleviation of students' previously recorded substandard academic performance which is not reflective of a 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, NC) 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.

## 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** to 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 in writing 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.

## Petitions and Appeals

Petitions for 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 every two weeks to review petitions.

## Withholding Student Records

NOCCCD BOARD POLICY Section 6009, Student Personnel, Withholding Student Records, Adopted 9/10/96

- 1.0 **Probable Cause:** The President, or designee, may place a hold on a 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.
- 2.0 **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 college has the authority to exercise the Withholding Student Records Policy. A hold is placed on a student's academic record and subsequent term registration when the student has an outstanding obligation to the college or needs to provide additional information to Admissions and Records Office for the registration process. Once the student satisfies the obligation or the necessary information, the hold will be released.

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

Hold Type	Office to Contact
Accounts Receivable	Bursar
Admissions Info Required	Admissions and Records
Bursar's Hold	Bursar
Disciplinary	Dean of Students
Financial Aid	Financial Aid
International Student	International Student Center
Library Materials/Fees	Library
Registrar's Hold	Admissions and Records
Scholastic Dismissal	Admissions and Records
Special Admit Form	Admissions and Records
Transcript	Admissions and Records
Unpaid Balance	Admissions and Records



# Campus Procedures

## Campus Rules

1. Smoking is prohibited in all buildings. Designated areas are located throughout the campus.
2. Eating and drinking are prohibited in all buildings, except where food is sold or is part of an approved and scheduled activity.
3. Gambling on the campus is prohibited. Gaming is restricted to the Student Center.
4. Animals not indigenous to the campus grounds are not allowed on campus. Exceptions shall be made for certified companion animals and those animals previously approved by college officials for specific educational purposes.
5. Literature to be distributed must be approved by the Director of Student Affairs.
6. Children are not allowed on campus unless supervised by a parent/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, theater, food services area, quad, or college parking lots.
7. Unauthorized vehicles (vehicles without a parking permit) must use visitor parking or purchase a one-day parking permit.
8. Students are required to be fully attired, including shirts or blouses and footwear.
9. Skateboarding, skating and bike riding are prohibited on campus grounds.
10. The use of radios, electronic recording devices, tape or compact disc players without headphones is prohibited on campus except in connection with approved campus/classroom activities.
11. Electronic recording devices may not be used in classrooms without the permission of the instructor.
12. Student credit cards may be marketed only with authorization by administration, and only at sites designated by campus administration. Marketers of student credit cards are prohibited from offering gifts to students for filling out credit card applications. Credit card and debt education information provided by non-profit credit counseling organizations shall be included in new student orientation materials.

## Student Right-to-Know Act and Campus Security Act

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

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

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

### **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

Fullerton College has a 23.7% graduation rate with a 47.7% transfer rate.

Over 1,300 students transfer annually from Fullerton College to a UC, CSU, or regionally-accredited California independent or out-of-state college/university.

Fullerton College sends approximately 85-90% of all Fullerton College transfers to top California State University campuses. The top CSU's in terms of number of Fullerton College transfers are: Cal State Fullerton, Cal State Long Beach, Cal Poly Pomona, and San Diego State.

Fullerton College students are accepted by extremely competitive academic institutions and programs including the following: UC Berkeley's Haas School of Business (8% admit rate and admits only 90 students annually), UCLA's prestigious Television and Film program, UCLA's Theater Program, UCSF's School of Pharmacy, Julliard, and Stanford, BYU, University of Virginia, Carnegie Mellon, NYU, etc.

## Campus Safety Institutional Security Policies and Crime Statistics

Part 1 – Crime	2000	2001	2002
Murder/Non-Negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	0	0	0
Non-Forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	2	2	1
Burglary	28	23	26
Auto Theft	2	4	9

### Special Category Arrest

Weapons Possession	1	2	0
Drug Abuse Violation	2	0	1
Liquor Laws	3	1	0
Hate Crimes	0	1	0

## 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 risk-free 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) 992-7343 or by coming in person to the Campus Safety Department, located in Student Parking Lot 1, off Lemon Street between Grove and Nutwood Place, Room T-8. Emergency call boxes are located throughout the campus and will connect the caller directly to Campus Safety.

### Access to Campus Facilities

**BUILDINGS** – Most campus buildings are open from 6:30a to 10:30p, 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 5:30pm on Friday to 6:30am on Monday. As previously stated, Campus Safety personnel will unlock doors for weekend classes and other events as published in the Room Reservation Schedule prepared by the Facilities Office, (714) 992-7333.

**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 Educational Support and Planning, 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 at (714) 992-7343 whenever you see suspicious behavior.

### **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 student or employee in violation of this policy is 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:**

<b>FC Admissions and Records</b> (714) 992-7568 2000 Building – 1st Floor	<b>FC Campus Safety</b> (714) 992-7341 1700 Complex – T-8
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<b>FC Student Affairs</b> (714) 992-7248 Student Center Complex – Room 1409	<b>FC Cadena/Transfer Center</b> (714) 992-7587 Student Center Complex – Room 1407
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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/](http://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.

## **Non-Discrimination and Sexual Harassment Statement**

The North Orange County Community College District, in compliance with all applicable Federal and State laws, does not discriminate on the basis of race, color, national origin, ancestry, marital status, age, religion, disability, gender, sex, or sexual orientation in any of its policies, procedures, or practices.

Consistent with State and Federal law and District policy, the North Orange County Community College District forbids sexual harassment at any of its locations. The District will take preventive, corrective, and disciplinary action for any act that violates this policy or the rights and privileges it is designed to protect.

Any repeated or unwarranted verbal or physical sexual advance, sexually explicit derogatory statement, or sexually discriminatory remark made by someone at school which is offensive or objectionable to the recipient or which causes the recipient discomfort or humiliation, or which interferes with the recipient's performance constitutes sexual harassment. Any act of discrimination on the basis of disability should be reported. Also, the lack of English skills will not be a participatory barrier in any vocational educational program and should be reported.

The District does not discriminate against any employees or applicants for employment on the basis of their age or because of their medical condition; nor does the District discriminate on the basis of citizenship or sexual orientation, within the limits imposed by law or District policy. This non-discrimination statement covers admission, access, and service in District programs, activities, and application for and treatment in District employment.

The North Orange County Community College District is an affirmative action/equal opportunity employer. Individuals who believe they are victims of discrimination and/or harassment, or have questions about our policies, may contact the Director of Equity and Diversity, Fullerton College, 321 E. Chapman Avenue, Fullerton, CA 92832, (714) 992-7720; Vice Chancellor, Human Resources, North Orange County Community College District, 1830 W. Romneya Drive, Anaheim 92801, (714) 808-4802; or any other District/College administrator of their choosing.

## **Declaracion De No Discriminacion y Harassment Sexual**

El Distrito de North Orange County Community College en cumplimiento con las leyes federales y estatales vigentes no discrimina por razones de raza, color, origen nacional, ascendencia, estado civil, edad, religión, incapacidad física, sexo o orientación sexual, en ninguna de sus normas, procedimientos o prácticas.

Cumpliendo con las leyes federales y la política del Distrito, el North Orange County Community College District prohíbe el acoso sexual en todos sus locales. El Distrito tomará medidas preventivas, correctivas y disciplinarias por cualquier acto que viole esta política o los derechos y privilegios para la protección de los cuales ha sido designada.

El Distrito no discrimina contra ningún empleado o solicitante de empleo por razones de edad o condición médica; tampoco discrimina el Distrito por razones de ciudadanía u orientación sexual, dentro de los límites impuestos por la ley o la política del Distrito. Esta declaración contra la discriminación cubre la admisión, el acceso, y el servicio en programas y actividades del Distrito, y la solicitud de trabajo y el tratamiento como empleado del Distrito.

El North Orange County Community College District es un empleador de acción afirmativa y de igualdad de oportunidad. Los individuos que crean ser víctimas de discriminación y/o acoso, o que tengan preguntas sobre nuestras normas, pueden ponerse en contacto con el the Director of Equity y Diversity, Fullerton College, 321 E. Chapman Avenue, Fullerton, CA 92832, (714) 992-7720; Vice Chancellor, Human Resources, North Orange County Community College District, 1830 W. Romneya Drive, Anaheim 92801, (714) 808-4802; o cualquier otro administrador del Distrito o Fullerton College de su preferencia. La falta de habilidad en el inglés no será un impedimento en la admisión o participación en programas de estudios vocacionales.

## **Drug-Free and Alcohol-Free District Policy**

The Federal Government has mandated that as of October 1, 1990, there will be no drug usage by students, staff or faculty on college campuses anywhere in the United States.

On January 13, 1992, the Board of Trustees of the North Orange County Community College District adopted the following policy statement to comply with the law. The policy, which is to be shared in writing with students, staff and faculty is as follows:

On November 18, 1988, Congress passed the Drug-Free Workplace Act of 1988. (P.L. 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.). The statute requires contractors and grantees of Federal agencies to certify that they will provide a drug-free workplace. Making this required certification is a precondition for receiving a contract or grant from a Federal agency.

Pursuant to the Drug-Free Workplace Act of 1988, it is unlawful to manufacture, distribute, dispense, possess, or use controlled substances at all District worksites and/or while in the performance of District business or attending a District event or program.

The Drug-Free Schools and Communities Act Amendments of 1989 (P.L. 101-226) amends the previous law of 1988 to include that it is also unlawful to manufacture, distribute, dispense, possess, use or sell illicit drugs and alcohol in the workplace or at any District activities or events or while performing District business.

### **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 1400, Room 1409
2. Campus Safety Department, T-8

### **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.

## **Student Complaint Procedure (approval pending)**

### **Definitions:**

#### **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.

#### **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. Students should refer to the Fullerton College Catalog for the specific process for these exceptions: student-to-student conduct, grade appeal and sexual harassment.

### **Procedures:**

#### **Informal**

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

#### **Formal**

1. Students are responsible for initiating the procedure. The College has a legal responsibility to deal directly with the students. Student Complaint Procedure forms are available in division offices.
2. Students should complete the Student Complaint Procedure form and set an appointment with the appropriate dean or director. If the complaint is about the dean or director, or the students feel the issue is not resolved, they can ultimately contact Fullerton College's Executive Vice President of Educational Programs and Student Services or the Vice President of Educational Support and Planning. Both offices are located on the first floor of the 100 building.
3. Students will be notified in writing on the Student Complaint Procedure form after each formal step.

## **Grade Appeal Request Procedure (approval pending)**

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 students believe the grade is prejudicially, capriciously, or arbitrarily assigned.
3. Requests for grade change should be initiated by students within the next regular semester, but no later than two years, following the award of the original grade. If the instructor determines that there is a valid basis for the change, a Change of Grade form shall be used to notify the Office of Admissions and Records.
4. If the instructor determines there is not a valid basis for the change and denies the student's request, students may proceed to the appeals procedure described below. 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.

The Grade Appeal Request form must first be directed to the instructor of the course and a signed copy maintained by the student. If further action is necessary, students should present the written complaint to the division dean. If the issue continues to remain unresolved, the written appeal can be directed to the Executive Vice President of Educational Programs and Student Services. The Executive Vice President will convene the Grade Appeal Committee. Once the Grade Appeal Request has entered the formal process, it shall be resolved formally.

## Suspension

When serious violations of college regulations 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 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 control of the District or college, for a maximum of two consecutive days.
3. **Withdrawal of Consent to Remain on Campus** — Withdrawal of consent by the President or President's designee for a student or other person to remain on the 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.

## 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, and were drawn in compliance with Sections 66300, 76030, 76033, 76034, 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 District premises.
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 objects 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 at 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.

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. Also, 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.

## 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. **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.
4. **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).
5. **Removal from Class** — The involuntary removal of a student from class by an Instructor for a maximum period of two consecutive class sessions.
6. **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.
7. **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.
8. **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.

9. **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.
10. **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.
11. **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 Support Programs and Services

## Academic Support Center

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The Academic Support Center (ASC) provides services to **ALL** Fullerton College students and staff in achieving academic success. The center is comprised of three related services: the Skills Center, the Tutoring Center, and the Writing Center.

During Fall Semester 2004, the ASC is located on the second floor of the 2000 Building (Student Services); during Spring Semester 2005 and afterwards, the ASC will move to the Learning Resource Center on the ground floor of the Library/Learning Resource Center building in the center of campus.

### Skills Center services:

- Self-paced computer-assisted and audiovisual instructional support in study skills, vocabulary improvement, critical thinking, keyboarding, and a variety of other subjects.
- Administration of make-up exams for all Fullerton College classes (on campus, online, hybrid and teleweb classes).
- Instructional lab support for courses in basic through advanced reading and writing, English as a Second Language and foreign languages.

### Tutoring Center services:

- Free tutoring for most college courses by faculty-recommended tutors
- Walk-in tutoring for accounting, chemistry, physics, math (Monday-Saturday)
- By-appointment tutoring for all other subjects
- Inspiration software (for organizing ideas for any subject)
- Math Anxiety Workshop offered each semester
- E-mail tutoring in math and English through website: [www.tutoringcenter.fullcoll.edu](http://www.tutoringcenter.fullcoll.edu)

### Writing Center services:

- Assistance with any writing project, whether for class or personal use
- Tutoring for writing at any stage from brainstorming to final draft
- Both walk-in and by-appointment tutoring
- Frequent workshops on a wide variety of writing topics

### Contact Information:

- **Skills Center:** Phone: (714) 992-7550  
E-mail: [skillscenter@fullcoll.edu](mailto:skillscenter@fullcoll.edu)  
Web: [www.skillscenter.fullcoll.edu](http://www.skillscenter.fullcoll.edu)
- **Tutoring Center:** Phone: (714) 992-7482  
E-mail: [tutoringcenter@fullcoll.edu](mailto:tutoringcenter@fullcoll.edu)  
Web: [www.tutoringcenter.fullcoll.edu](http://www.tutoringcenter.fullcoll.edu)

- **Writing Center:** Phone: (714) 992-7554  
E-mail: [writingcenter@fullcoll.edu](mailto:writingcenter@fullcoll.edu)  
Web: [www.writingcenter.fullcoll.edu](http://www.writingcenter.fullcoll.edu)
- **ASC Director:** Phone: (714) 992-7552  
E-mail: [academicsupport@fullcoll.edu](mailto:academicsupport@fullcoll.edu)  
Web: [www.academicsupport.fullcoll.edu](http://www.academicsupport.fullcoll.edu)

**All Academic Support Center services are FREE to Fullerton College students.**

## Adaptive Services Center

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The Adaptive Services Center provides accommodations and/or services to enrolled students with professionally verified disabilities. Support services may include, but are not limited to, specialized tutoring, priority registration, materials in alternate formats, note-taking assistance, test-taking facilitation, adaptive equipment, interpreters, specialized academic counseling, and medical parking. Also available to eligible students is the Adaptive Computer Lab. Special classes include Adaptive Computer Access and Learning Strategies. Hours vary; please check with the office.

If you would like additional information about support services, call (714) 992-7270 or (714) 992-7221 (TTY for hearing impaired). You may also visit the Adaptive Services Center website at <http://dsp.fullcoll.edu> or visit the ASC in Room 804.

## Bookstore

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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 are arranged in easy-to-locate supermarket-style by class names and numbers. In addition, extensive classroom and office supplies, study aids, college clothing, giftware, software at education discounts, small electronics, books, magazines, and snacks are available. During the semesters, the Bookstore is open Monday through Thursday 7:45am to 7pm, Friday 7:45am to 3:45pm, and some Saturdays 7:30am to 2pm. Special hours for breaks, holidays, rush periods, and inventory are posted in the Bookstore and available by phone at (714) 992-7557. The Bookstore web page, reached at <http://bookstore.fullcoll.edu>, includes on-line ordering.

## Cadena/Transfer Center

The Cadena/Transfer Center is a multipurpose center providing both diversity and transfer-related events, services, and resources for Fullerton College students, faculty and staff. (See Counseling and Student Development for specific services.)

## Career and Life Planning Center

The Career and Life Planning Center offers individual and group appointments with career counseling faculty. (See Counseling and Student Development for specific services).

## Child Care Center

The Child Care Center offers child care to all parents. The program is licensed by the State of California and is accredited as a High Quality Childhood Program by the National Academy of Early Childhood Programs. Both half-day and full-day programs are available. Children 6 months through 5 years may enroll. Advance registration is required. For additional information, call (714) 992-7467.

## Child Development Lab School

The Child Development Lab School offers a full day early care and education experience for preschool age children from two years nine months to five years. The Lab School is a part of the Fullerton College Child Development Centers and is open to Fullerton College students, staff and members of the community. The Lab School is licensed and accredited by the National Association for the Education of Young Children. Curriculum development approaches used in the Child Development Lab School follow the learning philosophies professed by the Fullerton College Child Development and Family Life Department. The teachers at the Lab School use an emergent curriculum/project approach to support developmentally appropriate experiences and early skill development in literacy, music education, natural sciences, and math readiness. Early learning and readiness approaches focus on the development of the whole child in an integrated learning mode which includes: long periods of time for exploration, in depth processes/projects, and thinking/problem solving skill development. For enrollment information call (714) 992-7467.

## Counseling and Student Development

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, CalWORKS 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, a resource for general questions. (<http://counseling.fullcoll.edu>)

**COUNSELING CENTER** 2000 Building., second floor; phone (714) 992-7010 — The Counseling Center offers new, continuing and returning students individual or group appointments with counseling faculty to:

- 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
- 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
- Assist students in appropriate selection of math, English and basic skills courses
- Assist students in clarifying their career goals
- Assist students in resolving concerns about life management issues
- Provide information on college policies and regulations
- Provide walk-in general information counseling
- Provide orientation and new student group advising

In addition, the Counseling Center staff assists students with:

- Processing Matriculation forms
- Scheduling counseling appointments

**CAREER AND LIFE PLANNING CENTER** building 100, room 113; phone (714) 992-7043 — The Career and Life Planning Center offers individual and group appointments with career counseling faculty. In addition, the center provides career development services including:

- Career exploration and career decision making
- Computerized career information systems
- Career and/or job change planning
- An extensive research library of career reference materials
- Assistance with resumes, application letters and interviewing techniques
- Assessments and courses for adult re-entry students

**CADENA/TRANSFER CENTER** room 1407 near the tennis courts and Chapman Avenue; phone (714) 992-7587; Website <http://cadena.fullcoll.edu> — The Cadena/Transfer Center is a multipurpose center providing both diversity and transfer-related events, services, and resources for Fullerton College students, faculty and staff. These activities include the following:

- Walk-in transfer advising, counseling and assistance.
- Personal contact with representatives from four-year colleges and universities
- Transfer application assistance and workshops
- Field trips to four-year colleges and universities
- Field trips to multicultural and diversity-related destinations
- Transfer Day and college fairs
- A large collection of college and university catalogs
- Guidebooks to assist in using college and university catalogs
- Computer stations with Internet access
- Cultural, diversity, academic and student development workshops and events
- Financial aid and scholarship information
- Guide to Majors sheets
- E-mail mailing list for students interested in transfer information and activities of the center

**ASSESSMENT CENTER** building 500, room 513 — The Assessment Center offers required assessment tests for enrollment in Math and English courses. No appointment is needed; come to the center during operating hours to complete your assessment. Upon completion of your assessment new students will be scheduled for orientation.

**CalWORKs Office** is located at 315 N. Pomona, just west of the campus, between Whiting and Wilshire; phone (714) 449-4792. The CalWORKs program is designed for students who are receiving AFDC/Welfare. CalWORKs students receive the following services:

- CalWORKs counselors provide academic, career and personal counseling as well as ongoing support
- Coordination and/or referral to outside agencies for health, transportation, food, housing and other basic needs
- Child care grants both on and off campus for qualified students
- School-To-Work plan developed with Job Development Specialist, matching student skills with employment opportunities
- A team approach used to advocate for student rights

## Escort Service

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Escort service is available daily, Monday through Friday. Call ext. 27343 on any campus phone or by dialing \*81 on any campus pay phone. Emergency phones are strategically located throughout the campus.

## Financial Aid

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### Philosophy

In keeping with the open-door philosophy of Fullerton College, the Financial Aid Office endeavors to support the dignity and worth of each individual. The office is vitally concerned with the educational needs of all individuals in the community and recognizes that the specific needs for education vary among students.

The student and their individual needs then become the chief focal point of the Financial Aid Office. Its goal is to provide monetary assistance to students who may benefit from higher education, but who cannot do so without financial assistance.

## 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:

- Student must be an American citizen, or eligible non-citizen
- Demonstrate a financial need according to a recognized Federal system on need analysis
- Working toward a degree or certificate program
- Does not yet possess a Bachelor's Degree
- Enrolled as a regular student in an eligible program
- Males must be registered with the Selective Service Board
- Possess a high school diploma, GED certificate or pass a Federally-approved test
- May not be in default on any Perkins, Stafford, Plus or Direct Loan
- Owes a repayment on any previously-received Federal grants
- Has no drug-related convictions
- Maintain satisfactory academic progress

Basic Loan eligibility criteria are:

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

## Programs

**FEDERAL PELL GRANT** is a direct grant from the Department of Education to students for educational expenses.

**FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)** is 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 first-time undergraduates and for graduate students who need financial aid. 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)** is state funded and is awarded to students from limited income families.

**SUBSIDIZED DIRECT LOAN PROGRAM** provides students with long-term, low-interest loans for educational expenses. The loans have a low interest rate which may vary from year to year.

**UNSUBSIDIZED DIRECT LOAN PROGRAM** provides loans for students who do not qualify, in whole or in part, for subsidized Direct Loans. Authorized under a new federal law called the Higher Education Amendments of 1992, the terms of the unsubsidized loans are the same as the terms for subsidized Direct Loans, except the interest payments, are paid by the student.

**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. 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)

**GRANT ADVANCE FUND:** Students who have applied for Financial Aid, but won't receive their funds in time to buy their books, can apply for a \$300.00 advance to be deducted from their grant. Please note, student must meet grant eligibility requirements.

The **BOARD FINANCIAL ASSISTANCE PROGRAM** provides three ways to help low-income students pay for the enrollment fee; eligibility requirements vary.

## 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. The form may be obtained from the Financial Aid Office or you may access the website at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). The application period for financial assistance for the 2004-2005 school year is January 1, 2004 through May 1, 2005. Priority funding will be awarded to those submitting completed applications between April 1st and June 30th of each year.

**For further information, contact the Financial Aid Office at (714) 992-7050.**

## Health Services

The Health Center provides health care and personal counseling to the students of Fullerton College. It is located on the west side of the Physical Education Building and is open from 8:00 am to 7:30 pm Monday through Thursday and from 8:00 am to 4:00 pm on Friday during the fall and spring semesters. The summer schedule is variable. The mandatory health fee (payable at the time of registration) includes the following services:

- 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.

\*Limitations apply.

- 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 Fees are charged to all students whether or not they choose to use health services. The following students are exempt from paying health fees in accordance with Section 76355 of the Education Code:

1. Students who receive Board of Governors (BOG) Enrollment Fee Waivers, including students who demonstrate financial need in accordance with the methodology set forth in Federal law or regulation for determining the expected family contribution of students seeking financial aid and students who demonstrate eligibility according to income standards established by the Board of Governors and contained in Section 58620 of Title 5 of the California Code of Regulations.
2. Students who depend upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization.
3. Students who are attending community college under an approved apprenticeship training program.

### Your Health Fees At Work

The student Health Center provides 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. **Call (714) 9992-7414 or \*83 on Campus Public Phones.**

Nurses are available from 8 am – 7:30 pm Monday through Thursday and from 8 am 4:00 pm on Friday.

Physicians, Nurse Practitioners, and Psychologists by appointment.

Check our Web site: <http://healthservices.fullcoll.edu>

## Housing

The College does not have a student housing facility. A list of housing available to students is posted in the Student Center Building (1406). Included is information on rentals, rooms for rent, apartments for rent, roommates wanted, roommates available, and brochures.

## Veterans' Services

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Veterans, service members, and their survivors and dependents may apply for their VA Educational Benefit Programs through the Office of Financial Aid and Veterans Services. This office is located in the Administration Building, room 115.

VA students must complete and submit a REQUEST FOR ENROLLMENT CERTIFICATION form for each semester in order to collect their benefits. An advance payment of their benefits may be obtained, if eligible, by submitting their REQUEST form at least 30 days prior to the start of the enrollment period to be certified. Also, all veterans must submit a SEPP (Student Education Program Plan) form for each semester that they wish to be certified, which can be obtained from their academic counselor.

VA students must submit all of their official prior postsecondary transcripts (civilian and military) to be evaluated along with their second REQUEST form, and declare a program (major) for them to be evaluated.

Fullerton College, as required by federal regulation and DVA policy, conducts an evaluation of all VA students' prior postsecondary education, experience and training (civilian and military) before certifying their third enrollment period. Also, as required, Fullerton College grants the appropriate credit, shortening their training period proportionately, and notifies the DVA and these students the amount of credit allowed towards their declared program.

Unless otherwise notified, 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.

VA students cannot be certified if their cumulative grade point average (overall GPA) remains below 2.00 for two successive certified enrollment periods. Once their overall GPA is 2.00 or above, their subsequent enrollment periods can then be certified.

For more information, policies, and procedures regarding VA Education Benefit Programs, visit <http://financialaid.fullcoll.edu> or call the Fullerton College VA Certifying Official at (714) 992-7055.

## Workforce Center

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The Workforce Center, located in building 1409, offers job placement services to currently enrolled students and alumni (within two years after graduation). A wide variety of job listings and announcements are available for temporary, seasonal, permanent, part-time, and full-time employment.

Services also include resume and cover letter writing assistance, job interview preparation, and free resume faxing. Local employers are present on campus throughout the semester to provide company information and recruitment during peak hiring periods. The Workforce Center proudly sponsors two "Employer Day" job fairs for the entire campus community.

Students are required to present proof of current enrollment during each visit to the Workforce Center. It is the student's responsibility to conduct his/her own job search, contact the employers directly, and then notify the Workforce Center if he/she was hired. For more information and hours of operation, please call (714) 992-7261.

# Special Programs

## Continuing Education

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North Orange County Community College District maintains a School of Continuing Education which is concerned primarily with the non-credit educational needs of the population of the District and surrounding area. This program is designed to satisfy community non-credit requirements in specialized and general education areas. Much of the work is on an individual basis, and as a consequence, students are free to enroll in courses at the point where they will benefit the most. For information on Continuing Education programs, call (714) 808-4999.

## Associated Students

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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 (A.S.) is the recognized “student voice” in the shared governance process of the campus community.

The **Associated Students** (A.S.) consists of elected and appointed members including the Associated Students President, Vice President, 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.

The **Associated Students** Senate holds business meetings every Tuesday at 1:30 pm in the Student Center Conference Room (Bldg. 1410). All students and guests are welcome to attend.

The **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 the Student Center Conference Room (Bldg. 1410). All students and guests are welcome to attend.

Check the **Associated Students Office** (Bldg. 1408) or the **Student Affairs Office** (Bldg. 1409) for times and locations of all other A.S. and I.C.C. club meetings.

## Benefits for A.S. Members

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- Free A.S. Student Handbook and Academic Planner
- Free admission (or discounted) 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
- Discounts at 60-70 local businesses (detailed listing 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 Cinema
- Discounts to local entertainment areas and amusements (membership cards available in Student Center, Bldg. 1406)
- Fullerton College Bookstore discounts (as listed in the A.S. Student Handbook and Academic Planner)
- Fullerton College Cosmetology discounts (as listed in the A.S. Student Handbook and Academic Planner)
- Bike locker discounts
- Free admission (or discounted) at Fullerton College music and art events
- Free admission (or discounted) to all Fullerton College Mainstage Theatre events
- Free admission (or discounted) to all home Fullerton College athletic events (excluding tournaments)
- Photocopy service discount in Student Center (Services subject to change)

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

- Student Government leadership opportunities
- Student Body (A.S.) elections
- Inter-Club Council/Club involvement
- Day-to-day business operations of the A.S. offices
- Campus Photo Identification Cards
- A.S. Legal Clinic — free legal assistance
- A.S. CareBank — emergency assistance
- A.S. Radio Station — KFCR
- “FC Days” discount tickets
- Student Center operations
- Photocopy service in Student Center
- Play pool, check out cue sticks, cue ball and board games in the Student Center Lounge
- Bicycle Lockers
- Debit card services at Bookstore
- Ski discounts at participating ski resorts
- Programs and Special Events — featuring interesting speakers, seminars, plays and entertainment
- Student banquets, awards and recognition programs
- Music group activities — bands, choirs, ensembles

- Pep Band
- Pep Squad
- Athletics
- Art shows and displays
- Campus newspaper and other student publications (beyond the basic class requirements)
- Campus publicity, marketing and outreach
- Instructional funding opportunities
- A.S. co-sponsorship funding
- Student research for campus improvements
- Child Development Center
- State and regional student representation
- High school relations activities

(Services subject to change)

**For more information contact:**

**ASSOCIATED STUDENTS OFFICE** — Monday-Friday, 7:30 am to 4:00 pm; Building 1408, (714) 992-7256

**STUDENT AFFAIRS OFFICE** — Monday-Friday, 9:00 am to 4:00 pm, Building 1409, (714) 992-7248

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## Office of Student Affairs

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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, including Commencement and Men and Women of Distinction are coordinated by the Student Affairs staff. Hours vary; please check with the office.

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## Campus Photo Identification Card

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Services that require a Campus Photo ID Card are the Library, Tutoring Center, Financial Aid, Bookstore to make purchases by check or charge, Bursar’s to obtain refunds, to pick-up financial aid checks and other areas where needed. Campus ID Cards are the preferred source of photo identification when setting up campus lab accounts. The Campus ID Card is purchased for **\$2.50** only **once** during a student’s tenure at Fullerton College. A current semester validation sticker should be obtained each term. A current semester printout and valid photo ID must be shown to obtain the Campus ID Card and/or validation(s). If you do not have a valid photo I.D., you may receive verification in A&R, bring your birth certificate, or obtain a driver’s license/photo ID from your nearest DMV. A free A.S. Student Handbook and Academic Planner will be provided as available.

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## Men and Women of Distinction

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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, Building 1409, (714) 992-7248.

## Associated Students Validation

**Associated Students Benefits Validation — \$7.50** (per semester; Summer Benefits Validation — \$3.75).

A 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. (Validation sticker may be purchased during registration, at the Bursar's Office or in Student Affairs (building 1410). For more information on services and benefits offered, please see "Student Affairs and Activities."

Out-of-class learning programs — e.g., workshops, seminars, symposiums, trips  
 Instructional Funding  
 Fullerton College Bookstore discounts  
 Free Legal assistance  
 Bike security lockers  
 Music group activities — bands, choirs, ensembles  
 Pep Band  
 Pep Squad  
 Art shows and displays  
 Participation in the Campus newspaper and other student publications (beyond the basic class requirements)  
 The A.S./Campus radio station — KFCR  
 Student government — A.S. Senate membership  
 Inter-Club Council  
 Child care services  
 CareBank — Emergency Assistance  
 Membership in any Associated Students funded club or organization (does not include clubs not choosing to be funded by the Associated Students)  
 The day-to-day business operations of the Associated Students offices  
 Student research and effort toward improving Food Services, Bookstore services, bus service and parking facilities, instructor accountability, environmental clean-up  
 Student Center improvements  
 Campus publicity and handouts  
 Student banquets, awards, and recognition programs  
 Student Body (A.S.) elections  
 State and regional student representation  
 High school relations activities

(Services Subject to Change)

### The following benefits are also provided for A.S. Cardholders:

Debit Card services  
 Fullerton College Bookstore discounts  
 Discounts for up to 80 local businesses  
 Discounts to local areas of entertainment, theatres and amusements  
 Free admission to all Home and Away FC athletic events (excluding tournaments)  
 Discounted admission to all FC music and art events  
 Fullerton College "FC Days" discount tickets  
 Discounted admission to all FC Mainstage Theatre events  
 Free admission (or discounts) to all FC A.S. sponsored events including, food event days, Homecoming activities, comedy shows, Festival of Diversity, college hours educational programs, cultural events, and more

(Services Subject to Change)

## 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) 992-7256.

## Student Center

The focus of student life at Fullerton College is located at the Student Center Complex (Buildings. 1406-1410).

The Student Center Complex contains the Student Center Lounge (Building 1406), the Cadena/Transfer Center (Building 1407), the Associated Students — Student Government Offices (Building 1408), the Student Affairs Offices (Building 1409), the Workforce Center (Building 1409), and the Student Center Conference Room (Building 1410).

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. Campus Photo ID Cards are produced and validated in the Student Center Lounge during specific hours. For more information, call (714) 992-7256 (hours 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 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.

## Eligibility Requirements for Student Offices

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 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. Consequently, the following minimum eligibility requirements have been adopted. 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

## ELIGIBILITY REQUIREMENTS (Subject To Change)

### I. PREVIOUS SCHOOL RECORD

#### A. For Associated Students (A.S.) President Candidates:

The amount of time normally expended in successfully handling the office of Student Body President is such that eligibility requirements are slightly different from those established for other Student Senate officers.

1. Shall have completed nine or more units with a 2.3 or better GPA in the last previous semester in which the student was enrolled for nine units or more.
2. Shall be enrolled and complete nine or more units with a 2.3 or better GPA during the previous semester in which the person was a candidate.
3. Any student who has not previously enrolled for and completed a full semester (nine or more units) of college work shall have achieved at least an overall GPA of 2.5 for all previous college coursework — with a minimum of 12 completed college units. Students without sufficient previous college work are not be eligible to run for the A.S. Presidency.
4. Shall not be on disciplinary probation or suspension during the previous semester in which the person is a candidate.
5. All Executive officers, during the time for which they are elected, shall not hold office in any campus club or subsidiary organization.

#### B. For Other Elected Officers:

This includes all elected senators, A.S. Vice President, A.S. Treasurer, appointed offices, I.C.C. President, I.C.C. officers, club and organization officers, Pep Squad, and all other similar positions.

1. **Returning and Transfer Students** shall have completed nine or more units with a 2.0 or better GPA in the last previous semester in which the student was enrolled for nine or more units.

("Last previous semester," in this case, is only applicable to a period that goes back to or does not exceed three years. Students whose "last previous semester" as a full-time student is more than three years ago would, for eligibility purposes, be treated as a "new student" (See B2) and would also have to have at least a 2.0 GPA overall for all previous college coursework.)

2. **New Students:** Any student who has not previously enrolled for and completed a full semester (nine or more units) of college work shall have achieved at least a 2.0 ("C") average in the senior year of high school and at least a 2.0 for any college work completed.

3. **Returning and transfer students** shall be enrolled in and complete nine or more units with a 2.0 GPA during the previous semester in which they are candidates for office.

4. **All Executive Officers**, during the time for which they are elected shall not hold office in any campus club or subsidiary organization.

#### C. For Appointed Positions:

This includes A.S. commissioners, Child Care and KFCR Board members, A.S. committee appointees, KFCR management staff and any similar positions.

1. The Previous School Record requirements here are the same as those stated above in B. For Other Elected Officers.

### II. THE SEMESTER OF CANDIDACY

Note: Depending on the office, the "Semester of Candidacy" and the semester referred to in Part I or III may in some cases be one and the same.

#### A. For Associated Students (A.S.) President Candidates:

1. Shall be enrolled in and complete nine units with a 2.3 or better GPA during the semester in which the person is a candidate.
2. Shall not be or have been on disciplinary probation or suspension during the semester in which the person is a candidate.

#### B. For Other Elected Officers:

1. Shall be enrolled in and complete nine units with a 2.0 or better GPA during the semester in which the person is a candidate.
2. Shall not be or have been on disciplinary probation or suspension during the semester in which the person is a candidate.

#### C. For Appointed Positions:

Requirements are the same as those stated above in B. For Other Elected Officers.

#### D. Regardless of Position:

Candidate shall maintain good standing at Fullerton College.

### III. THE SEMESTER WHILE IN OFFICE

#### A. For the Associated Students (A.S.) President:

1. Shall maintain enrollment in seven or more units with a 2.0 GPA or better throughout the semester. Failure to do so shall result in disqualification from office with the position being filled according to procedures set forth in the A.S. Constitution.
2. Being placed on disciplinary probation or suspension while holding office shall result in disqualification and dismissal from the office during the period of probation or suspension.
3. The A.S. President, during the time for which he/she is elected, shall not hold an office or a leadership position in any campus club or subsidiary organization.

#### B. For Other Elected Officers:

1. Shall maintain enrollment in nine or more units with a 2.0 GPA or better throughout the semester in which the student holds office. Failure to do so shall result in disqualification and dismissal from office.
2. All Executive Officers, during the time for which they are elected, shall not hold an office or leadership position in any campus club or subsidiary organization.
3. Shall not be or have been on disciplinary or academic probation during the semester in which the person is in office.

#### C. For Appointed Positions:

Requirements are the same as those stated above in B. For Other Elected Officers with the following exceptions:

- a. A.S. Senate members shall maintain enrollment in a minimum of 6 units with a 2.0 GPA.
- b. The KFCR management staff shall maintain enrollment in a minimum of 9 units with a 2.0 GPA.
- c. Radio station disc jockeys, newscasters, and traffic assistants shall maintain enrollment in at least six units with a 2.0 GPA or better.
- d. The KFCR sales department staff selection is left up to the discretion of the management staff.

**D. Regardless of Position:**

Candidate shall maintain good standing at Fullerton College and in the Associated Students.

**Miscellaneous and Special Considerations:**

1. In case the student elected or appointed to office in the spring semester should subsequently fail to complete that semester with either the nine-unit or 2.0 GPA requirement, then that person shall be ineligible to assume or hold office the next fall semester unless the deficiency is made up through Summer session enrollment.
2. In case the elected students in the fall semester should subsequently fail to complete the semester with the required units and/or GPA for that respective office, then that person shall be ineligible to assume office the next spring semester.

Questions regarding the "Eligibility Requirements for Student Offices" as stated above shall be referred to the Office of Student Affairs for interpretation or disposition.

## Athletics

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### 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 that ranks with the very best in nationwide community college circles.

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

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

### Athletic Conference Membership

Fullerton College is a member of the Mission Football Conference. Other conference members include: Cerritos, El Camino, Golden West, Long Beach, Mt. San Antonio, Orange Coast, Palomar, Pasadena, Riverside, Saddleback and Santa Ana. The Mission Football Conference consists of two divisions: American and National. Fullerton is in the National Division along with El Camino, Pasadena, Riverside, Saddleback, and Santa Ana. Competition will be against teams in the American Division along with teams from the National Division.

Fullerton College is a member of the Orange Empire Conference in the following sports: men's and women's basketball, baseball, men's and women's cross country, men's and women's soccer, men's and women's tennis, men's and women's track and field, women's fast pitch softball, women's volleyball, women's golf, and women's 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 ten 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.

### Athletic Eligibility Rules

Both men's and women's athletics are governed by uniform eligibility rules adopted by the California Community College Commission on Athletics.

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 passed a minimum of twenty-four units between seasons of that sport and achieved a 2.00 GPA. 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, tennis, track and field, and water polo. Winning is a tradition as teams participate in Mission and Orange Empire Conferences.

## Intercollegiate Athletics for Women

Women's teams at Fullerton College include badminton, basketball, cross country, golf, softball, soccer, swimming, 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. There are no costs to the student participating in intercollegiate athletics beyond the normal education expenses common to all students. 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 dance team from incoming first-semester students and returning sophomores. The Pep Squad members rehearse during the summer in preparation for performances at school athletic events and campus functions. 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) 992-7383.

## Admission to Athletic Events

Student athletes are given a pair of general admission tickets for use by their parents or friends for each home game in which they are listed to play. For sports in which the student athlete is not a team member, he/she will be admitted free to all scheduled athletic events played at home.

Gate receipts from the intercollegiate athletic program, including facility rentals, are used by the college to help support the entire athletic program.

## CARE: Cooperative Agencies Resources for Education

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 Services

- Academic assistance and support
- Child care assistance
- Transportation assistance
- Academic counseling
- Group activities
- Special theme seminars and workshops
- Community referrals

### Information on Eligibility

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

For further information, please call (714) 992-7470.

## Center for Careers in Education (Apple Courses)

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 "apple" courses, early field work experiences, enhanced transfer opportunities, an integrated teacher preparation program with Cal State University Fullerton, Club Teach, specialized academic advisement/counseling, and CBEST test preparation workshops.

## Distance Learning — Online, Hybrid, TeleWeb

An alternative to a traditional classroom environment, the Distance Education Program at Fullerton College uses a variety of different delivery formats to make classes more accessible and to provide students with more options to earn transferable college credits.

**Online** courses are delivered (51% or more) via the Internet. Students complete coursework using technology such as e-mail, multimedia, voice mail, chat rooms, message boards, and listservs. Students interested in this format should have access to a computer that meets system requirements, be comfortable navigating the Internet, and be prepared to attend mandatory, on-campus orientations. Specific information can be found at <http://online.fullcoll.edu>.

**Hybrid** courses combine Internet work and require some on-campus attendance, and the viewing of video programs that are broadcast via cable television. For a listing of cable companies and cities that receive the broadcasts, visit <http://online.fullcoll.edu>.

**TeleWeb** courses combine Internet work; they require some on-campus attendance and the viewing of video programs that are broadcast via cable television. For a listing of cable companies and cities that receive the broadcasts, visit <http://online.fullcoll.edu>.

Students enroll in distance learning courses through the regular registration process. Visit [www.fullcoll.edu](http://www.fullcoll.edu) for admission and registration information. Fees and academic credit for distance learning courses are the same as on-campus, traditional courses. For a listing of courses visit the distance learning site at <http://online.fullcoll.edu>, or e-mail staff at [fconline@fullcoll.edu](mailto:fconline@fullcoll.edu).

## Extended Opportunities Program and Services (EOPS)

EOPS is a support services program designed to provide entry, retention and transition services for educational and economically needy students. The support services are designed to assist and contribute to the student's success in college.

## 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.

## 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:

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

**For assistance or additional information contact EOPS Outreach Services Office, (714) 992-7470.**

## Evening and Weekend College

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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 Saturdays. 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 Saturday classes are planned and supervised by the regular administrative staff of the college.

## Honors Program

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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 the 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 who teach these courses. The holistic approach of Honors instruction strives to develop social and leadership skills in addition to intellectual and academic abilities. Towards this end, students enrolled in Honors courses will participate in field trips, social events, and leadership training. Other Honors activities include an Honors lecture series and the opportunity to attend regional and national Honors conferences.

Honors students are eligible for many other benefits. These include eligibility 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>.

## International Education — Semester Abroad Program

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The Semester 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 Semester Abroad locations.

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

The courses offered in this program are Fullerton and Cypress courses, most of which meet degree and transfer requirements, either as general education courses or elective units. Fullerton and Cypress faculty teach most of these courses, although the program sometimes employs local instructors who teach these courses according to the colleges' course outlines.

There is an application process for interested students, beginning early in the semester prior to departure to the foreign location. Students should contact the Academic Services Office for further information.

## Learning Communities Program

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Learning Communities classes are classes that are linked 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. Concurrent enrollment is required in both linked classes. Drops and withdrawals from one breaks the link and results in an auto-drop from both.

## MESA

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The Mathematics, Engineering, Science Achievement (MESA) program assists community college students to excel in math, science and engineering courses so they can transfer to four-year institutions in math-based fields. The program emphasizes academic and career guidance, scholarships, involvement with industry, and work experience through internships and summer jobs. The MESA Study Center, located in Room 719 of the Technology and Engineering Building, is available to students for study, networking and workshops. MESA works with chemistry, computer science, engineering, mathematics and physics students and students who plan to obtain a bachelor's degree in one of these majors.

If you would like more information about MESA or how to join, please call (714) 992-7132 or visit the MESA Program in Room 718.

## Puente Project

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The Puente Project is a Transfer Preparation Program geared at helping at-risk, under-served students by promoting transfer, student success and community leadership. The one year program includes guaranteed English and Counseling instruction, one-to-one counseling, mentoring, social events, college field trips and networking. If interested, please contact Flor Aguilera at (714) 992-7717.

## ROTC

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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	213-642-2770
Army ROTC	
California State University, Fullerton	714-525-1970
Navy ROTC	
University of California, Los Angeles	213-825-9075
University of Southern California, L.A.	213-743-2675

## School Honor Societies

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### 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 membership in the Student Affairs Office. See section on Honors for Scholarship.

### 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 (Building 1409).

## TAP: Transfer Achievement Program

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TAP is a comprehensive program designed to assist students develop skills necessary for college success and to achieve their expressed goal of transferring to a four-year college or university. For information about enrollment appointments, call (714) 992-7010.

# Graduation Requirements

## Graduation Application

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Applications for graduation are available in the Admissions and Records Office and will be accepted through the third week of the Fall and Spring Semesters and through the third day of the Summer Session.

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 being evaluated for graduation. No exceptions will be made.

Commencement exercises are held once a year at the end of the spring semester. Detailed information will be mailed to all graduation candidates in early May. Diplomas are mailed to the students approximately three months after the date of graduation.

## Catalog Rights

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A student establishes catalog rights upon enrollment in the college. This means the student is held to the requirements published in that year's catalog.

These rights are maintained through continuous enrollment. Continuous enrollment is defined as being enrolled at Fullerton College for at least one term in every academic year of sufficient duration as to receive a letter grade on a transcript.

## Graduation Requirements

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

### 3. Major Requirement

- Completion of coursework as required in a approved field of study.

### 4. General Education Requirements

- 24 units as stipulated by the Fullerton College graduation requirements; or
- 39 units as stipulated by the CSU general education certification requirements; or
- 37-39 units as stipulated by the IGETC (Intersegmental General Education Transfer Curriculum) requirements.
- 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

- One unit of Physical Education Activity; or
- Completion of PE 243 Stress Management through Physical Activity; or PE 266 Physical Fitness as a Lifelong Concept.

### 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	Multicultural Issues in Administration of Justice
ANTH 102 F	Cultural Anthropology
ANTH 105 F	Language and Culture (Beg F 99)
ANTH 107 F	The Anthropology of Magic, Witchcraft and Religion
BUS 131 F	Principles of International Business (Beg F 98)
CDFL 110 F	Anti-Bias Perspective Seminar
CDFL 201 F	Child in Home and Community (Beg F 99)
DANC 210 F	Multicultural Dance in the U.S. Today
ENGL 218 F	California Writers (Beg F 01)
ENGL 239 F	Survey of Children's Literature (Beg F 97)
ENGL 243 F	Folklore and Mythology
ENGL 247 F	Voices of America: Studies in Multicultural Literature
ETHS 101 F	American Ethnic Studies
FASH 244 F	Ethnic Costume
FOOD 130 F	Cultural Aspects of Food
GEOG 100 F	Global Geography
GEOG 100HF	Honors Global Geography (Beg F 97)
GEOG 160 F	Cultural Geography
HIST 110AF	Western Civilization (Beg F 00)
HIST 110BF	Western Civilization (Beg F 00)
HIST 112 F	World Civilizations (Beg F 99)
HIST 112HF	Honors World Civilizations (Beg F 99)
HIST 113 F	World Civilizations (Beg F 99)
HIST 113HF	Honors World Civilizations (Beg F 99)
HIST 270 F	Women in United States History (Beg F 02)
PE 250 F	Sport and the United States Society (Beg F 99)
MKT 205 F	Multicultural Markets in the U.S. (Beg F 03)

PHIL 105 F	World Religions (Beg F 98)
PHIL 105HF	Honors World Religions (Beg F 98)
PHIL 270 F	Introduction to Asian Religions (Beg F 98)
PSY 131 F	Cross-Cultural Psychology (Beg F 03)
PSY 145 F	Child Psychology (Beg F 97)
CRTV 126AF	World Cinema to 1945 (Beg F 00)
CRTV 126BF	World Cinema: 1946 to the Present (Beg F 00)
SOC 101 F	Introduction to Sociology
SOC 101HF	Honors Introduction to Sociology (Beg F 03)
SOC 102 F	Social Problems (Beg F 99)
SPAN 206 F	Introduction to Latin American Literature
SPCH 120 F	Intercultural Communication
THEA 108 F	Multicultural Perspectives in American Theater

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 semester 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. Successful completion of:
  - READ 096 F Preparation for College Reading or
  - READ 142 F College Reading: Logical Analysis and Evaluation or
  - any course in the IGETC (1B) or CSU (A3) critical thinking category or
  - ESL 185 F Advanced Reading and Writing for Students of American English.

All students graduating after the year 2002 (beginning 2003) will be required to complete the reading requirement, no matter how their previous catalog rights were defined.

## Statement of Philosophy of General Education

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

The subject matter present 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.

Twenty-four (24) Units Total Minimum Requirement — A minimum of three (3) units in each of eight (8) sub-categories.

- A student may count no more than seven (7) units of General Education courses in the student's major.
- Courses appearing in more than one area may only be counted in one area.

**Area A**

Language and Rationality (6 units)			
<u>A1: Written Communications (3 units)</u>			<u>Units</u>
BUS 111 F	Business Communications		3
ENGL 100 F	College Writing		3 or
ENGL 100HF	Honors College Writing		3
JOUR 101 F	Reporting and Writing		3
<u>A2: Analytical Thinking (3 units)</u>			<u>Units</u>
CIS 100 F	Introduction to Personal Computer Applications		3
CIS 111 F	Introduction to Information Systems		3
CRTV 118 F	Introduction to Radio, Television and Film		3
CSCI 123 F	Introduction to Programming Concepts in C/C++		4
ENGL 103 F	Critical Reasoning and Writing		3 or
ENGL 103HF	Honors Critical Reasoning and Writing		3
ENGL 104 F	Critical Thinking and Writing About Literature		3
JOUR 110 F	Mass Media Survey		3
MATH 120 F	Introduction to Probability and Statistics		4 or
MATH 120HF	Honors Introduction to Probability and Statistics		4
PHIL 170 F	Logic and Critical Thinking		3
PHIL 172 F	Critical Thinking/Writing		3
READ 142 F	College Reading: Logical Analysis and Evaluation		3
SOSC 120 F	Introduction to Probability and Statistics		4
SPCH 100 F	Public Speaking		4
SPCH 105 F	Interpersonal Communication		3
SPCH 120 F	Intercultural Communication		3
SPCH 124 F	Small Group Communication		3
SPCH 135 F	Essentials of Argumentation		4

**Area B**

Natural Sciences and Mathematics (6 units)			
<u>B1: Physical Sciences and Life Sciences (3 units)</u>			<u>Units</u>
Physical Sciences:			
CHEM 100 F	Chemistry for Daily Life		4
CHEM 101 F	Introduction to Chemistry		5
CHEM 103 F	Chemistry in a Changing World		3
CHEM 107 F	Elementary Chemistry		5
CHEM 111AF	General Chemistry		5
ESC 100 F	Physical Geology		3
ESC 101 F	Earth Science Survey		3
ESC 102 F	Survey of Natural Disasters		3
ESC 103 F	Historical Geology		4
ESC 104 F	Geology of National Parks & Monuments		3
ESC 105 F	Elements of Meteorology		3
ESC 116 F	Astronomy		3
ESC 120 F	Geology of California		3
ESC 130 F	Introduction to Oceanography		3
ESC 190 F	Environmental Geology		3
GEOG 102 F	Physical Geography		3
PHSC 102 F	Physical Science Survey		3
PHYS 130 F	Elementary Physics		4
PHYS 205 F	College Physics		4
PHYS 210 F	Physics		4

**Area B (cont)**

			<u>Units</u>
PHYS 221 F	General Physics		4
TECH 088 F	Technical Science		3
<u>Life Sciences:</u>			
ANTH 101 F	Physical Anthropology		3
BIOL 101 F	General Biology		5 or
BIOL 101HF	Honors General Biology		5
BIOL 102 F	Human Biology		3
BIOL 104 F	Biology of Insects and Spiders		3
BIOL 109 F	Genetics and Biotechnology in Society		3
BIOL 141 F	Marine Mammal Biology and Conservation		3
BIOL 170 F	Organismal Biology		5
BIOL 222 F	Marine Biology		3
BIOL 274 F	General Ecology		5
ENVS 105 F	Environmental Biology		3
ENVS 126 F	Natural History of California		3
HED 140 F	Health Science		3
HED 150 F	Infant and Child Health		3
NUTR 210 F	Nutrition Today		3
<u>B2: Mathematics (3 units)*</u>			<u>Units</u>
BUS 151 F	Business Mathematics		3
ELEC 056AF	Electronic Mathematics		3
MATH 040 F	Intermediate Algebra		4
MATH 100 F	Liberal Arts Mathematics		3

**Mathematics Proficiency Testing**

Students who have previously attained the appropriate level of mathematics proficiency for the AA or AS degree may request to take the Compass Math Test in order to meet the general education mathematics requirement. Testing services are available through the Counseling area. The Compass Math Test is intended to indicate a minimum level of competency in the area tested. Attainment of the appropriate score on the Compass Math Test waives three units of the course requirement under Part 2 Area B Natural Sciences and Mathematics. No units are given for passing this 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. Three additional units from Areas A, B, C, or D are needed to meet the 24-unit minimum general education requirement. Students who satisfy the 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.** Students wishing to take this examination should contact Counseling Services.

<b>Area B (cont)</b>			Units	<b>Area C (cont)</b>			Units
MATH 120 F	Introduction to Probability and Statistics	4 or		ENGL 076 F or 206 F	The Film: 1950 to Present	3	
MATH 120HF	Honors Introduction to Probability and Statistics	4		FASH 242 F	History of Costume	3	
MATH 129 F	College Algebra for Business Calculus	4		FASH 244 F	Ethnic Costume	2	
MATH 130 F	Calculus for Business	4		IDES 180 F	History of Interior Architecture and Furnishings	3	
MATH 141 F	College Algebra	4		MUS 101 F	Music Fundamentals	3	
MATH 142 F	Trigonometry	4		MUS 102 F	Music Reading	3	
MATH 171 F	Discrete Mathematics	4		MUS 104AF	Beginning Musicianship	3	
SOSC 120 F	Introduction to Probability and Statistics	4		MUS 106 F	Introduction to Music Theory	3	
TECH 081 F	Technical Math I	3		MUS 107AF	Harmony I	3	
*Any course numbered Math 040 F or above within the Math Division.				MUS 113 F	Jazz History — An Appreciation	3	
Students who began their enrollment prior to fall 1997 have catalog rights. For a definition of these rights, see "Graduation Requirements — Catalog Rights." All students graduating after August 2002 (Beginning December 2002) may not use MATH 020 F or MATH 030 F to satisfy General Education Category B2, no matter how their previous catalog rights were defined.				MUS 114 F	Women, Music and Society	3	
<b>Area C</b>				MUS 115 F	Music Cultures of the World	3	
Arts and Humanities (6 Units)				MUS 116 F	Music Appreciation	3	
C1: Visual Arts, Music, Theatre, and Dance (3 units)				MUS 117 F	American Popular Music	3	
ART 110 F	Introduction to Art	3		MUS 118 F	Introduction to Opera	3	
ART 112 F	Art History — Ancient and Medieval	3		MUS 119 F	History of Rock Music	3	
ART 113 F	Art History — Renaissance to Modern	3		MUS 120 F	Survey of Music History	3	
ART 114 F	Art History — Impressionism to the Present	3		MUS 123 F	Concert Hour	.5,.5,.5,.5	
ART 116 F	Art History — Mexico	3		MUS 180 F	Collegiate Chorale	1,1,1,1	
ART 119 F	Design and Color for Non-Art Majors	2		MUS 196HF	Honors Creative Arts	3	
ART 120 F	Basic Visual Design Concepts	3		MUS 271 F	Fullerton Symphony	1,1,1,1	
ART 127 F	Painting Concepts — Floral	2,2,2,2		MUS 273 F	Concert Band	1,1,1,1	
ART 150AF	Ceramics, Beginning Handbuilding	3		MUS 274 F	Fullerton College Symphonic Winds	1,1,1,1	
ART 160 F	Fundamentals of Sculpture	3,3		MUS 281 F	Concert Choir	1,1,1,1	
ART 179 F	Drawing for Non-Art Majors	2		MUS 282 F	Fullerton College Master Chorale	1,1,1,1	
ART 182 F	Basic Drawing	3		PHOT 100 F	Basic Photography	3	
ART 185 F	Life Sculpture	3,3,3,3		PHOT 101 F	Introduction to Photography	3	
ART 186AF	Beginning Life Drawing	3		CRTV 131 F	Contemporary Cinema	3	
ART 187 F	Watercolor for Non-Art Majors	2,2		THEA 100 F	Introduction to the Theatre	3	
ART 188 F	Watercolor Painting	3,3,3,3		THEA 104 F	Introduction to Theatre Appreciation	3	
ART 189AF	Beginning Painting	3		THEA 106 F	Principles of Playwriting	2,2	
ART 196HF	Honors Creative Arts	3		THEA 109 F	Modern Dramatic Literature	2	
ART 212 F	Asian Art History	3		THEA 127 F	Oral Interpretation	3	
ART 213 F	Pre-Columbian Art	3		THEA 196HF	Honors Creative Arts	3	
CRTV 120 F	Media Aesthetics	3		WOOD 110 F	Fundamentals of Woodworking	3	
CRTV 121 F	The American Cinema	3		C2: Literature, Philosophy, Religion, and Foreign Language —			
CRTV 126AF	World Cinema to 1945	3		A minimum of 3 units			
CRTV 126BF	World Cinema: 1946 to the Present	3		Units			
CRTV 131 F	Contemporary Cinema	3		CHIN 101 F, 102 F	Elementary Chinese — Mandarin I, II	5,5	
DANC 100 F	Introduction to Dance Appreciation	3		ENGL 102 F	Introduction to Literature	3 or	
DANC 103 F	Dance Technique I	1,1		ENGL 102HF	Honors Introduction to Literature	3	
DANC 105 F	Ballet I	1,1		ENGL 105 F	Creative Writing	3	
DANC 107 F	Modern Dance I	1,1		ENGL 073 F or ENGL 203 F	Introduction to Dramatic Literature	3	
DANC 111 F	Jazz I	1,1		ENGL 074 F or ENGL 204 F	Introduction to Poetry	3	
DANC 120 F	Dance History	3		ENGL 077 F or ENGL 207 F	The Short Story	3	
DANC 210 F	Multicultural Dance in the U.S. Today	3		ENGL 211 F	English Literature to 1800	3	
ENGL 075 F or 205 F	The Film: Beginning to 1950	3		ENGL 212 F	English Literature since 1800	3	
				ENGL 094 F or ENGL 214 F	Contemporary Literature	3	
				ENGL 078 F or ENGL 218 F	California Writers	3	
				ENGL 221 F	American Literature	3	
				ENGL 222 F	American Literature	3	
				ENGL 224 F	World Literature	3	
				ENGL 225 F	World Literature	3	
				ENGL 234 F	Introduction to Shakespeare	3	
				ENGL 239 F	Survey of Children's Literature	3	

<b>Area C (cont)</b>			Units	<b>Area D (cont)</b>			Units
ENGL 093 F or ENGL 243 F	Folklore and Mythology		3	HIST 112HF	Honors World Civilizations		3
ENGL 095 F or ENGL 245 F	The Bible as Literature		3	HIST 113 F	World Civilizations		3 or
ENGL 096 F or ENGL 246 F	The Novel		3	HIST 113HF	Honors World Civilizations		3
ENGL 097 F or ENGL 247 F	Voices of America: Studies in Multicultural Literature		3	HIST 127 F	Survey of American History		3
ENGL 248 F	Science Fiction		3	HIST 154 F	Ancient Egypt		3
ENGL 249 F	Survey of Chicano/a Literature		3	HIST 162AF	History of the Americas		3
ENGL 250 F	Survey of African American Literature		3	HIST 162BF	History of the Americas		3
ENGL 251 F	Survey of Native American Literature		3	HIST 170 F	History of the United States		3 or
ENGL 252 F	Women's Literature		3	HIST 170HF	Honors History of the United States		3
FREN 101 F, 102 F	Elementary French I, II		5,5	HIST 171 F	History of the United States		3 or
FREN 203 F, 204 F	Intermediate French III, IV		4,4	HIST 171HF	Honors History of the United States		3
GERM 101 F, 102 F	Elementary German I, II		5,5	HIST 270 F	Women in United States History		3
GERM 203 F, 204 F	Intermediate German III, IV		4,4	POSC 100 F	American Government		3 or
ITAL 101 F, 102 F	Elementary Italian I, II		5,5	POSC 100HF	Honors American Government		3
ITAL 203 F, 204 F	Intermediate Italian III, IV		4,4	POSC 120 F	Introduction to Political Theory		3
JAPN 101 F, JAPN 102 F	Elementary Japanese I, II		5,5	POSC 150 F	California Government & Politics		3
JAPN 203 F	Intermediate Japanese III		4	POSC 200 F	Introduction to the Study of Politics		3
PHIL 100 F	Introduction to Philosophy		3 or	POSC 216 F	Government & Politics of the Middle East		3
PHIL 100HF	Honors Introduction to Philosophy		3	SOC 102 F	Social Problems (beg F'99)		3
PHIL 101 F	Introduction to Religious Studies		3	<b>D2: Social Behavior and Self-Understanding (3 units)</b>			Units
PHIL 105 F	World Religions		3 or	ANTH 102 F	Cultural Anthropology		3
PHIL 105HF	Honors World Religions		3	ANTH 105 F	Language and Culture		3
PHIL 135 F	Social and Political Philosophy		3	BUS 266 F	Human Relations in Business		3
PHIL 160 F	Introduction to Ethics		3	BUS 270 F	Management Communications		3
PHIL 195 F	Women's Issues in Philosophy		3	CDFL 120 F	Human Development: Early Years		3
PORT 101 F, PORT 102 F	Elementary Portuguese I, II		5,5	CDFL 140 F	Infant Development and Relationships		3
SPAN 101 F, SPAN 102 F	Elementary Spanish I, II		5,5 or	CDFL 173 F	Process of Parenting		3
SPAN 101HF, 102HF	Honors Elementary Spanish I, II		5,5	CDFL 201 F	Child in Home and Community		3
SPAN 201 F	Spanish for the Spanish Speaker		5	CDFL 202 F	Contemporary Family Living		3
SPAN 203 F, SPAN 204 F	Intermediate Spanish III, IV		4,4	GEOG 160 F	Cultural Geography		3
<b>Area D</b>				PSY 101 F	General Psychology		3 or
Social and Behavioral Sciences (6 Units)				PSY 101HF	Honors General Psychology		3
<b>D1: Social, Political, and Economic Institutions (3 units)</b>				PSY 110 F	Introduction to Applied Psychology		3
ANTH 107 F	Anthropology of Magic, Witchcraft & Religion		3	PSY 120 F	Human Sexuality		3
BUS 041 F	Survey of Business Law		3	PSY 131 F	Cross-Cultural Psychology		3
BUS 131 F	Principles of International Business		3	PSY 139 F	Development Psychology: Life Cycle		3
BUS 162 F	Business Economics		3	SOC 101 F	Introduction to Sociology		3 or
BUS 240 F	Legal Environment of Business		3	SOC 101HF	Honors Introduction to Sociology		3
BUS 241AF	Business Law		3	SOC 275 F	Marriage and the Family		3
ECON 101 F	Principles of Economics — Micro		3 or	WMNS 100 F	Introduction to Women's Studies		3
ECON 101HF	Honors Principles of Economics — Micro		3				
ECON 102F	Principles of Economics — Macro		3 or				
ECON 102HF	Honors Principles of Economics — Macro		3				
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 170 F	Introduction to Asian American Studies		3				
GEOG 100 F	Global Geography		3 or				
GEOG 100HF	Honors Global Geography		3				
GEOG 120 F	Global Environmental Problems		3				
HIST 110 F	Western Civilization		3				
HIST 110HF	Honors Western Civilization		3				
HIST 111 F	Western Civilization		3				
HIST 111HF	Western Civilization		3				
HIST 112 F	World Civilizations		3 or				

# General Education Requirements for the Associate Degree in Paralegal Studies

## Area A

Language and Rationality (6 units)

A1: Written Communications (3 units) Units

ENGL 100 F College Writing 3 or

ENGL 100HF Honors College Writing 3

A2: Analytical Thinking (3 units) Units

ENGL 103 F Critical Reasoning and Writing 3 or

ENGL 103HF Honors Critical Reasoning and Writing 3

ENGL 104 F Critical Thinking and Writing About Literature 3

JOUR 110 F Mass Media Survey 3

MATH 120 F Introductory Probability and Statistics 4

MATH 120HF Honors Introductory Probability and Statistics 4

PHIL 170 F Logic and Critical Thinking 3

PHIL 172 F Critical Thinking/Writing 3

READ 142 F College Reading: Logical Analysis &amp; Evaluation 3

SPCH 100 F Public Speaking 4

SPCH 105 F Interpersonal Communication 3

SPCH 120 F Intercultural Communications 3

SPCH 124 F Small Group Communication 3

SPCH 135 F Essentials of Argumentation 4

## Area B

Natural Sciences and Mathematics (6 units)

B1: Physical Sciences and Life Sciences (3 units) Units

Physical Sciences:

CHEM 100 F Chemistry for Daily Life 4

CHEM 101 F Introduction to Chemistry 5

CHEM 103 F Chemistry in a Changing World 3

CHEM 107 F Elementary Chemistry 5

CHEM 111AF General Chemistry 5

ESC 100 F, 100LF Physical Geology 3,1

ESC 101 F Earth Science Survey 3

ESC 102 F Survey of Natural Disasters 3

ESC 103 F Historical Geology 4

ESC 104 F Geology of National Parks and Monuments 3

ESC 105 F Elements of Meteorology 3

ESC 116 F, 116LF Astronomy 3,2

ESC 120 F Geology of California 3

ESC 130 F Introduction to Oceanography 3

ESC 190 F Environmental Geology 3

GEO 102 F Physical Geography 3

PHSC 102 F Physical Science Survey 4

PHYS 130 F Elementary Physics 4

PHYS 205 F College Physics 4

PHYS 221 F General Physics 4

TECH 088 F Technical Science 3

## Area B (cont)

Units

Life Sciences:

ANTH 101 F Physical Anthropology 3

BIOL 101 F General Biology 5 or

BIOL 101HF Honors General Biology 5

BIOL 102 F Human Biology 3

BIOL 104 F Biology of Insects and Spiders 3

BIOL 109 F Genetics and Biotechnology in Society 3

BIOL 141 F Marine Mammal Biology and Conservation 3

BIOL 170 F Organismal Biology 3

BIOL 222 F Marine Biology 3

BIOL 274 F General Ecology 5

ENVS 105 F, 105LF Environmental Biology 3,1

ENVS 126 F Natural History of California 3

NUTR 210 F Nutrition Today 3

B2: Mathematics (3 units) Units

MATH 040 F Intermediate Algebra (or higher) 4

## Area C

Arts and Humanities (6 Units)

C1: Visual Arts, Music, Theatre, and Dance Units

ART 110 F Introduction to Art 3

ART 112 F Art History — Ancient and Medieval 3

ART 113 F Art History — Renaissance to Modern 3

ART 114 F Art History — Impressionism to the Present 3

ART 116 F Art History — Mexico 3

ART 212 F Asian Art History 3

ART 213 F Pre-Columbian Art 3

CRTV 121 F The American Cinema 3

CRTV 126AF World Cinema to 1945 3

CRTV 126BF World Cinema 1946 to Present 3

ENGL 075 F or ENGL 205 F The Film: Beginning to 1950 3

ENGL 076 F or ENGL 206 F The Film: 1950 to Present 3

FASH 242 F History of Costume 3

FASH 244 F Ethnic Costume 2

IDES 180 F History of Interior Architecture and Furnishings 3

MUS 113 F Jazz History — An Appreciation 3

MUS 114 F Women, Music and Society 3

MUS 115 F Music Cultures of the World 3

MUS 116 F Music Appreciation 3

MUS 117 F American Popular Music 3

MUS 118 F Introduction to Opera 3

MUS 119 F History of Rock Music 3

THEA 104 F Introduction to Theatre Appreciation 3

THEA 109 F Modern Dramatic Literature 2

C2: Literature, Philosophy, Religion, and Foreign Language —

A minimum of 3 units Units

CHIN 101 F & CHIN 102 F Elementary Chinese —  
Mandarin I, II 5,5

ENGL 102 F Introduction to Literature 3 or

ENGL 102HF Honors Introduction to Literature 3

ENGL 105 F Creative Writing 3

ENGL 073 F or ENGL 203 F Introduction to Dramatic  
Literature 3

ENGL 074 F or ENGL 204 F Introduction to Poetry 3

<b>Area C (cont)</b>		Units	<b>Area D (cont)</b>		Units
ENGL 077 F or ENGL 207 F	The Short Story	3	HIST 110HF	Honors Western Civilization	3
ENGL 211 F	English Literature to 1800	3	HIST 111 F	Western Civilization	3
ENGL 212 F	English Literature since 1800	3	HIST 111HF	Honors Western Civilization	3
ENGL 094 F or ENGL 214 F	Contemporary Literature	3	HIST 112 F	World Civilizations	3 or
ENGL 078 F or ENGL 218 F	California Writers	3	HIST 112HF	Honors World Civilizations	3
ENGL 221 F	American Literature	3	HIST 113 F	World Civilizations	3 or
ENGL 222 F	American Literature	3	HIST 113HF	Honors World Civilizations	3
ENGL 224 F	World Literature	3	HIST 127 F	Survey of American History	3
ENGL 225 F	World Literature	3	HIST 154 F	Ancient Egypt	3
ENGL 234 F	Introduction to Shakespeare	3	HIST 162AF	History of the Americas	3
ENGL 093 F or ENGL 243 F	Folklore and Mythology	3	HIST 162BF	History of the Americas	3
ENGL 095 F or ENGL 245 F	The Bible as Literature	3	HIST 170 F	History of the United States	3 or
ENGL 096 F or ENGL 246 F	The Novel	3	HIST 170HF	Honors History of the United States	3
ENGL 097 F or ENGL 247 F	Voices of America: Studies in Multicultural Literature	3	HIST 171 F	History of the United States	3 or
ENGL 239 F	Survey of Children's Literature	3	HIST 171HF	Honors History of the United States	3
ENGL 248 F	Science Fiction	3	HIST 270 F	Women in United States History	3
ENGL 249 F	Survey of Chicano/a Literature	3	POSC 100 F	American Government	3 or
ENGL 250 F	Survey of African American Literature	3	POSC 100HF	Honors American Government	3
ENGL 251 F	Survey of Native American Literature	3	POSC 120 F	Introduction to Political Theory	3
FREN 101 F, FREN 102 F	Elementary French I, II	5,5	POSC 150 F	California Government and Politics	3
FREN 203 F, FREN 204 F	Intermediate French III, IV	4,4	POSC 200 F	Introduction to the Study of Politics	3
GERM 101 F, GERM 102 F	Elementary German I, II	5,5	POSC 216 F	Government and Politics in the Middle East	3
GERM 203 F, GERM 204 F	Intermediate German III, IV	4,4	<b>D2: Social Behavior and Self-Understanding (3 units) Units</b>		
ITAL 101 F, ITAL 102 F	Elementary Italian I, II	5,5	ANTH 102 F	Cultural Anthropology	3
JAPN 101 F, ITAL 102 F	Elementary Japanese I, II	5,5	ANTH 105 F	Language and Culture	3
JAPN 203 F	Intermediate Japanese III	4	CDFL 120 F	Human Development: Early Years	3
PHIL 100 F	Introduction to Philosophy	3 or	CDFL 140 F	Infant Development and Relationships	3
PHIL 100HF	Honors Introduction to Philosophy	3	CDFL 173 F	Process of Parenting	3
PHIL 101 F	Introduction to Religious Studies	3	CDFL 201 F	Child in Home and Community	3
PHIL 105 F	World Religions	3 or	CDFL 202 F	Contemporary Family Living	3
PHIL 105HF	Honors World Religions	3	GEOG 160 F	Cultural Geography	3
PHIL 135 F	Social and Political Philosophy	3	PSY 101 F	General Psychology	3 or
PHIL 160 F	Introduction to Ethics	3	PSY 101HF	Honors General Psychology	3
PHIL 195 F	Women's Issues in Philosophy	3	PSY 110 F	Introduction to Applied Psychology	3
RUSS 101 F, 102 F	Elementary Russian I, II	5,5	PSY 120 F	Human Sexuality	3
SPAN 101 F, 102 F	Elementary Spanish I, II	5,5 or	PSY 131 F	Cross-Cultural Psychology	3
SPAN 101HF, SPAN 102HF	Honors Elementary Spanish I, II	5, 5	PSY 139 F	Development Psychology: Life Cycle	3
SPAN 201 F	Spanish for the Spanish Speaker	5	SOC 101 F	Introduction to Sociology	3
SPAN 203 F, 204 F	Intermediate Spanish III, IV	4,4	SOC 102 F	Social Problems	3
<b>Area D</b>			SOC 275 F	Marriage and the Family	3
Social and Behavioral Sciences (6 Units)			WMNS 100 F	Introduction to Women's Studies	3
<b>D1: Social, Political, and Economic Institutions (3 units) Units</b>					
ANTH 107 F	The Anthropology of Magic, Witchcraft & Religion	3			
BUS 131 F	Principles of International Business	3			
ECON 101 F	Principles of Economics — Micro	3 or			
ECON 101HF	Honors Principles of Economics — Micro	3			
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 170 F	Introduction to Asian American Studies	3			
GEOG 100 F	Global Geography	3 or			
GEOG 100HF	Honors Global Geography	3			
HIST 110 F	Western Civilization	3			



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# **Transferability of Courses**

## **General Education**

### **Requirements**

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# Transferability of Courses

## Transferability of Courses

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Community colleges, including Fullerton, offer curriculums paralleling the first two years of Bachelor's 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" and 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 four-year 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 Bachelor's 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 four-year 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

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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 Bachelor's 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 Four-Year Colleges and Universities

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

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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

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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

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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.

## University of California Transfer Admission Requirements

Admission eligibility requirements for transfer students enrolling at the University of California for Fall 2004 are similar to Fall 2003. 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 graduate 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.

## Intersegmental General Education Transfer Curriculum "IGETC"

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a California community college to a campus in either the California State University (CSU) or University of California (UC) system without the need, after transfer, to take additional lower-division, general education courses to satisfy the transfer institution's general education requirements.

It is recommended that all IGETC requirements be completed prior to transfer. If for good cause you are unable to complete one or two IGETC courses, you may be eligible to complete IGETC after transfer. Your petition submitted to the Counseling and Student Development Office must describe the good cause. Typical situations for not completing one or two IGETC courses are illness, unavailable courses, military service and unexpected hardships, experienced in the final term before transfer.

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. Depending on a student's major and field of interest, the student may find it advantageous to take courses fulfilling either the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer.

**IMPORTANT NOTE:** Courses on this list are approved for a specific academic year which begins with the Fall semester, 2004. Students wishing to use a course to meet an IGETC requirement must be sure that the course is approved for the academic year in which it is taken. This list is valid through Summer, 2005.

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 student educational plan.

## 2004-2005 Approved List of Courses:

### AREA 1. ENGLISH COMMUNICATIONS

CSU 3 courses = 9 semester units/12-15 quarter units;

UC 2 courses = 6 semester units/8-10 quarter units.

#### 1.A English reading and written composition.

(One course required)

ENGL 100 F	College Writing	3 or
ENGL 100HF	Honors College Writing	3

#### 1.B Critical thinking — English composition.

(One course required)

ENGL 103 F	Critical Reasoning and Writing	3 or
ENGL 103HF	Honors Critical Reasoning and Writing	3
ENGL 104 F	Critical Thinking and Writing About Literature	3
ENGL 201 F	Intermediate College Writing	3
PHIL 172 F	Critical Thinking/Writing	3

#### 1.C Oral Communication. (One course required for CSU; students transferring to UC do not have to meet the oral communication requirement)

SPCH 100 F	Public Speaking	4
SPCH 124 F	Small Group Communication	3
SPCH 135 F	Essentials of Argumentation	4

### AREA 2. MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

1 course = 3 semester units/4-5 quarter units.

- MATH 120 F Introductory Probability and Statistics 4 or
- MATH 120HF Honors Introductory Probability & Statistics 4
- † MATH 130 F Calculus for Business 4
- MATH 141 F College Algebra 4
- † MATH 150AF Calculus 4
- MATH 150BF Calculus 4
- MATH 171 F Discrete Mathematics 4
- MATH 250AF Intermediate Calculus 4
- MATH 250BF Linear Algebra and Differential Equations 4
- SOSC 120 F Introductory Probability and Statistics 4
- SOSC 121 F Introductory Probability and Statistics 4
- MATH 120 F, or MATH 120HF; or SOSC 120 F, or SOSC 121 F and PSY 161 F (not included in IGETC) combined: maximum UC credit allowed = 1 course.
- † 130 F combined with 150AF: maximum UC credit allowed = 1 course.

### AREA 3. ARTS AND HUMANITIES

At least 3 courses = 9 semester units/12-15 quarter units. One course is required from each area.

#### 3.A Arts:

ART 110 F	Introduction to Art	3
ART 112 F	Art History — Ancient/Medieval	3
ART 113 F	Art History — Renaissance to Modern	3
ART 114 F	Art History — Impressionism to Present	3
ART 116 F	Art History — Mexico	3
ART 117 F	History of American Art	3
ART 212 F	Asian Art History	3
ART 213 F	Pre-Columbian Art	3
CRTV 126AF	World Cinema to 1945	3
CRTV 126BF	World Cinema: 1946 to the Present	3
CRTV 131 F	Contemporary Cinema	3
DANC 120 F	Dance History	3
DANC 210 F	Multicultural Dance in the U.S. Today	3
ENGL 205 F	The Film: From Beginning to 1950	3
ENGL 206 F	The Film: 1950 to the Present	3
MUS 113 F	Jazz History — An Appreciation	3
MUS 116 F	Music Appreciation	3
MUS 117 F	American Popular Music	3
MUS 118 F	Introduction to Opera	3
MUS 119 F	History of Rock Music	3
MUS 120 F	Survey of Music History	3
† MUS 196HF	Honors Creative Arts (same as ART 196HF, THEA 196HF)	3
THEA 100 F	Introduction to the Theatre	3
THEA 104 F	Introduction to Theatre Appreciation	3
THEA 105 F	Musical Theatre History	3
† THEA 196HF	Honors Creative Arts (same as ART 196HF, MUS 196HF)	3

† Maximum UC credit one course from ART 196HF, MUS 196HF, THEA 196HF.

#### 3.B Humanities:

ENGL 102 F	Introduction to Literature	3 or
ENGL 102HF	Honors Introduction to Literature	3
ENGL 203 F	Introduction to Dramatic Literature	3
ENGL 204 F	Introduction to Poetry	3
ENGL 207 F	The Short Story	3
ENGL 211 F	English Literature to 1800	3
ENGL 212 F	English Literature since 1800	3
ENGL 214 F	Contemporary Literature	3
ENGL 218 F	California Writers	3
ENGL 221 F	American Literature	3
ENGL 222 F	American Literature	3
ENGL 224 F	World Literature	3
ENGL 225 F	World Literature	3
ENGL 239 F	Survey of Children's Literature	3
ENGL 243 F	Folklore and Mythology	3
ENGL 245 F	The Bible as Literature	3
ENGL 246 F	The Novel	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
~ ETHS 130 F	History of African Americans in United States	3
~ ETHS 160 F	History of the Native Americans	3
FREN 203 F	Intermediate French III	4
FREN 204 F	Intermediate French IV	4
GERM 203 F	Intermediate German III	4
GERM 204 F	Intermediate German IV	4
† HIST 110 F	Western Civilization	3 or
+ HIST 110HF	Honors Western Civilization	3
† HIST 111 F	Western Civilization	3 or
† HIST 111HF	Honors Western Civilization	3
† HIST 112 F	World Civilization	3 or
† HIST 112HF	Honors World Civilization	3
† HIST 113 F	World Civilization	3 or
† HIST 113HF	Honors World Civilization	3
†~HIST 127 F	Survey of American History	3
HIST 151 F	Survey of British History	3
HIST 152 F	Survey of British History	3
HIST 154 F	Ancient Egypt (beg F'99)	3
HIST 160AF	Asia: Basic Heritage	3
HIST 160BF	Modern China and Japan	3
~ HIST 162AF	History of the Americas	3
~ HIST 162BF	History of the Americas	3
HIST 165 F	Introduction to the Middle East	3
†~HIST 170 F	History of the United States	3 or
†~HIST 170HF	Honors History of the United States	3
†~HIST 171 F	History of the United States	3 or
†~HIST 171HF	Honors History of the United States	3
HIST 275 F	History of California and Pacific Coast	3
ITAL 203 F	Intermediate Italian III	4
ITAL 204 F	Intermediate Italian IV	4
JAPN 203 F	Intermediate Japanese III	4
PHIL 100 F	Introduction to Philosophy	3 or
PHIL 100HF	Honors Introduction to Philosophy	3
PHIL 101 F	Introduction to Religious Studies	3
PHIL 105 F	World Religions	3 or
PHIL 105HF	Honors World Religions	3
PHIL 160 F	Introduction to Ethics	3
PHIL 195 F	Women's Issues in Philosophy	3
SPAN 203 F	Intermediate Spanish III	4
SPAN 204 F	Intermediate Spanish IV	4
SPAN 205 F	Introduction to Spanish Literature	3
SPAN 206 F	Introduction to Latin American Literature	3

† HIST 127 F and HIST 170 F or HIST 170HF and HIST 171 F or HIST 171HF combined: maximum UC credit allowed = 2 courses.

† HIST 110 F or HIST 110HF and HIST112 F or HIST112HF combined: maximum UC credit allowed = 4.5 units;

† HIST 111 F or HIST 111HF and HIST113 F or HIST113HF combined: maximum UC credit allowed = 4.5 units.

~ Courses used to meet American Institutions will not meet Area 3.B category.

**AREA 4. SOCIAL AND BEHAVIORAL SCIENCES**

At least 3 courses = 9 semester units/12-15 quarter units

Select from at least two (2) different disciplines.

ANTH 102 F	Cultural Anthropology	3
ANTH 103 F	Introduction to Archaeology	3
ANTH 105 F	Language and Culture	3
ANTH 107 F	Anthropology of Magic, Witchcraft & Religion	3
ECON 101 F	Principles of Economics — Micro	3 or
ECON 101HF	Honors Principles of Economics — Micro	3
ECON 102 F	Principles of Economics — Macro	3 or
ECON 102HF	Honors Principles of Economics — Macro	3
~ ETHS 101 F	American Ethnic Studies	4
ETHS 129 F	Intro to African American Studies	3
ETHS 140 F	Introduction to Chicano/a Studies	3
ETHS 141 F	Chicano/a History	3
ETHS 142 F	The Chicano-a/Latino-a in Contemporary Society	3
ETHS 170 F	Introduction to Asian American Studies	3
GEOG 100 F	Global Geography	3 or
GEOG 100HF	Honors Global Geography	3
GEOG 120 F	Global Environmental Geography	4
GEOG 160 F	Cultural Geography	3
HIST 110 F	Western Civilization	3
HIST 110HF	Honors Western Civilization	3
HIST 111 F	Western Civilization	3
HIST 111HF	Honors Western Civilization	3
GEOG 260 F	Economic Geography	3
HIST 270 F	Women in United States History	3
~ POSC 100 F	American Government	3 or
~ POSC 100HF	Honors American Government	3
POSC 120 F	Introduction to Political Theory	3
POSC 110 F	Contemporary American Politics	3
POSC 200 F	Introduction to the Study of Politics	3
POSC 215 F	Comparative Political Systems	3
POSC 216 F	Government and Politics in the Middle East	3
POSC 230 F	Introduction to International Relations	3
PSY 101 F	General Psychology	3 or
PSY 101HF	Honors General Psychology	3
PSY 131 F	Cross-Cultural Psychology	3
PSY 139 F	Developmental Psychology: Life Cycle	3
PSY 145 F	Child Psychology	3
PSY 202 F	Introduction to Experimental Psychology	3
PSY 222 F	Abnormal Psychology	3
PSY 251 F	Social Psychology	3 or
PSY 251HF	Honors Social Psychology	3
SOC 101 F	Introduction to Sociology	3 or
SOC 101HF	Honors Introduction to Sociology	3
SOC 102 F	Social Problems	3
SOC 275 F	Marriage and Family	3
WMNS 100 F	Introduction to Women's Studies	3

~ Courses used to meet American Institutions will not meet Area 4 category.

**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.

**5.A Physical Sciences:**

† CHEM 100 F	<u>Chemistry for Daily Life</u>	4
† CHEM 101 F	<u>Introduction to Chemistry</u>	5
† CHEM 103 F	Chemistry in a Changing World	3
† CHEM 107 F	<u>Elementary Chemistry</u>	5
CHEM 111AF	<u>General Chemistry</u>	5
CHEM 111BF	<u>General Chemistry</u>	5
† ESC 100 F	Physical Geology	3
† ESC 100LF	<u>Physical Geology Lab</u>	1
ESC 101 F	Earth Science Survey	3
ESC 101LF	<u>Earth Science Survey Laboratory</u>	1
ESC 103 F	<u>Historical Geology</u>	4
ESC 105 F	Elements of Meteorology	3
ESC 116 F	Astronomy	3
ESC 116LF	<u>Astronomy Laboratory</u>	2
ESC 120 F	Geology of California	3
ESC 130 F	Introduction to Oceanography	3
ESC 130LF	<u>Introduction to Oceanography Field Experience</u>	1
ESC 190 F	Environmental Geology	3
GEOG 102 F	Physical Geography	3
GEOG 102LF	<u>Physical Geography Lab</u>	1
~†PHSC 102 F	<u>Physical Science Survey</u>	4
† PHYS 130 F	<u>Elementary Physics</u>	4
† PHYS 205 F	<u>College Physics</u>	4
† PHYS 206 F	<u>College Physics</u>	4
PHYS 210 F	<u>Physics</u>	4
PHYS 211 F	<u>Physics</u>	4
† PHYS 221 F	<u>General Physics</u>	4
† PHYS 222 F	<u>General Physics</u>	4
† PHYS 223 F	<u>General Physics</u>	4
† CHEM 100F or CHEM 103 F; no UC credit if taken after CHEM 111AF.		
† 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 111AF.		
† CHEM 100 F or CHEM 103 F: no UC credit if taken after CHEM 111AF.		
† ESC 100 F-100LF 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 F, 210 F or 221 F.		
† PHYS 205 F, 206 F or 210 F, 211 F, or 221 F, 222 F and 223 F combined: maximum credit, one series.		

**5.B Biological Sciences:**

† ANAT 231 F	<u>General Human Anatomy</u>	4
† ANAT 240 F	<u>Human Physiology</u>	4
ANTH 101 F	Physical Anthropology	3
ANTH 101LF	<u>Physical Anthropology Lab</u>	1
= BIOL 100 F	General Biology	4
† BIOL 101 F	<u>General Biology</u>	5 or
† BIOL 101HF	<u>Honors General Biology</u>	5
# BIOL 102 F	Human Biology	3
# BIOL 102LF	<u>Human Biology Lab</u>	1
BIOL 108 F	Plants and People	3
† BIOL 109 F	Genetics & Biotechnology in Society	3
BIOL 170 F	<u>Organismal Biology</u>	5
BIOL 222 F	<u>Marine Biology</u>	3
BIOL 266 F	<u>General Zoology</u>	5
BIOL 268 F	<u>General Botany</u>	5
BIOL 272 F	<u>Cell and Molecular Biology</u>	5
BIOL 274 F	<u>General Ecology</u>	5
ENVS 105 F	Environmental Biology	3
ENVS 105LF	<u>Environmental Biology Lab</u>	1
ENVS 126 F	Natural History of California	3
MICR 262 F	General Microbiology	5

† BIOL 101 F or 101HF: no UC credit if taken after a 200-level Biological Science course (per catalog).

† BIOL 109 F: no UC credit if taken after 200 level Biology class.

# BIOL 102 F or BIOL 102LF: no UC credit if taken after BIOL 101 F or 101HF.

= BIOL 100 F and 101 F combined: maximum credit one course.

**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 on the Foreign Language Advanced Placement Test; OR
- Satisfactory score in the SAT II: Subject Test in languages other than English

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:

CHIN	102 F	Elementary Chinese — Mandarin II	5
FREN	102 F	Elementary French II	5
GERM	102 F	Elementary German II	5
ITAL	102 F	Elementary Italian II	5
JAPN	102 F	Elementary Japanese II	5
PORT	102 F	Elementary Portuguese II	5
SPAN	102 F	Elementary Spanish II	5 or
SPAN	102HF	Honors Elementary Spanish II	5
SPAN	201 F	Spanish for the Spanish Speaker	5

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

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

6 units; one course from Group 1 and one course from Group 2:

**Group 1.**

POSC	100 F	American Government	3 or
POSC	100HF	Honors American Government	3

**Group 2.**

ETHS	101 F	American Ethnic Studies	4
ETHS	130 F	History of African Americans in the United States	3
ETHS	160 F	History of the Native Americans	3
HIST	127 F	Survey of American History	3
HIST	162AF	History of the Americas	3
HIST	162BF	History of the Americas	3
HIST	170 F	History of the United States	3 or
HIST	170HF	Honors History of the United States	3
HIST	171 F	History of the United States	3 or
HIST	171HF	Honors History of the United States	3

Note: Courses used to meet this requirement may not be used to satisfy requirements for IGETC.

UC credit limitations are defined at the bottom of each area throughout the document. Please consult with a counselor for additional information.

## California State University General Education Approved Course List 2004-2005

**IMPORTANT NOTE:** Courses on this list are approved for a specific academic year which begins with the Fall 2004 semester. This list is valid through Summer 2005.

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 2004-2005 academic year. A course used in the certification process must be on the CSU GE Breadth approved list during the term in which it is taken. If a course is taken before it is approved for inclusion on the list, it cannot be certified. Similarly, a course which is taken after it has been removed from the list cannot be certified.

Students who have taken courses at other colleges can have these courses "pass along" in the certification process. 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.

Students requesting CSU GE "pass along" certification must complete at least 12 transferable units at FC.

Students enrolled in high unit majors (i.e. architecture, computer science, engineering, sciences) are often recommended not to be fully CSU GE certified but rather to meet transfer admission requirements and complete required lower division major and support courses. See your counselor to develop an academic student educational plan.

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.

**AREA A: COMMUNICATION IN THE ENGLISH LANGUAGE (9 UNITS)**

Choose one course from each section. Grades of "C" or better are required. SPCH 135 F may be used once in either section A.1 or A.3.

<b>A.1</b>	<b>ORAL (3 Units)</b>		
SPCH	100 F	Public Speaking	4
SPCH	105 F	Interpersonal Communication	3
SPCH	124 F	Small Group Communication	3
SPCH	135 F	Essentials of Argumentation	4

**A.2 WRITTEN (3 Units)**

ENGL	100 F	College Writing	3 or
ENGL	100HF	Honors College Writing	3

**A.3 CRITICAL THINKING (3 Units)**

ENGL	103 F	Critical Reasoning and Writing	3 or
ENGL	103HF	Honors Critical Reasoning and Writing	3
ENGL	104 F	Critical Thinking and Writing About Literature	3
ENGL	201 F	Intermediate College Writing	3
PHIL	170 F	Logic and Critical Thinking	3
PHIL	172 F	Critical Thinking/Writing	3
READ	142 F	College Reading: Logical Analysis and Evaluation	3
SPCH	135 F	Essentials of Argumentation	4

**AREA B: PHYSICAL UNIVERSE AND LIFE FORMS (9 Units)**

One lecture course is required from each section. One matching lab must be included for Physical Science or Life Science. Underlined courses satisfy the laboratory requirement.

**B.1 PHYSICAL UNIVERSE**

CHEM	100 F	<u>Chemistry for Daily Life</u>	4
CHEM	101 F	<u>Introduction to Chemistry</u>	5
CHEM	103 F	Chemistry in a Changing World	3
CHEM	107 F	<u>Elementary Chemistry</u>	5
CHEM	111AF	<u>General Chemistry</u>	5
CHEM	111BF	<u>General Chemistry</u>	5
ESC	100 F	Physical Geology	3
ESC	101 F	Earth Science Survey	3
ESC	103 F	<u>Historical Geology</u>	4
ESC	104 F	Geology of National Parks and Monuments	3
ESC	105 F	Elements of Meteorology	3
ESC	116 F	Astronomy	3
ESC	120 F	Geology of California	3
ESC	130 F	Introduction to Oceanography	3
ESC	190 F	Environmental Geology	3
GEOG	102 F	Physical Geography	3
PHSC	102 F	<u>Physical Science Survey</u>	4
PHYS	130 F	<u>Elementary Physics</u>	4
PHYS	205 F	<u>College Physics</u>	4
PHYS	206 F	<u>College Physics</u>	4
PHYS	210 F	<u>Physics</u>	4
PHYS	211 F	<u>Physics</u>	4
PHYS	221 F	<u>General Physics</u>	4
PHYS	222 F	<u>General Physics</u>	4
PHYS	223 F	<u>General Physics</u>	4

**B.2 LIFE SCIENCE:**

ANAT	231 F	<u>General Human Anatomy</u>	3
ANAT	240 F	<u>Human Physiology</u>	5
ANTH	101 F	Physical Anthropology	3
BIOL	100 F	General Biology	4
BIOL	101 F	<u>General Biology</u>	5 or
BIOL	101HF	<u>Honors General Biology</u>	5
BIOL	102 F	Human Biology	3
BIOL	104 F	Biology of Insects and Spiders	3
BIOL	108 F	Plants and People	3
BIOL	109 F	Genetics and Biotechnology in Society	3
BIOL	141 F	Marine Mammal Biology & Conservations	3
BIOL	170 F	<u>Organismal Biology</u>	5
BIOL	222 F	<u>Marine Biology</u>	3
BIOL	266 F	<u>General Zoology</u>	5
BIOL	268 F	<u>General Botany</u>	5
BIOL	272 F	<u>Cellular Biology</u>	5
BIOL	274 F	<u>General Ecology</u>	5
ENVS	105 F	Environmental Biology	3
ENVS	126 F	Natural History of California	3
HORT	152 F	<u>Applied Botany</u>	4
HORT	205 F	<u>Applied Entomology</u>	3
HORT	207 F	<u>Plant Pathology</u>	3
MICR	220 F	<u>Medical Microbiology</u>	4
MICR	262 F	<u>General Microbiology</u>	5

**B.3 LABORATORY ACTIVITY: Underlined courses from Area B.1 or B.2 also satisfy the Area B.3 laboratory requirement.**

ANTH	101LF	Physical Anthropology Laboratory	1
BIOL	102LF	Human Biology Laboratory	1
ESC	100LF	Physical Geology Laboratory	1
ESC	101LF	Earth Sciences Survey Laboratory	1
ESC	116LF	Astronomy Laboratory	2
ESC	130LF	Intro to Oceanography Field Experience	1
ENVS	105LF	Environmental Biology Laboratory	1
GEOG	102LF	Physical Geography Laboratory	1

**B.4 MATHEMATICS/QUANTITATIVE REASONING:**

Grade of "C" or better required.			
MATH	100 F	Liberal Arts Mathematics	3
MATH	120 F	Introductory Probability and Statistics	4 or
MATH	120HF	Honors Introductory Probability and Statistics	4
MATH	129 F	College Algebra for Business Calculus	4
MATH	130 F	Calculus for Business	4
MATH	141 F	College Algebra	4
MATH	142 F	Trigonometry	4
MATH	150AF	Calculus	4
MATH	150BF	Calculus	4
MATH	171 F	Discrete Mathematics	4
MATH	250AF	Intermediate Calculus	4
MATH	250BF	Linear Algebra & Differential Equations	4
PSY	161 F	Elementary Statistics in Behavioral Sciences	3
SOSC	120 F	Introduction to Probability and Statistics	4
SOSC	121 F	Introduction to Probability and Statistics	4

**AREA C: ARTS, FOREIGN LANGUAGE, LITERATURE, AND PHILOSOPHY (9 Units)**

At least one course is required from section 1 and section 2.

**C.1 THE ARTS**

ART	110 F	Introduction to Art	3
ART	112 F	Art History — Ancient and Medieval	3
ART	113 F	Art History — Renaissance to Modern	3
ART	114 F	Art History — Impressionism to Present	3
ART	116 F	Art History — Mexico	3
ART	117 F	History of American Art	3
ART	118 F	Color Theory	3
ART	119 F	Design and Color for Non-Art Majors	2
ART	120 F	Basic Visual Design Concepts	3
ART	121 F	Three-Dimensional Design	3
ART	150AF	Ceramics, Beginning Handbuilding	3
ART	150BF	Ceramics, Beginning Throwing	3
ART	174AF	Jewelry: Fabrication	2
ART	179 F	Drawing for Non-Art Majors	2
ART	182 F	Basic Drawing	3
ART	184 F	Expressive Drawing	2
ART	189AF	Beginning Painting	3
ART	196HF	Honors Creative Arts	3
ART	212 F	Asian Art History	3
ART	213 F	Pre-Columbian Art	3
CRTV	120 F	Media Aesthetics	3
CRTV	121 F	The American Cinema	3
CRTV	126AF	World Cinema to 1945	3
CRTV	126BF	World Cinema: 1946 to the Present	3
CRTV	131 F	Contemporary Cinema	3
DANC	101 F	Rhythmic Fundamentals	2
DANC	120 F	Dance History	3
DANC	210 F	Multicultural Dance in the U.S. Today	3
MUS	101 F	Music Fundamentals	3
MUS	102 F	Music Reading	3
MUS	106 F	Introduction to Music Theory	3
MUS	107AF	Harmony I	3
MUS	110 F	Electronic Music	3
MUS	113 F	Jazz History — An Appreciation	3
MUS	114 F	Women, Music and Society	3
MUS	115 F	Music Cultures of the World	3
MUS	116 F	Music Appreciation	3
MUS	117 F	American Popular Music	3
MUS	118 F	Introduction to Opera	3
MUS	119 F	History of Rock Music	3
MUS	120 F	Survey of Music History	3
MUS	135AF	Beginning Piano	1
MUS	196HF	Honors Creative Arts	3
PHOT	100 F	Basic Photography	2
PHOT	101 F	Introduction to Photography	3
THEA	100 F	Introduction to the Theatre	3
THEA	104 F	Intro to Theatre Appreciation	3
THEA	105 F	Musical Theatre History	3
THEA	127 F	Oral Interpretation	3
THEA	196HF	Honors Creative Arts	3

**C.2 FOREIGN LANGUAGE, LITERATURE, AND PHILOSOPHY**

ENGL	102 F	Introduction to Literature	3 or
ENGL	102HF	Honors Introduction to Literature	3
ENGL	105 F	Creative Writing	3
ENGL	203 F	Intro to Dramatic Literature	3
ENGL	204 F	Intro to Poetry	3
ENGL	205 F	The Film: From the Beginning to 1950	3
ENGL	206 F	The Film: 1950 to the Present	3
ENGL	207 F	The Short Story	3
ENGL	211 F	English Literature to 1800	3
ENGL	212 F	English Literature since 1800	3
ENGL	214 F	Contemporary Literature	3
ENGL	218 F	California Writers	3
ENGL	221 F	American Literature	3
ENGL	222 F	American Literature	3
ENGL	224 F	World Literature	3
ENGL	225 F	World Literature	3
ENGL	234 F	Introduction to Shakespeare	3
ENGL	239 F	Survey of Children's Literature	3
ENGL	243 F	Folklore and Mythology	3
ENGL	245 F	The Bible as Literature	3
ENGL	246 F	The Novel	3
ENGL	247 F	Voices of America: Studies in Multicultural 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
CHIN	101 F	Elementary Chinese — Mandarin I	5
CHIN	102 F	Elementary Chinese — Mandarin II	5
CHIN	203 F	Intermediate Chinese — Mandarin III	4
CHIN	204 F	Intermediate Chinese — Mandarin IV	4
FREN	101 F	Elementary French I	5
FREN	102 F	Elementary French II	5
FREN	203 F	Intermediate French III	4
FREN	204 F	Intermediate French IV	4
GERM	101 F	Elementary German I	5
GERM	102 F	Elementary German II	5
GERM	203 F	Intermediate German III	4
GERM	204 F	Intermediate German IV	4
ITAL	101 F	Elementary Italian I	5
ITAL	102 F	Elementary Italian II	5
ITAL	203 F	Intermediate Italian III	5
ITAL	204 F	Intermediate Italian IV	5
JAPN	101 F	Elementary Japanese I	5
JAPN	102 F	Elementary Japanese II	5
JAPN	203 F	Intermediate Japanese III	4
PORT	101 F	Elementary Portuguese I	5
PORT	102 F	Elementary Portuguese II	5
SPAN	101 F	Elementary Spanish I	5 or
SPAN	101HF	Honors Elementary Spanish I	5
SPAN	102 F	Elementary Spanish II	5 or
SPAN	102HF	Honors Elementary Spanish II	5
SPAN	201 F	Spanish for the Spanish Speaker	5
SPAN	203 F	Intermediate Spanish III	4
SPAN	204 F	Intermediate Spanish IV	4
SPAN	205 F	Intro to Spanish Literature	3



**D.8 POLITICAL SCIENCE, GOVERNMENT, AND LEGAL INSTITUTIONS**

POSC	100 F	American Government	3 or
POSC	100HF	Honors American Government	3
POSC	110 F	Contemporary American Politics	3
POSC	120 F	Introduction to Political Theory	3
POSC	150 F	California Government & Politics	3
POSC	200 F	Introduction to the Study of Politics	3
POSC	215 F	Comparative Political Systems	3
POSC	216 F	Government & Politics of the Middle East	3
POSC	230 F	Intro to International Relations	3
POSC	275 F	Intro to Public Law	3

**D.9 PSYCHOLOGY**

PSY	101 F	General Psychology	3 or
PSY	101HF	Honors General Psychology	3
PSY	131 F	Cross-Cultural Psychology	3
PSY	145 F	Child Psychology	3
PSY	202 F	Introduction to Experimental Psychology	3
PSY	222 F	Abnormal Psychology	3
PSY	251 F	Social Psychology (beg F'91)	3
PSY	251HF	Honors Social Psychology	3

**D.10 SOCIOLOGY AND CRIMINOLOGY**

SOC	101 F	Introduction to Sociology	3 or
SOC	101HF	Honors Introduction to Sociology	3
SOC	102 F	Social Problems	3
SOC	225 F	Sociology of Women	3
SOC	275 F	Marriage and the Family	3

**AREA E: LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT (3 UNITS)**

COUN	151 F	Career/Life Planning	3
HED	140 F	Health Science	3
NUTR	210 F	Nutrition Today	3
PSY	120 F	Human Sexuality	3
PSY	139 F	Developmental Psychology: Life Cycle	3
PE	248 F	Psychology of Sport	3
PE	266 F	Physical Fitness as a Lifelong Concept	2
SPCH	120 F	Intercultural Communication	3
WELL	230 F	The Body-Mind Connection	3

ONE UNIT MAXIMUM: ALL PHYSICAL EDUCATION ACTIVITY CLASSES (except for PE 113 F Billiards) including one unit maximum from:

DANC	100 F	Introduction to Dance Appreciation	3
DANC	102 F	Conditioning for Dance	1
DANC	103 F	Dance Technique I	1
DANC	104 F	Dance Technique II	1
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	113 F	Tap I	1
DANC	115 F	Hip Hop Dance I	1
DANC	116 F	Social Dance	1

DANC	119 F	Dance for Theatre	1
DANC	130 F	Afro-Caribbean Dance	1
DANC	132 F	Flamenco Dance I	1
DANC	202 F	Dance Composition and Choreography	2
DANC	214 F	Dance Repertory	2
REC	107 F	Wilderness Survival	1
REC	108 F	Backpacking	1
WELL	242 F	Stress Mgmt & Relaxation Training	1.5

**CSU GRADUATION REQUIREMENT IN U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS 6 units; one course from Group 1 and one course from Group 2:**

**Group 1.**

POSC	100 F	American Government	3 or
POSC	100HF	Honors American Government	3

**Group 2.**

ETHS	101 F	American Ethnic Studies	4
ETHS	130 F	History of African Americans in the United States	3
ETHS	160 F	History of the Native Americans	3
HIST	127 F	Survey of American History	3
HIST	162AF	History of the Americas	3
HIST	162BF	History of the Americas	3
HIST	170 F	History of the United States	3 or
HIST	170HF	Honors History of the United States	3
HIST	171 F	History of the United States	3 or
HIST	171HF	Honors History of the United States	3
HIST	270 F	Women in United States History	3

(The two courses used to meet the U.S. History, Constitution, and American Ideals requirement may also be used to meet 6 of the 9-unit AREA D unit requirements.)

## Educational Objective — Transfer

When a student attends a California community college before applying to a four-year college or university, it is advisable to successfully complete lower division courses that are transferable and that satisfy the specific four-year college or university requirements. The course requirements will fulfill the admission transfer course requirements, general education, major and major support course requirements of the four-year college or university.

**The Career Center, Counseling Resource Center, and the Cadena/Transfer Center** provide a variety of resource materials and services available to assist students in the transfer process. Fullerton College counselors will help with career goal decisions, the selection of a college transfer major, and the development of an academic course plan leading to transfer.

Fullerton College students transfer to all campuses of the California State University and the University of California as well as many independent/private colleges. Fullerton College has written transfer articulation agreements with most four-year colleges including several out-of-state schools.

Transfer students are encouraged to meet with a counselor each semester to review any possible changes in transfer admission, general education and/or major course requirements.

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 (Drawing and Painting)

Art (General Studio)

Art (Graphic Design)

Art (History)

Art (Illustration)

Art (Photography)

Art (Printmaking)

Art (Sculpture)

Art (Teaching)

Biochemistry

Biological Sciences

Business Administration

Chemistry

Child Development

Communications (Journalism)

Communications (Journalism/Broadcast)

Communications (Public Relations)

Communications (Telecommunications, Radio-TV, Film)

Computer Science

Dance

Economics

Engineering

Engineering Technology

English

Ethnic Studies

Fashion (Merchandising/Textiles)

French

Geography

Geological Science

Health Science

History

Horticulture

Hotel and Restaurant Management

Human Services

Interior Design

Kinesiology

Liberal Studies

Mathematics

Music

Nutrition/Food (Dietetics)

Philosophy

Physics

Political Science

Pre-Chiropractic

Pre-Dental Hygiene

Pre-Dentistry

Pre-Medicine

Pre-Nursing

Pre-Occupational Therapy

Pre-Optometry

Pre-Pharmacy

Pre-Physical Therapy

Pre-Physician Assistant

Pre-Veterinarian Medicine

Psychology

Recreation

Religious Studies

Social Work/Human Services

Sociology

Spanish

Theatre Arts (Directing)

Theatre Arts (General)

Theatre Arts (Performance Emphasis)

Theatre Arts (Playwriting)

Theatre Arts (Teaching)

Theatre Arts (Technical Production)

University Transfer Studies

Women's Studies



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# **Degrees and Certificates**

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# Programs of Study Leading to Degrees and Certificates

Listed on the following pages are programs of study offered by Fullerton College. Students are encouraged to meet with an academic counselor to plan their individual needs.

Each of the programs listed leads to a vocation certificate or graduation with an Associate in Arts (A.A.) Degree, or an Associate in Science (A.S.) Degree. Since the programs have been carefully planned, deviations should be made only after careful consideration and consultation with one of the college counselors. Course substitutions or waivers must be submitted for approval to the Admissions and Records Office.

For requirements for a particular degree or certificate program, please refer to the table below. Degree and certificate programs are listed by Instructional Division. Requirements for the Associate in Arts (A.A.) Degrees can be found on page 91; requirements for the Associate in Science (A.S.) Degrees can be found on page 92; and the requirements for the vocational certificates can be found on pages 93-94.

Listing by Instructional Division	A.A. Degree	A.S. Degree	Vocational Certificate Programs		A.A. Degree	A.S. Degree	Vocational Certificate Programs
<b>Academic Services</b>				Music	✓		
Cosmetology		✓	✓	Commercial	✓		
Cosmetology Instructor		✓		Piano Teaching			✓
<b>Business and Computer Information Systems</b>				Recording/Production			✓
Accounting		✓	✓	Theatre Arts: Drama (Acting)	✓		
Business Administration	✓			Musical Theatre			✓
Business Management		✓	✓	Advanced Musical Theatre			✓
Business and Technology Skills			✓	<b>Humanities</b>			
E- Business Development			✓	English	✓		
Entrepreneurship		✓	✓	Foreign Language	✓		
International Business			✓	Speech	✓		
International Business Management		✓	✓	<b>Liberal Studies</b>	✓		
Managerial Communications			✓	<b>Mathematics and Computer Science</b>			
Marketing Management		✓	✓	Computer Science		✓	
Project Management			✓	Mathematics	✓		
Computer Information Systems		✓	✓	<b>Natural Science</b>			
Computer Software Applications Specialist			✓	Astronomy	✓		
Database Applications			✓	Biological Technician		✓	
E-Commerce Programming			✓	Biology	✓		
Enterprise Database			✓	Chemistry	✓		
Internet			✓	Environmental Science	✓		
Networking			✓	Environmental Technology		✓	✓
PC Applications			✓	Geology	✓		
Programming			✓	Horticulture:			
Spreadsheet Applications			✓	Greenhouse and Nursery Production			✓
Web Design			✓	Landscape Management		✓	
Web Scripting			✓	Landscape Design Management			✓
Office Technology				Landscape Horticulture			✓
Administrative Office Assistant		✓	✓	Landscape Irrigation			✓
Legal Office Administration		✓	✓	Nursery Management	✓		
Word Processing		✓	✓	Ornamental		✓	✓
Paralegal Studies		✓	✓	Pest Management			✓
Real Estate Management		✓	✓	Industrial Laboratory Technician (Chemistry)	✓		
Real Estate Sales			✓	Medical Technology		✓	
<b>Counseling and Student Development</b>				Microbiology		✓	
University Transfer Studies	✓			Nutrition and Foods	✓		
<b>Fine Arts</b>				Pre-Nursing	✓		
Art	✓			Physics	✓		
Advertising and Graphic Design	✓						
Advertising and Graphic Design Level I			✓				
Advertising and Graphic Design Level II			✓				
Computer Graphics			✓				
Computer Animation/Multi Media			✓				
Desktop Publishing			✓				

	A.A. Degree	A.S. Degree	Vocational Certificate Programs		A.A. Degree	A.S. Degree	Vocational Certificate Programs
<b>Physical Education</b>							
Aquatic Specialist			✓	Construction			
Athletic Coach			✓	Cabinetmaking/Millwork Technology			✓
Dance	✓			Estimating			✓
Group Fitness Instructor			✓	Inspection		✓	✓
Outdoor Recreation and Safety			✓	Management		✓	✓
Personal Trainer			✓	Technology		✓	✓
Physical Education	✓			Drafting Technology		✓	
Physical Education (Fitness)		✓		AutoCAD for Industrial Drafting			✓
Therapeutic and Sports				Industrial Drafting Level I			✓
Massage Level I Massage Therapist			✓	Industrial Drafting Level II			✓
Massage Level II Massage Therapist			✓	Electronics, Technical		✓	✓
				Digital Electronics			✓
<b>Social Science</b>				Microcomputer Technology			✓
Anthropology	✓			Technical Networking			✓
Child Development	✓			Engineering		✓	✓
After School Care			✓	Fashion Design	✓		✓
Associate Teacher			✓	Advanced Fashion Design			✓
Weekend Associate Teacher			✓	Advanced Theatrical Costumer			✓
ECE Teacher			✓	Dressmaking-Alterations			✓
ECE Administration			✓	Fashion Illustration			✓
Family Child Care			✓	Image Consultant			✓
Infant/Toddler Caregiver			✓	Theatrical Costumer			✓
Economics	✓			Fashion Journalism	✓		✓
Ethnic Studies	✓			Fashion Merchandising	✓		✓
Family Studies: Child and Family Development			✓	Homemaking	✓		✓
Geography	✓			Industrial Arts	✓		✓
History	✓			Industrial Technology	✓		✓
Latin-American Studies	✓			Interior Design Assistant		✓	✓
Philosophy	✓			Commercial Design			✓
Political Science	✓			Interior Merchandising Level I			✓
Psychology	✓			Residential Design			✓
Religious Studies	✓			Machine Technology			✓
Social Science	✓			CNC Operator			✓
Sociology	✓			Computer Numerical Control (CNC)			✓
				Machine Technology Level I			✓
				Machine Technology Level II			✓
				Surfcam			✓
<b>Technology and Engineering</b>				Manufacturing Technology		✓	✓
Administration of Justice	✓	✓	✓	Printing Technology		✓	✓
Architecture		✓		Advanced Offset Presswork			✓
Architectural CAD Technology			✓	Customer Service Training			✓
Automotive				Digital Printing			✓
Automatic Transmission Specialist			✓	Electronic Imaging			✓
Automotive Chassis Specialist			✓	Flexography			✓
Automotive Maintenance Specialist			✓	Graphic Communications			✓
Automotive Management			✓	Offset Duplicator			✓
Automotive Technology		✓	✓	Quick Print/In-Plant Graphics			✓
Emission Control Specialist			✓	Screen Printing			✓
Engine Performance Specialist			✓	Textiles and Clothing	✓		✓
Fabrication Specialist			✓	Welding Technology			✓
Light Repair Specialist			✓	Wood Technology			✓
Manual Drive Train Specialist			✓	Cabinetmaking			✓
Carpentry	✓			Furniture Making			✓
Civil Engineering Technology		✓		Woodcarving			✓
Communications:							
Advertising			✓				
General	✓						
Journalism	✓		✓				
Public Relations			✓				
Radio Broadcasting	✓		✓				
Radio Production	✓						
Radio/Television Broadcast		✓	✓				
Radio & Television/Video Production			✓				
Sports Broadcasting			✓				
Television/Film	✓						
Television/Video (+ endorsements)			✓				

# Programs of Study Leading to an Associate in Arts Degree

## The Associate in Arts Degree requirements are:

- 1) Completion of a total of **60-degree applicable units** and a **grade point average of 2.0 or higher**
- 2) Included in the 60-unit total must be **18 or more units in a specified major** as stated in the catalog on the following pages
- 3) Also included in the 60 total units must be **one of the following general education options:**
  - a) Fullerton College Associate Degree General Education requirements (24 units) OR
  - b) California State University (CSU) General Education requirements (39 units) OR
  - c) Intersegmental General Education Transfer Curriculum (IGETC) requirements (37-39 units)
- 4) Completion of a minimum of **1 unit of physical education** activity class OR PE 243 or PE 266
- 5) Completion of one course meeting the **Multicultural Requirement**
- 6) Satisfy the **Reading Proficiency Requirement**

NOTE: A student may be awarded only one Associate in Arts degree.

Alphabetical Listing – Associate in Arts Degrees	page
Administration of Justice	103
Advertising and Graphic Design	111
Anthropology	109
Art	111
Astronomy	166
Biology	122
Business Administration	125
Carpentry	132
Chemistry	132
Child Development	134
Communications	
General	144
Journalism	144
Radio Broadcasting	144
Radio Production	144
Cinema-Television-Film	145
Dance	164
Economics	169
English	174
Ethnic Studies	183
Fashion Design	185
Fashion Journalism	186
Fashion Merchandising	187
Foreign Language	191
Geography	192
Geology	194
History	195
Homemaking	198
Horticulture — Nursery Management	200
Industrial Arts	204
Industrial Laboratory Technician (Chemistry)	204
Industrial Technology	204
Latin-American Studies	209
Liberal Studies	209
Mathematics	213
Medical Technology	215
Microbiology	216
Music	216
Commercial	216
Nutrition and Foods	225
Philosophy	232
Physical Education	234
Physics	248
Political Science	250
Pre-Nursing	251
Psychology	256
Religious Studies	261
Social Science	261
Sociology	262
Speech	265
Textiles and Clothing	267
Theatre Arts: Drama (Acting)	267
University Transfer Studies	272

# Program of Study Leading to an Associate in Science Degree

## The Associate in Science Degree requirements are:

- 1) Completion of a total of **60-degree applicable units** and a **grade point average of 2.0 or higher**
- 2) Included in the 60-unit total must be **18 or more units in a specified major** as stated in the catalog on the following pages
- 3) Also included in the 60 total units must be **one of the following general education options:**
  - a) Fullerton College Associate Degree General Education requirements (24 units) OR
  - b) California State University (CSU) General Education requirements (39 units) OR
  - c) Intersegmental General Education Transfer Curriculum (IGETC) requirements (37-39 units)
- 4) Completion of a minimum of **1 unit of physical education** activity class OR PE 243 or PE 266
- 5) Completion of one course meeting the **Multicultural Requirement**
- 6) Satisfy the **Reading Proficiency Requirement**

NOTE: A student may be awarded multiple Associate in Science degrees that are different disciplines.

Alphabetical Listing – Associate in Science Degrees	page
Accounting	100
Administration of Justice	103
Architecture	110
Automotive Technology	118
Biological Technician	122
Business Management	125
Entrepreneurship	126
International Business Management	127
Marketing Management	128
Civil Engineering Technology	144
Communications — Radio/Television Broadcast	144
Computer Information Systems	148
Computer Science	157
Construction — Inspection	158
Construction — Management	158
Construction — Technology	158
Cosmetology	161
Cosmetology Instructor	161
Drafting Technology	164
Electronics, Technical	169
Engineering	173
Environmental Technology	182
Horticulture — Landscape Management	198
Horticulture — Ornamental	200
Interior Design Assistant	205
Manufacturing Technology	212
Office Technology	
Administrative Office Assistant	225
Legal Office Administration	226
Word Processing	227
Paralegal Studies	229
Physical Education (Fitness)	235
Printing Technology	252
Real Estate Management	259

# Programs of Study Leading to Vocational Certificate Programs

The Certificate is a carefully selected group of courses which provide a focused education leading to job skills and employment in a specified occupation. Content and scope of the curriculum requirements vary by subject area and are annually reviewed by the respective Subject Area Advisory Committee to assure content relevance and currency. Certificates are designed to meet the needs of today's work force.

<b>Alphabetical Listing – Vocational Certificate Programs</b>	<b>page</b>
Accounting	100
Administration of Justice	
Administration of Justice	103
Crime Analysis	104
Crime Scene Investigation	104
P.O.S.T. Law Enforcement Skills Development	104
Advertising and Graphic Design	
Advertising and Graphic Design Level I	112
Advertising and Graphic Design Level II	112
Architectural CAD Technology	110
Automotive	
Automatic Transmission Specialist	119
Automotive Chassis Specialist	118
Automotive Maintenance Specialist	118
Automotive Management	119
Automotive Service Advisor	119
Automotive Technology	119
Emission Control Specialist	120
Engine Performance Specialist	120
Fabrication Specialist	120
Light Repair Specialist	120
Manual Drive Train Specialist	120
Business Management	
Business Management	126
Business and Technology Skills	125
E-Business Development	126
Entrepreneurship	127
International Business	128
International Business Management	128
Managerial Communications	128
Marketing Management	129
Project Management	129
Child Development	
After School Care	134
Associate Teacher	134
Weekend Associate Teacher	135
ECE Teacher	135
ECE Administration	136
Family Child Care	136
Infant/Toddler Caregiver	136
Communications	
Advertising	145
Journalism	208
Public Relations	258
Radio Broadcasting	140
Radio & Television/Video Production	140
Sports Broadcasting	140
Television/Video (+ endorsements)	141
Computer Graphics	146
Computer Animation/Multimedia	145
Desktop Publishing	146
Computer Information Systems	149
Computer Software Applications Specialist	149
Database Applications	150
E-Commerce Programming	150
Enterprise Database	150

Internet	150
Networking	150
PC Applications	151
Programming	151
Spreadsheet Applications	151
Web Design	151
Web Scripting	152
Construction	
Construction Estimating	158
Construction Inspection	158
Construction Technology	159
Cosmetology	161
Drafting Technology	
AutoCAD for Industrial Drafting	164
Industrial Drafting Level 1	165
Industrial Drafting Level 2	165
Electronics, Technical	170
Digital Electronics	170
Microcomputer Technology	170
Technical Networking	171
Environmental Technology	181
Family Studies	184
Fashion Design	185
Advanced Fashion Design	186
Dressmaking-Alterations	185
Fashion Illustration	186
Fashion Merchandising	187
Image Consultant	187
Horticulture	
Greenhouse and Nursery Production	198
Landscape Design Management	198
Landscape Horticulture	199
Landscape Irrigation	199
Ornamental	200
Pest Management	200
Interior Design Assistant	
Commercial Design	204
Interior Merchandising Level I	205
Residential Design	205
Machine Technology	
Machine Technology Level I	210
Machine Technology Level II	210
Computer Numerical Control (CNC)	210
CNC Operator	210
Mastercam	211
Surfcam	211
Music	
Piano Teaching	217
Recording/Production	217
Office Technology	
Administrative Office Assistant	226
Legal Office Administration	227
Word Processing	227
Paralegal Studies	230
Physical Education	
Aquatic Specialist	234
Athletic Coach	234
Group Fitness Trainer	235
Therapeutic & Sports Massage Technician — Level I	236
Therapeutic & Sports Massage Technician — Level II	236
Outdoor Recreation and Safety	235
Personal Trainer	236
Printing Technology	253
Advanced Offset Presswork	252
Customer Service Training	252
Digital Printing	252
Electronic Imaging	252

Flexography	253
Graphic Communications	253
Offset Duplicator	253
Quick Print/In-Plant Graphics	253
Screen Printing	254
Real Estate Management	260
Real Estate Sales	260
Theatre Arts: Drama	
Musical Theatre	267
Advanced Musical Theatre	267
Theatrical Costumer	268
Advanced Theatrical Costumer	268
Welding Technology	272
Wood Technology	
Cabinetmaking and Millwork Technology	273
Cabinetmaking Specialist	274
Furniture Making Specialist	274
Woodcarving Specialist	274

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# **Announcement of Courses, Degrees and Certificates**

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# Announcement of Courses

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.

## Course Descriptions

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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 non-degree credit course.

An associate degree credit course is a course which has been designated as college level, which is appropriate to the associate degree in accordance with the requirements of Section 55805.5 and “which has been recommended by the college and/or district curriculum committee and approved by the district governing board as a collegiate course meeting the needs of the students eligible for admission.”

Only courses that conform to the standards specified in Section 55002 and that fall into the following categories may be offered for associate degree credit:

1. All lower division courses accepted toward the baccalaureate degree by the California State University or University of California or designed to be offered for transfer.
2. Courses that apply to the major in non-baccalaureate occupational fields.
3. English courses not more than one level below the first transfer level composition course, typically known as English 1A or English 100. Each student may count only one such course as credit toward the associate degree.
4. All mathematics courses above and including Intermediate Algebra.
5. Credit courses in English and mathematics taught in or on behalf of other departments and which, as determined by the local board of trustees require entrance skills at a level equivalent to those necessary for the courses specified in subsections (3) and (4).

Non-degree credit courses are courses that earn credit but are not counted toward the 60 units required for the associate degree. Non-degree courses are intended to assist students in performing the skills needed for college level courses. Non-degree courses do apply toward: residency, athletic eligibility, work study and financial aid, veterans benefits, associated student body office, and full-time status.

## Course Numbering System Defined

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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 remedial, 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.

## Credit Values

The number in parentheses following the title of the course is the semester credit value of the course.

## Course Prerequisites

- **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 (type 35 words per minute), some experience (has worked as a tax preparer), an ability (speaks and writes Spanish fluently), a test score (475 on the SAT Verbal Examination), 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 “CR” or “C” or better, before enrolling in the course; “D,” “F” or “NC” grades are not acceptable.
- **Corequisite** A “corequisite” is just like a prerequisite (see above) with this exception: a student may take the corequisite concurrently with the course for which it is required. 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 “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.

## Definition of Unit

Coursework at Fullerton College is measured in terms of semester units. A “unit” equals eighteen hours of lecture or fifty-four hours of laboratory work per semester in most courses and prorated for short-term classes. Several combinations of lecture-laboratory hours exist in special situations. All college courses have unit credit.

## 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.

### California Articulation Number (CAN)

The California Articulation Number (CAN) System identifies some of the transferable, lower division, introductory, preparatory courses commonly taught within each academic discipline on college campuses.

The system assures students that CAN courses on one participating campus will be accepted “in lieu of” the comparable CAN course on another participating campus. Example: CAN ECON 2 on one campus will be acceptable for CAN ECON 2 on another participating campus. Each campus retains its own numbering system.

It is expected that most CSU campuses throughout the state will qualify to participate and use CAN’s. Check with counselors, academic advisers, and Transfer Center staff as well as campus publications, for lists of participating campuses and courses.

The California Articulation Numbers are listed parenthetically by the course description titles in this catalog.

## 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 limitations 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.

## Course Prefixes

ACCT	Accounting
ACG	Computer Graphics
AJ	Administration of Justice
ANAT	Anatomy and Physiology
ANTH	Anthropology
ARCH	Architecture
ART	Art
AUTO	Automotive
BIOL	Biology
BUS	Business Management
CDFL	Child Development and Family Life
CHEM	Chemistry
CHIN	Chinese
CIS	Computer Information Systems
COSM	Cosmetology
COUN	Counseling and Guidance
CRTV	Cinema-Radio-Television
CSCI	Computer Science
CSTR	Construction Technology
DANC	Dance
DRAF	Drafting Technology
ECON	Economics
ELEC	Electronics
ENGL	English
ENGR	Engineering
ENVS	Environmental Sciences
ESC	Earth Sciences
ESL	English as a Second Language
ET	Environmental Technology
ETHS	Ethnic Studies
FASH	Fashion
FOOD	Nutrition and Foods

FREN	French
GEOG	Geography
GERM	German
HED	Health Education
HIST	History
HORT	Horticulture
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
OT	Office Technology
NUTR	Nutrition and Foods
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

# Accounting

## Accounting A.S. Degree

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)

ACCT 100BF Financial Accounting Principles (3) or  
 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 (3) or  
 BUS 211 F Writing for Business (3)  
 BUS 240 F Legal Environment of Business (3) or  
 BUS 241AF Business Law (3) (See counselor for determination of correct course)

### Restricted Electives (3 units)

ACCT 001 F Accounting for Small Business (3)  
 ACCT 011 F Payroll Accounting (2)  
 ACCT 012 F Updating State Income Tax Regulations (.5-.5-.5)  
 ACCT 013 F Estate and Gift Tax Regulations (.5-.5-.5-.5)  
 ACCT 014 F Updating Federal Tax Laws (.5-.5-.5-.5)  
 ACCT 100AF Financial Accounting Principles (3)  
 ACCT 105 F Accounting for Supervisors & Managers (3)  
 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 I (4-4-4-4)  
 ACCT 117 F Tax Preparation for Practitioners II (3-3-3-3)  
 ACCT 118 F Tax Preparation for Practitioners III (3-3-3-3)  
 ACCT 120 F Tax/Financial Planning (3-3-3-3)  
 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)

## Accounting Certificate

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)

ACCT 100BF Financial Accounting Principles (3) or  
 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 (3) or  
 BUS 211 F Writing for Business (3)

### Restricted Electives (5 units)

ACCT 001 F Accounting for Small Business (3)  
 ACCT 011 F Payroll Accounting (2)  
 ACCT 012 F Updating State Income Tax Regulations (.5-.5-.5-.5)  
 ACCT 013 F Estate and Gift Tax Regulations (.5-.5-.5-.5)  
 ACCT 014 F Updating Federal Tax Laws (.5-.5-.5-.5)  
 ACCT 090 F Current Topics in Taxation (.5-3)  
 ACCT 100AF Financial Accounting Principles (3)  
 ACCT 105 F Accounting for Supervisors & Managers (3)  
 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 I (4-4-4-4)  
 ACCT 117 F Tax Preparation for Practitioners II (3-3-3-3)  
 ACCT 118 F Tax Preparation for Practitioners III (3-3-3-3)  
 ACCT 120 F Tax/Financial Planning (3-3-3-3)  
 ACCT 203 F Auditing (3)  
 ACCT 204 F Analysis of Financial Statements (3)  
 BUS 240 F Legal Environment of Business (3) or  
 BUS 241AF Business Law (3) (See counselor for determination of correct course)  
 CIS 105 F Spreadsheet I (2)

## 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 covered in the course include fundamentals of double entry accounting; preparation of trial balances; worksheets and simple financial statements for service or retail types of businesses; use of control accounts; special journals; combined cash journals; accrual and cash basis accounting; cash controls and bank reconciliations; payroll accounting including employee earnings and deductions and employer's taxes and payments. (Degree credit)

### **ACCT 011 F Payroll Accounting (2)**

Prerequisite: ACCT 100AF Financial Accounting Principles or ACCT 101AF Financial Accounting with a grade of "C" or better

One and one-half hour lecture and one and one-half hour lab 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 012 F Updating State Income Tax Regulations (.5-.5-.5-5)**

Credit/no credit only.

A total of eight hours lecture. This course provides an overview of the requirements for filing the California State Income Tax return. The relationship of the Federal Income Tax laws and State Income Tax laws are discussed. Course may be taken four times for credit. (Non-degree credit)

### **ACCT 013 F Estate and Gift Tax Regulations (.5-.5-.5-5)**

Credit/no credit only.

A total of eight hours lecture. This course is designed to provide a yearly update of the basic changes in Estate and Gift Tax regulations. Course may be taken four times for credit. (Non-degree credit)

### **ACCT 014 F Updating Federal Tax Laws (.5-.5-.5-5)**

Credit/no credit only.

A total of eight hours lecture. This course provides an overview of the major current revision of tax reforms and how they affect the individual taxpayer. Course may be taken four times for credit. (Non-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 Financial Accounting with a grade of "C" or better. (CSU) (UC Credit Limitation) (Degree credit)

### **ACCT 100BF Financial Accounting Principles (3)**

Prerequisite: ACCT 100AF Financial Accounting Principles 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 101AF Financial Accounting requirement. Not open to students who have completed 101AF Financial Accounting with a grade of "C" or better. (CSU) (UC Credit Limitation) (Degree credit)

### **ACCT 101AF Financial Accounting (4) (CAN BUS 2) (ACCT 101AF + ACCT 101BF = 3D CAN BUS SEQ A)**

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) (CAN BUS 4) (ACCT 101AF + ACCT 101BF = 3D CAN BUS SEQ A)**

Prerequisite: ACCT 101AF Financial Accounting or ACCT 100BF Financial Accounting Principles 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 Financial Accounting Principles or ACCT 101AF Financial Accounting with a grade of "C" or better  
Letter grade or credit/no credit option.

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 105 F Accounting for Supervisors and Managers (3)**

Three hours lecture per week. This course is designed to provide the supervisor or manager with an understanding of essential accounting functions including a study of financial statement forecasting, cost budgeting, decision-making, accounting terminology, and accounting systems. This course may not be substituted for ACCT 101AF Financial Accounting. (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 109 F Computerized Tax Preparation (2)**

One and one-half hour lecture and one and one-half hour lab per week. This course will introduce students to basic tax preparation software using up-to-date comprehensive software for recording data. Emphasis will be placed on how to use tax preparation application software in a personal environment. (CSU) (Degree credit)

**ACCT 112 F Income Tax Procedure (3)**

Three hours lecture per week. This course offers a simple and non-technical presentation of the information needed in preparing Federal Income Tax returns for individuals whose income is derived from wages and other various sources. Tax deductions and credits are also covered in detail. (CSU) (Degree credit)

**ACCT 116 F Tax Preparation for Practitioners I (4-4-4-4)**

Corequisite: Prior knowledge of income tax returns preparation.  
Letter grade or credit/no credit option.

Four lecture hours per week. This special tax course is designed to assist students, tax practitioners and preparers to improve their knowledge of tax return preparation. This course will meet the number of educational hours required for registration as an income tax preparer for the State of California. The course follows the separate line items on the individual income tax form. Special emphasis will be placed on those areas that accounted for the greatest number of discrepancies on federal and state income tax returns in previous years. A minimum of 20 hours will be spent on state income tax returns. Course may be taken four times for credit. (CSU) (Degree credit)

**ACCT 117 F Tax Preparation for Practitioners II (3-3-3-3)**

Prerequisite: ACCT 116 F Tax Preparation for Practitioners.  
Letter grade or credit/no credit option.

Three hours lecture per week. Designed as an intermediate-level course for tax practitioners, covering individual, farm, and small business returns for both federal and state. This course will be of most interest to experienced preparers, enrolled agents and public accountants. Course may be taken four times for credit. (CSU) (Degree credit)

**ACCT 118 F Tax Preparation for Practitioners III (3-3-3-3)**

Prerequisite: ACCT 116 F Tax Preparation for Practitioners.  
Letter grade or credit/no credit option.

Three hours lecture per week. This is an advanced-level course for tax practitioners covering partnerships and corporations. Of primary interest to the more sophisticated preparers, enrolled agents, public accountants, certified public accountants, and tax attorneys. A minimum of four hours is spent covering these topics for state returns. Course may be taken four times for credit. (CSU) (Degree credit)

**ACCT 120 F Tax/Financial Planning (3-3-3-3)**

Letter grade or credit/no credit option.

Three hours lecture per week. A course designed to cover the fundamentals of planning an estate within the parameters of taxation and family needs. Course may be taken four times for credit. (CSU) (Degree credit)

**ACCT 201AF Intermediate Accounting (4)**

Prerequisite: ACCT 101BF Managerial Accounting

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 Managerial Accounting

Five hours lecture per week. This course is a continuation of 201AF Intermediate Accounting, 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 Managerial Accounting 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 account courses in four-year colleges. Required of all vocational accounting majors. (CSU) (Degree credit)

**ACCT 203 F Auditing (3)**

Prerequisite: ACCT 101BF Managerial Accounting

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 Financial Accounting 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

## Associate in Arts Degree

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)

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 (4) or
PSY	161 F Elementary Statistics for Behavioral Science (3)

### Restricted Electives (6 units)

AJ	128 F Police-Community Relations (3)
AJ	222 F Rules of Evidence (3)
AJ	278 F Multicultural Issues Within Administration of Justice (3)
PSY	101 F General Psychology (3)
SOC	101 F Introduction to Sociology (3)

## Associate in Science Degree

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)

AJ	100 F Introduction to Law Enforcement (3)
AJ	110AF Criminal Law (3)
AJ	151 F Police Report Writing* (3)

\*Prerequisite required

### Restricted Electives (15 units)

AJ	097 F Law Enforcement Supervisory Update (1.5)
AJ	102 F Introduction to Probation and Parole (3)
AJ	110BF Adv Criminal Law (3)
AJ	111 F Vehicle Code (3)
AJ	128 F Police-Community Relations (3)
AJ	135 F Weaponless Defense (1)
AJ	137 F Firearms (1)
AJ	140 F Juvenile Control (3)
AJ	220 F Criminal Procedures (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 in Administration of Justice (3)
AJ	279 F Contemporary Issues in Law Enforcement (3)
AJ	901 F Organized Crime and the Criminal Justice System (3)

NOTE: Satisfactory completion of the Fullerton College AJ 059AF/AJ 059BF Police Basic Academy Extended Format (26-26) will also fulfill completion of the major. Consult your counselor for selection of coursework for General Education and electives.

## Administration of Justice Certificate

The **Administration of Justice Certificate** Program requires the completion of 34 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:

AJ	059AF Police Basic Academy, Extended Format (26)
AJ	059BF Police Basic Academy, Extended Format (26)

**OR, select 34 units from the following lists:**

### Required Courses (12)

AJ	110AF Criminal Law (3)
AJ	151 F Police Report Writing (3)
AJ	223 F Criminal Investigation (3)
AJ	278 F Multicultural Issues in Administration (3)

### Additional Requirements —

#### Six units from the following

AJ	110BF* Advanced Criminal Law (3)
AJ	111 F Vehicle Code (3)
AJ	220 F Criminal Procedure (3)
AJ	222 F Rules of Evidence (3)
AJ	252 F Police Patrol (3)

\*Prerequisite required

#### Three units from the following

AJ	128 F Police Community Relations (3)
AJ	226 F Narcotics and Vice Control (3)
AJ	230 F Crime Scene Techniques (3)

#### Three units from the following

AJ	140 F Juvenile Control (3)
AJ	276 F Investigation of Homicidal Behavior (3)

Ten additional units from the above or other courses approved by the department.

## Crime Analysis

The **Crime Analysis Certificate** Program prepares students for entry-level employment as a crime analyst in the law enforcement and/or private security field. The certificate requires the completion of **17 units**, of which **11 units** are in required courses. An additional **6 units** must be taken from the restricted electives listed below. A minimum grade of "C" is needed for each required course taken. At least one-half of the units toward the certificate must be completed at Fullerton College.

### Required Courses (11 units)

AJ	223 F Criminal Investigation (3)
GEOG	230 F Introduction to Geographic Information Systems (3)
GEOG	241 F Basic Crime Mapping* (2)
GEOG	242 F Advanced Crime Mapping* (3)

### Restricted Electives (6 units)

AJ	092 F Crime Scene Investigation (1)
AJ	100 F Introduction to Law Enforcement (3)
AJ	110AF Criminal Law (3)
AJ	151 F Police Report Writing* (3)
AJ	252 F Police Patrol (3)

\*Prerequisite Required

## Crime Scene Investigation

The **Crime Scene Investigation 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)

AJ	092 F Crime Scene Investigation (1)
AJ	093 F DNA Genetic Fingerprinting (.5)
AJ	096 F CAD/Crime Scene Application (.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)
BIOL	109 F Genetics and Biotechnology in Society (3)

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

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)

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 Report Writing (3)

### Restricted Electives (7.5)

AJ	068 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 Community-Oriented Policing and Problem Solving (0.5)
AJ	077 F Organized Crime (1)
AJ	078 F Multi-Agency Task Force (0.5)
AJ	080 F Lifetime Fitness for 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 F Supervisory Response to Officer Involved Shooting* (1)
AJ	088 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 Instructional Skills 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

## *Administration of Justice Courses*

### **AJ 059AF Basic Police Academy, Extended Format (26)**

Prerequisite: AJ 094 F Basic Police Academy Orientation or pre-service status with a law enforcement agency. No felony convictions. Valid California Driver's license. Advisory: AJ 080 F Lifetime Fitness for Law Enforcement.

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 (26)**

Prerequisite: AJ 059AF Basic Police Academy, Extended Format

Twenty-four 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, and 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 068 F: Parolee Contacts (1.5)**

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 parolees 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 (0.5)**

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)**

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 (0.5)**

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 non-combative methods of carrying out law enforcement duties in a racially and culturally diverse environment. (Degree credit)

### **AJ 072 F Investigating Domestic Terrorism (1)**

Credit/no credit 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. (Non-degree credit)

### **AJ 073 F Interview and Interrogation Update (1.5)**

Credit/no credit 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. (Non-degree credit)

### **AJ 074 F Conflict Resolution for Police Officers (.5)**

Credit/no credit 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. (Non-degree credit)

**AJ 075 F Cultural Diversity (1)**

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)**

Eight hours lecture per semester. This course examines the community-oriented 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)**

Credit/no credit 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." (Non-degree credit)

**AJ 078 F Multi-Agency Task Forces (.5)**

Credit/no credit 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 multi-agency environment and achieving desired outcomes. (Non-degree credit)

**AJ 079 F Law Enforcement Career Preparation (.5)**

Credit/no credit only.

Eight hours lecture per semester. This class will assist the student in identifying and utilizing effective performance strategies toward entry-level law enforcement employment examinations. Emphasis is placed on specific civil service testing procedures, including written exams, physical agility tests, oral board interviews, and the background investigation process. (Degree credit)

**AJ 080 F Lifetime Fitness for Law Enforcement (2-2-2-2)**

Credit/no credit only

Two 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 disabilities through stress reduction, current nutrition guidelines and proper fitness program design. Course may be repeated three times for credit. Intended to meet the basic requirements of Penal Code 13510 in raising the level of competence of California law enforcement officers. (Non-degree credit)

**AJ 081 F Use of Force (.5)**

Credit/no credit only.

Eight hour (8) 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)**

Credit/no credit only.

Eight hour (8) 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)**

Credit/no credit only.

Eight hour (8) 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. The students will 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)**

Credit/no credit only.

Eight hour (8) 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)**

Credit/no credit 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. (Non-degree credit)

**AJ 086 F Values, Principles, and Ethics (.5)**

Credit/no credit only.

Eight hour (8) 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)**

Prerequisite: Peace Officer status or approval of Department Coordinator with completion of AJ 110AF Criminal Law, AJ 110BF Adv Criminal Law, AJ 137 F Firearms, AJ 151 F Police Report Writing, AJ 220 F Criminal Procedure, AJ 223 F Criminal Investigation, and AJ 252 F Police Patrol required. Credit/no credit only.

Sixteen hours (16) 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)**

Prerequisite: Peace Officer status or approval of Department Coordinator with completion of AJ 110AF Criminal Law, 220 F Criminal Procedure, 223 F Criminal Investigation, 226 F Narcotics and Vice Control, 252 F Police Patrol, and 278 F Multicultural Issues within Administration of Justice required. Credit/no credit only.

Twenty-four hours (24) 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)**

Credit/no credit only.

Eight hours (8) 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)**

Credit/no credit only.

Eight hours (8) 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)**

Credit/no credit 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.) (Non-degree credit)

**AJ 092 F Crime Scene Investigation (1)**

Credit/no credit only.

Twelve hours (12) lecture and twelve (12) hours lab per semester. This class will give the police officer the knowledge and practical application to collect, preserve and preserve evidence at crime scenes. Students are required to supply 35mm SLR/camera, two rolls of 24 exposure color film and the cost of processing the film. (Degree credit)

**AJ 093 F DNA Genetic Fingerprinting (.5)**

Credit/no credit only.

Eight hours (8) 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)**

Credit/no credit 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 Policy 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. Credit/no credit. (Degree credit)

**AJ 095 F Preventing Sexual Harassment (.5)**

Credit/no credit 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)**

Credit/no credit only

Eight hours (8) lecture and sixteen hours (16) lab per week. A twenty-four hour (24) short course to provide the student with a working knowledge of C.A.D. 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 Office Standards and Training (POST) for continuing education for peace officers.

**AJ 097 F Law Enforcement Supervisory Update (1.5)**

Letter grade or credit/no credit 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) (CAN AJ 2)**

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 professionalization 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) (CAN AJ 4)**

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)**

Prerequisite: AJ 110AF Criminal Law.

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 Vehicle Code (3)**

Three hours lecture per week. A study of the California Vehicle Code with emphasis on those sections that are most frequently violated. Special study is made of the vehicle code sections that have created the greatest problems for peace officers. (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 (1-1-1-1)**

One hour lecture and one hour laboratory 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. (CSU) (Degree credit)

**AJ 137 F Firearms (1-1-1-1)**

Prerequisite: AJ 110AF Criminal Law.

One hour lecture and one hour laboratory per week. The moral aspects, legal provisions, safety precautions and restrictions covering the use of firing of the sidearm and shotgun. (CSU) (Degree credit)

**AJ 140 F Juvenile Procedures (3)**

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 Police 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) (CAN AJ 6)**

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, follow-up investigation, and courtroom presentation relating to criminal offenses and includes specialist lectures on the scientific elements. Emphasis is placed on the investigative process and the legal requirements of criminal inquiry. (CSU) (Degree credit)

**AJ 226 F Narcotics and Vice Control (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)**

Credit/no credit 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)

**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 combat 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 231 F General Human Anatomy (4) (CAN BIOL 10) (ANAT 231 F + ANAT 240 F = CAN BIOL SEQ B)**

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 laboratory 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 Credit Limitation) (Degree credit)

## **ANAT 240 F Human Physiology (5) (CAN BIOL 12) (ANAT 231 F + ANAT 240 F = CAN BIOL SEQ B)**

Prerequisite: One semester of a college laboratory biological science course with a grade of "C" or better. Corequisite: ANAT 231 F Human Anatomy and a chemistry course.

Three hours lecture and six hours lab per week. This course is an in-depth study of human function. Special attention is given to the abnormal as well as the normal functional state. The laboratory experience includes selected exercises that emphasize the interrelationships between structure and function. It is designed for all majors that require a separate course in physiology, including nursing and physical education majors. (CSU) (UC Credit Limitation) (Degree credit)

# Anthropology

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*

- ANTH 101 F Physical Anthropology (3)  
ANTH 102 F Cultural Anthropology (3)

### *II. Category A — 7 units from the following*

- ANTH 101LF Physical Anthropology Lab (1)  
ANTH 103 F Introduction to Archaeology (3)  
ANTH 105 F Language & Culture (3)  
ANTH 107 F Anthropology of Magic, Witchcraft & Religion (3)

## **Restricted Electives (6 units)**

### **Select two courses from the following:**

- 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)  
GEOG 230 F Introduction to Geographical Information Systems (3)  
ESC 100 F Physical Geology (3)  
HIST 270 F History of Women in the United States (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 (3)  
PSY 101 F General Psychology (3)  
PSY 161 F Elementary Statistics in Behavioral Sciences (3)  
SOC 101 F Introduction to Sociology (3)

# Anthropology Courses

## **ANTH 101 F Physical Anthropology (3) (CAN ANTH 2)**

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)

## **ANTH 101LF Physical Anthropology Laboratory (1)**

Corequisite: ANTH 101 F Physical Anthropology

Three hours lab per week. This course provides an introduction to laboratory 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 laboratory exercises, one short research paper will be required. (CSU) (UC) (Degree credit)

## **ANTH 102 F Cultural Anthropology (3) (CAN ANTH 4)**

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)

**ANTH 103 F Introduction to Archaeology (3) (CAN ANTH 6)**

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)

**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)

**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. (CSU) (UC) (Degree credit)

**ANTH 199 F Anthropology Independent Study (1-1-1-1)**

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 231 F Field Course in Archaeology (3, 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)

## Architecture

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The curriculum leads to the **Associate in Science Degree** in architectural 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)**

- 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 (3)
- ARCH 125 F Design Studio I (4)
- ARCH 215 F Design Studio II (4)
- ARCH 225 F Design Studio III (4)
- ARCH 227 F Internship in Architecture (1-4)

## Architectural CAD Technology

The **Architectural CAD Technology Certificate** Program requires the completion of a minimum of 39 units, of which 30 are in required courses. An additional 9 units must be chosen from the restricted electives listed below.

**Required Courses (30 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 227 F Internship in Architecture (1-4)
- BUS 111 F Business Communication (3)
- BUS 180 F Entrepreneurship: Small Business Management (3)
- COUN 141 F Career Exploration (1)
- KEY 001 F Beginning Typewriting/Keyboarding (3)
- SPCH 100 F Public Speaking (4)

**Restricted Electives (9 units)**

- ACG 100 F Introduction to Computer Graphics for Macintosh (3)
- BUS 266 F Human Relations in Business (3)
- DRAF 142 F Customizing AutoCAD (2)
- DRAF 143 F 3D Applications/AutoCAD (2)
- CSTR 036 F Uniform Building Code — Residential (3)
- CSTR 037 F Uniform Building Code — Commercial/Industrial (3)
- SPCH 105 F Interpersonal Communications (3)

The five year Bachelor of Architecture (B.Arch.) Major is an impacted program at many colleges and universities. Fullerton College does offer courses that do meet transfer requirements. Advanced placement into the five-year program of architecture is also based on a review of the student's portfolio.

## *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 two-dimensional surfaces. It is intended to develop the use of instruments, lettering, line weights, graphics and presentation layout. The media to be used will include pencil, ink, colored pencil and markers. (CSU) (UC) (Degree credit)

### **ARCH 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 Architectural Drawing I

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 Design Studio I

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 Design Studio II

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 Architectural CAD I

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 2D and 3D design problems. (Degree credit)

### **ARCH 934 F Architectural CAD III (3)**

Prerequisite: ARCH 924 F Architectural CAD II

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 2D and 3D computer drafting. (Degree credit)

### **ARCH 944 F Architectural CAD IV (3)**

Prerequisite: ARCH 934 F Architectural CAD III

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*

### *Advertising and Graphic Design*

Curriculum leads to the **Associate in Arts Degree** and/or an entry-level position as a commercial artist. This program is not designed to transfer to a four-year institution but will transfer to a private school of art. This degree totals 18 units of which 12 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below.

#### **Required Courses (12 units)**

ACG	100 F Introduction: Computer Graphics/Mac (3)
ART	140 F Introduction to Advertising and Graphics Design (3)
ART	145 F Publication Design (3)
ART	147 F Production Techniques for Graphic Designers (3)

**Restricted Electives (6 units)**

ACG	112 F	Electronic Illustration (3)
ACG	132 F	Electronic Paint for Macintosh (3)
ACG	140 F	Desktop Publishing I (3) or
ACG	146 F	Desktop Publishing II (3)
ART	123 F	Business Practices in Art (3)
ART	146 F	Advertising Design (3)
ART	148 F	Packaging Design (3)

The **Advertising and Graphic Design — Level I Certificate** requires a total of 16 units in required courses. This certificate prepares students for an entry-level position in the advertising and graphic design industry. A minimum grade of “C” is required in each course taken.

**Required Courses (16 units)**

ACG	100 F	Introduction: Computer Graphics/Mac (3)
ACG	140 F	Desktop Publishing I (3) or
ACG	146 F	Desktop Publishing II (3)
ART	140 F	Introduction to Advertising and Graphic Design (3)
ART	145 F	Publication Design (3)
ART	147 F	Publication Techniques for Graphic Designers (3)
COUN	141 F	Career Exploration (1)

The **Advertising and Graphic Design — Level II Certificate** requires the completion of the Advertising and Graphic Design — Level I Certificate plus 15 units in required courses. This certificate prepares students for a position in advertising, graphic, and packaging design. A minimum grade of “C” is required in each course taken.

**Required Courses (15 units)**

ACG	112 F	Electronic Illustration (3)
ACG	132 F	Electronic Paint for Macintosh (3)
ART	123 F	Business Practices in Art (3)
ART	146 F	Advertising Design (3)
ART	148 F	Packaging Design (3)

*Art*

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units from the following:

**One Art History course (3 units)**

ART	112 F	Art History: Ancient and Medieval (3) or
ART	113 F	Art History: Renaissance to Modern (3) or
ART	114 F	Art History: Impressionism to the Present (3) or
ART	116 F	Art History: Mexico (3) or
ART	212 F	Asian Art History (3)

**One course required from: (3 units)**

ART	120 F	Basic Design (3) or
ART	182 F	Basic Drawing (3)

**One course required from: (3 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)**

Any ART course **except** ART 110 F, ART 119 F, ART 179 F, ART 187 F

*Basic Computer Graphics*

The **Basic Computer Graphics – Level I Certificate** provides the beginning skills to create digital based illustrations and paintings. Emphasis is placed on development of student skill set in mainstream software, which will form the bases required for level II certificate. 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 for level I certificate **may not** be used for level II certificate. Level II certificate may not be earned without the completion of the level I certificate.

**Required Courses (9)**

ACG	108 F	Survey Graphics Applications (3)
ACG	112 F	Electronic Illustration (3)
ACG	132 F	Electronic Paint for Macintosh (3)

**Restricted Electives (6) – Select one Introduction class (3 units)**

ACG	100 F	Introduction: Computer Graphics/MAC (3) or
ACG	102 F	Introduction: Web Graphics/Mac (3) or
ACG	104 F	Introduction: 3-D Graphics/Mac (3) or
ACG	106 F	Introduction: Dimensional Design/Mac (3)

Select **one** art class (3 units)

ART	118 F	Color Theory (3)
ART	120 F	Basic Design (3)
ART	140 F	Introduction to Advertising and Graphic Design (3)
ART	182 F	Basic Drawing (3)

*Desktop Publishing*

**Desktop Publishing Certificate – Level II** is a continuation of the level I Basic Computer Graphics certificate with an emphasis in desktop publishing software. The certificate provides the skill set required for entry-level employment in the desktop publishing industry. The **Program** requires a total of 15 units of which 12 units are in required courses. An additional 3 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 class of level II if Introduction was completed as part of level I certificate.

**Required Courses (12)**

- ACG 100 F Introduction: Computer Graphics/Mac (3)  
 ACG 140 F Desktop Publishing I (3)  
 ACG 146 F Desktop Publishing II (3)  
 ART 140 F Introduction to Advertising and Graphic Design (3)

**Restricted Electives (3)** Select **one** course from below

- ART 118 F Color Theory (3)  
 ART 145 F Publication Design (3)  
 ART 146 F Advertising Design II (3)  
 ART 147 F Production Techniques for Graphic Designers (3)  
 ART 148 F Packaging Design (3)

*3D Animation*

**3D Animation Certificate — Level II** is a continuation of the level I Basic Computer Graphics certificate with emphasis in 3D animation software. This certificate provides the skill set required for entry-level employment in the 3D 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)**

- ACG 104 F Introduction: 3D Graphics/Mac (3)  
 ACG 120 F 3D Computer Graphics/Mac (3)  
 ACG 150 F 3D Computer Animation/Mac (3)

**Restricted Electives (6)** Select **two** courses from below

- ART 120 F Basic Visual Design Concepts (3) or  
 ART 182 F Basic Drawing (3)  
 ART 121 F Three Dimensional Design (3) or  
 ART 186 F Beginning Life Drawing (3)

Work produced in art classes for credit may be retained by the Art Department for up to one year for exhibition and display purposes. Art majors are encouraged to enroll in ART 182 Basic Drawing and ART 120 Basic Visual Design Concepts during their first semester to acquire skills used in all other studio classes. Cost of Classes: Most studio art classes require that equipment and supplies be purchased by students. A textbook is not usually required. The cost of basic materials necessary to begin a class, if the student had none to begin with, is between \$25 and \$75 unless otherwise specified in the course description. Equipment can usually be used in several related classes and need not be duplicated for each class. Additional materials may be required from time to time during the semester.

*Art History***ART 110 F Introduction to Art (3)**

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)

**ART 112 F Art History — Ancient & Medieval (3)  
(CAN ART 2) (ART 112 F + ART 113 F- CAN ART SEQ A)**

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, pro-rated per semester for short-term courses. (CSU) (UC) (Degree Credit)

**ART 113 F Art History — Renaissance to Modern (3)  
(CAN ART 4) (ART 112 F + ART 113 F- CAN ART SEQ A)**

Three hours lecture and slide presentation 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. 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)

**ART 114 F Art History — Impressionism to the Present (3)**

Three hours lecture and slide presentation per week. The development of modern architecture, sculpture, and painting from its 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 of all art majors. (CSU) (UC) (Degree credit)

**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. 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.

**ART 117 F History of American Art (3)**

Three hours lecture and slide presentation 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. 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)

**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)

**ART 213 F Pre-Columbian Art (3)**

Three hours lecture and slide presentation per week. A survey of the architecture, sculpture, painting, and ceramics of Pre-Columbian Mexico, Central, North and South America from formative through post-classic times. Slide lectures, videos, and museum visits will supplement the course. 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)

*Art Design***ART 118 F Color Theory (3) (CAN ART 22)**

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)

**ART 119 F Design & Color for Non-Art Majors (2)**

One hour lecture and 3 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)

**ART 120 F Basic Design (3) (CAN ART 14)**

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)

**ART 121 F Three-Dimensional Design (3) (CAN ART 116)**

Advisory: ART 120 F Basic Design

Two hours lecture and four hours lab per week. An introduction to three-dimensional design. This course defines the contrast of three-dimensional form to the two-dimensional format. The focus is on 360 degree design, in materials selected to best depict this contrast. This course involves the use of hand tools and some power equipment. Course may be taken one time for credit. (CSU) (Degree credit)

*Gallery and Business Practices***ART 122 F Gallery Design and Exhibition (2-2-2-2)**

One hour lecture and three hours studio per week. A workshop course in which students will be involved in the actual installation of art exhibits in the Fullerton College Art Gallery. The course includes excursions to galleries and museums. ART 122 F covers the basic skills of installing an art exhibition including arrangements, labeling, security, and brochure design. Recommended for art majors. Course may be taken four 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)

*Advertising and Graphic Design***ART 140 F Introduction to Advertising & Graphic Design (3)**

Two hours lecture and four 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. The course includes development of layout skills, style and an introduction to logotype design. The computer is demonstrated as a graphic design tool. (CSU) (Degree credit)

**ART 144 F Fundamentals of Cartooning (2)**

Advisory: ART 182 F Basic Drawing or ART 179 F Drawing for Non-Art Majors

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. (CSU) (Degree credit)

**ART 145 F Publication Design (3)**

Prerequisite: ART 140 F Introduction to Advertising and Graphic Design and ACG 100 F Introduction to Computer Graphics for Macintosh.

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)**

Prerequisite: ART 140 F Introduction to Advertising and Graphic Design and ACG 100 F Introduction to Computer Graphics for Macintosh.

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, billboards, and web sites. 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)**

Corequisite: ART 140 F Introduction to Advertising and Graphic Design  
Two hours lecture and three hours 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)**

Prerequisite: ART 140 F Introduction to Advertising and Graphic Design and ACG 100 Introduction to Computer Graphics for Macintosh.

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 and materials. 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 244 F Illustration (2)**

Prerequisite: ART 120 F Basic Visual Design Concepts and ART 140 F Advertising/Graphic Design I

One hour lecture and three hours studio per week. An intermediate course on the problems of creating finished illustrations for printed media. Primary emphasis is on developing a concept from thumbnail sketch to comprehensive rough to final art, and applied to newspaper, magazine, book, and marketing illustrations. Projects are designed to prepare the student for the professional skills needed in the advertising agency/illustrator relationship. (CSU) (Degree credit)

## *Ceramics*

**ART 150AF Ceramics, Beginning Handbuilding (3) (CAN ART 6)**

Two hours lecture and four hours studio with one hour open studio per week. A survey course dealing with ceramic handbuilding techniques. Emphasis is on creating forms, using the coil, slab and pinch processes, and on textural and sculptural embellishment of surface. Glazing technique, kiln loading, and basic technology of clay, glazes, and firing are included. (CSU) (UC) (Degree credit)

**ART 150BF Ceramics, Beginning Throwing (3)**

Prerequisite: ART 150AF Ceramics: Beginning Handbuilding or previous ceramics experience.

Two hours lecture and four hours studio and one hour open studio 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)

**ART 150CF Ceramics, Advanced (3-3)**

Prerequisite: ART 150AF Ceramics: Beginning Handbuilding and/or ART 150BF Ceramics: Beginning Throwing.

Two hours lecture and four hours lab and one hour open studio per week. Advanced study of handbuilding and/or throwing techniques, design of forms, and surface decoration. Kiln operation is emphasized. Development of further skills, knowledge, and conceptual ability is accomplished through individually determined projects. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**ART 151 F Technical Ceramics (2-2)**

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. Material 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 twice for credit. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**ART 152 F Ceramics Laboratory (1-1-1-1)**

Corequisite: ART 150AF, 150BF, 150CF Ceramics; ART 151AF, ART 261F, or completion of Art 150AF, ART 150BF, ART 150CF. Credit/no credit only.

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 159 F Master Potters (2)**

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. This course may be repeated up to three times.

## *Sculpture*

**ART 160 F Fundamentals of Sculpture (3-3) (ART 160 F (first semester) — CAN ART 12)**

Two hours lecture and analysis, four hours studio and one hour arranged per week. Development of three dimensional expression through the investigation of sculptural form and space. Traditional and contemporary concepts, techniques and materials employed. Designed for the beginning student and those with only limited sculpture experience. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**ART 161 F Advanced Sculpture (3-3)**

Prerequisite: ART 160 F Fundamentals of Sculpture.

Two hours lecture and analysis and four hours studio plus one hour open studio per week. This course introduces support processes of sculpture, of mold making, welding and casting to add breadth of knowledge and professionalism. Class requirements arranged by contract of projects to allow wide diversity of expression. Emphasis on developing individual style and the ability to plan and direct a semester schedule of projects. This course is for students with at least two semesters of sculpture. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**ART 162 F Sculpture — Cast Metal (Bronze and Aluminum) (3-3-3-3)**

Advisory: ART 160 F Fundamentals of Sculpture or ART 185 F Life Sculpture.

Two hours lecture and analysis and four hours studio plus one hour arranged per week. An introduction to the lost wax bronze casting process, investment, vacuum and sand casting. This class includes wax model production and mold making. The cast bronze sculpture is completed by metal chasing and patination. In semesters two, three and four, the complexity of the projects require alternative skills, techniques and materials. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**ART 163 F Sculpture Open Studio (1-1-1-1)**

Corequisite: Concurrent enrollment in 3-D design facility classes. Credit/no credit only.

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 students that are enrolled in any one of these three-dimensional classes, ART 160 ABF, ART 161 ABF, ART 162 ABCDF, ART 173 ABCDF, ART 174AF, ART 176 ABCDF or ART 121 F or students that have completed these courses. For each forty-eight hours that a student spends in the studio beyond their class hours, one unit of credit will be earned. All hours must be verified by a sign-in sheet. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**ART 185 F Life Sculpture (3-3-3-3)**

Two hours lecture and four hours studio per week. The class involves three dimensional problems in sculptural concepts and modeling from the human figure with an emphasis on accurate anatomical training in sculpture. This course is designed to develop an understanding of human anatomy as it pertains to sculpture; and to develop the ability of the student to sculpt the figure in various attitudes and movements. Skeleton, plaster cast and live models are used. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**ART 261 F Sculpture — Ceramics (2)**

Prerequisite: ART 160 F Sculpture — Beginning or 150AF Ceramics: Beginning Handbuilding.

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. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

*Jewelry/Crafts***ART 173 F Jewelry Casting (3-3-3-3)**

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 concepts and techniques in the design and construction of jewelry and small objects using cutting, forming and soldering techniques. The focus of this course is on original design fine art jewelry in precious metals. (CSU) (Degree credit)

**ART 174BF Jewelry: Fabrication (3-3-3)**

Prerequisite: ART 174AF Jewelry: Fabrication.

Two hours lecture and four hours studio per week. This class is a continuation of 174AF Jewelry: Fabrication. Further development of jewelry fabrication techniques are explored which include hollow form, articulation, surface treatment, repousse, patina and inlay. Emphasis is placed on individual design development. Course may be taken three times for credit. (CSU) (Degree credit)

**ART 176 F Stained Glass (Architectural Fabrication for Residential & Commercial) (3-3-3-3)**

Two hours lecture and four studio per week. Section A will instruct the student in the basics of designing and constructing both two and three dimensional stained glass projects using the "Tiffany Foil" technique and other cold glass process 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 B will involve continued development of the skills learned in Section A in addition to learning alternative processes such as overlay, sandblasting, fusing. Project emphasis will be in the design and fabrication of residential and commercial pieces. Section C will involve the student in three dimensional and large scale projects; and will also involve independent, instructor approved fabrications of real world commission type projects utilizing all processes and vocabulary learned in Section A & B. Project emphasis will be in the design and fabrication of residential and commercial pieces. This course may be taken a total of four times with Section A & B taken once each and Section C taken two times. Production hours outside of class time are required. (CSU) (Degree Credit)

*Drawing***ART 139 F Fashion Sketching (2-2-2)**

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 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)

**ART 180 F Perspective Drawing and Rendering (2-2)**

Prerequisite: ART 182 F Basic Drawing.

One hour lecture and three hours studio per week. The lecture portion covers basic fundamentals of perspective and traditional rendering. Emphasis is on creating the illusion of three dimensions on a two-dimensional drawing surface. The course includes explanations of simple solid shapes in space, lighting, and accurately depicting surface qualities. This course also meets student needs in advertising, illustration, and industrial design. Course may be taken twice for credit. (CSU) (Degree credit)

**ART 181 F Drawing from the Masters (2-2-2-2)**

Corequisite: ART 182 F Basic Drawing or ART 119 F Design and Color for Non-Art Majors

One hour lecture and three hours studio per week. Lecture covers working methods and media of master draftsmen from previous centuries. Lab consists of analyzing and copying master drawings in a variety of media. Emphasis is on traditional approach to drawing as practiced by renaissance masters such as Dürer, Michelangelo, DaVinci, Raphael, Rubens, and others. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**ART 182 F Basic Drawing (3) (CAN ART 8)**

Two hours lecture and four hours studio per week. An introduction to the fundamentals of representational drawing. Media used include pencil, ink, charcoal, conte, pastels, watercolor, and mixed media. Designed for art majors. (CSU) (UC) (Degree credit)

**ART 183 F Representational Drawing (2)**

Prerequisite: ART 182 F Basic Drawing.

One hour lecture and three hours studio per week. Study of contemporary and traditional realistic drawing concepts with emphasis on their creative application. Media: pencil, ink, charcoal, conte, pastel, watercolor, mixed media. Recommended for art majors. (CSU) (UC) (Degree credit)

**ART 184 F Expressive Drawing (2)**

Prerequisite: ART 182 F Basic Drawing. Advisory: ART 186AF Beginning Life Drawing

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)

**ART 186AF Beginning Life Drawing (3)**

Two hours lecture and four hours studio per week. 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)

**ART 186BF Intermediate Life Drawing (3)**

Prerequisite: ART 186AF Beginning Life Drawing.

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 Intermediate Life Drawing.

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 195 F Anatomical Figure Drawing (2-2-2-2)**

Prerequisite: ART 182 F Basic Drawing.

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)

*Print Making***ART 131 Printmaking (3-3) (CAN ART 20)**

Prerequisite: ART 182 F Basic Drawing or ART 186AF Life Drawing or ART 119 F Design and Color for Non-Art Majors or ART 120 F Basic Design

Two hours lecture and analysis and four hours studio per week. This course provides experience with materials and processes involved in the basic approaches of relief, intaglio, and stencil printing. 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 twice for credit. (CSU) (UC) (Degree credit)

*Painting***ART 127 F Painting Concepts — Floral (2-2-2-2)**

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)

**ART 128 F Oil Portrait Painting (2-2-2-2)**

Prerequisite: ART 129 F Portrait Drawing and Painting.

One hour lecture and three hours studio per week. Representation of features and varied facial types in oil paint. Costume, setting, color harmony and portraiture concepts. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**ART 129 F Portrait Drawing and Painting (2-2-2-2)**

Advisory: ART 182 F Basic Drawing and 186AF Beginning Life Drawing.

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 187 F Watercolor for Non-Art Majors (2-2)**

Letter grade or credit/no credit option.

One hour lecture and three hours studio per week. A beginner's watercolor painting course with emphasis upon a wide variety of traditional and contemporary techniques and skills. Creative self-expression encouraged in still life, landscape and figurative and abstract approaches. Media possibilities include transparent and opaque watercolor and related materials. Not recommended for art majors. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**ART 188 F Watercolor Painting (3-3-3-3)**

Two hours lecture and four hours studio per week. This class is designed specifically for the art major. This course will provide a better understanding of the structure, techniques, and vocabulary of transparent watercolor painting. The course will help students to develop conceptual, perceptual, and technical understanding of the elements of value, texture, color, and space while content, concept and subject matter are being explored. A variety of traditional and contemporary methods are presented through demonstration, lectures, slide presentations, individual instruction, critiques, class discussions, and field trips. The advanced students are encouraged to develop their personal style and own means of expression through a creative, experimental approach to watercolor painting. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**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)

**ART 189BF Intermediate Painting (3)**

Prerequisite: ART 189AF Beginning Painting

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 Intermediate Painting

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. This course may be repeated one time. The second semester of the class, emphasis is upon a body of work demonstrating individual conceptualism and material exploration.

**ART 194 F Studio Painting Laboratory (1-2)**

Fifty-four hours of laboratory per one unit in the painting studio. The lab course provides the opportunity for the painting student to work on new or on-going 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 for credit up to a maximum of four units.

## Independent Studies and Creative Arts

**ART 190 F Art Seminar (.5-2, .5-2, .5-2, .5-2)**

Prerequisite: ART 189AF Beginning Painting

Lecture/Laboratory 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 196HF Honors Creative Arts (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)

**ART 299 F Art Independent Study (1-2, 1-2, 1-2)**

One hour conference per week. For advanced students who wish to pursue a particular area of art through individual study. Course may be repeated three times for credit. (UC Credit Limitation depending on course content) (CSU) (UC review required.) (UC review required.) (Degree credit)

## Automotive Technology

Curriculum leads to the **Associate in Science Degree** and employment in automotive specialties: tune-up and electrical, engine repair, automatic transmissions, brakes and suspensions, power trains, air conditioning, service writing, parts control.

**Complete 24 or more units from the following list:**

Any Automotive course

MACH 116 F Machine Tools (2)

TECH 081 F Technical Mathematics I (3)

WELD 121AF Introduction to Welding (2)

## Automotive Chassis Specialist

The **Automotive Chassis Specialist Certificate** Program requires a total of 15 units in required courses.

**Required Courses (15 units)**

AUTO 050 F Automotive Specialty Practice (2)

AUTO 065 F Automotive Electricity and Electronics (5)

AUTO 083 F Brake and Suspension Systems Repair (8)

## Automotive Maintenance Specialist

The **Automotive Maintenance Specialist Certificate** Program requires a total of 19 units in required courses. This program will help the student become employed as an entry-level automotive maintenance specialist.

**Required Courses (19 units)**

AUTO 050 F Specialty Practice (2)

AUTO 065 F Automotive Electricity and Electronics (5)

AUTO 082 F Automotive Engine Performance and Drivability (8)

AUTO 089 F Automotive Air Conditioning (4)

## Automotive Management Certificate

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 the restricted electives listed below.

### **Required Courses (45 units)**

COUN 141 F Career Exploration (1)  
 AUTO 055 F Automotive Business Management (5)  
 AUTO 060 F Automotive Power Trains (5)  
 AUTO 065 F Automotive Electrical and Electronic Systems (5)  
 AUTO 081 F Engine Rebuilding and Repair (8)  
 AUTO 082 F Automotive Engine Performance and Drivability (8)  
 AUTO 083 F Brakes and Suspension Systems (8)  
 AUTO 084 F Automatic Transmissions (8)  
 AUTO 086 F Front Wheel Drive Auto/Transaxle (3)  
 AUTO 089 F Automotive Air Conditioning (4)

### **Restricted Electives (5 units)**

MACH 116 F Machine Tools (2)  
 BUS 151 F Business Mathematics (3)  
 TECH 081 F Technical Mathematics I (3)  
 BUS 180 F Entrepreneurship: Small Business Management (3)  
 CIS 100 F Introduction to Personal Computers (3)  
 BUS 266 F Human Relations in Business (3)  
 AUTO 051 F Internship in Automotive Management (1-4)  
 ET 100 F Introduction to Environmental Technology (3)

## Automotive Service Advisor

The **Automotive Service Advisor 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 electives listed below.

### **Required Courses (11 units)**

AUTO 055 F Automotive Business Management (5)  
 BUS 180 F Entrepreneurship: Small Business Management (3)  
 CIS 100 F Introduction to Personal Computers (3)

### **Restricted Electives (5 units)**

AUTO 050 F Automotive Specialty Practice (2)  
 AUTO 131 F Automotive Fundamentals (4)  
 BUS 266 F Human Relations in Business (3)

## Automotive Technology

The **Automotive Technology Certificate** Program requires the completion of 32 units of which 28 units must be chosen from required courses. An additional 4 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 (choose 28 units)**

AUTO 050 F Automotive Specialty Practice (2)  
 AUTO 060 F Automotive Power Trains (5)  
 AUTO 065 F Automotive Electrical and Electronic Systems (5)  
 AUTO 070 F Engine Reconditioning (7)  
 AUTO 072 F Automotive Engine Performance (7)  
 AUTO 073 F Brake Systems Repair (7)  
 AUTO 081 F Engine Rebuilding and Repair (8)  
 AUTO 082 F Automotive Engine Performance and Drivability (8)  
 AUTO 083 F Brakes and Suspension Systems (8)  
 AUTO 084 F Automatic Transmissions (8)  
 AUTO 086 F Automatic Transmission Fundamentals (3)  
 AUTO 088 F Fuel Systems and Advanced Diagnosis (4)  
 AUTO 089 F Automotive Air Conditioning (4)  
 AUTO 090 F Emission Control Systems and Advanced Diagnosis (6)  
 AUTO 091 F Cylinder Head Repair (4)  
 AUTO 096 F Performance Technology (4)

### **Restricted Electives (4 units)**

MACH 116 F Machine Tools (2-2)  
 DRAF 070 F Blueprint Reading (2)  
 WELD 121AF Introduction to Welding (2)  
 WELD 121BF Fundamentals of Inert Gas Welding (2)

## Automatic Transmission Specialist

The **Automatic Transmission Specialist Certificate** Program requires a total of 18 units in required courses. This program will help the student become employed as an automatic transmission specialist.

### **Required Courses (18 units)**

AUTO 050 F Automotive Specialty Practice (2)  
 AUTO 065 F Automotive Electrical and Electronic Systems (5)  
 AUTO 084 F Automatic Transmissions (8)  
 AUTO 086 F Automatic Transmission Fundamentals (3)

## Emission Control Specialist

The **Emission Control Specialist Certificate** Program requires a total of 16 units in required courses. This program will help the student become employed as an automotive emissions testing and repair specialist, and provide opportunities to study toward National Institute of Automotive Excellence (ASE) certification and toward the State of California emission control license examination.

### Required Courses (16 units)

- AUTO 050 F Automotive Specialty Practice (2)
- AUTO 082 F Automotive Engine Performance and Drivability (8)
- AUTO 090 F Emission Control Systems and Advanced Diagnosis (6)

## Engine Performance Specialist

The **Engine Performance Specialist Certificate** Program requires a total of 17 units in required courses. This provides preparation for advanced entry-level employment as an automotive technician who will specialize in engine performance diagnosis and drivability problem repair, and will also qualify the student to take the National Institute for Automotive Service Excellence (ASE) A6 Electrical and Electronics and A8 Engine Performance examinations.

### Required Courses (17 units)

- AUTO 065 F Automotive Electrical Systems (5)
- AUTO 082 F Automotive Engine Performance and Drivability (8)
- AUTO 088 F Fuel Systems and Advanced Drivability Diagnosis (4)

## Fabrication Specialist

The **Fabrication Specialist Certificate** Program requires a total of 18 units in 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 (18 units)

- AUTO 065 F Automotive Electricity and Electronics (5)
- AUTO 055 F Automotive Business Management (5)
- 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)

## Light Repair Specialist

The **Light Repair Specialist Certificate** Program requires a total of 18 units in required courses. Completion of this program will help the graduate find entry-level employment as an automotive light repair specialist.

### Required Courses (18 units)

- AUTO 050 F Automotive Specialty Practice (2)
- AUTO 065 F Automotive Electrical and Electronic Systems (5)
- AUTO 073 F Brake Repair (7)
- AUTO 089 F Air Conditioning (4)

## Manual Drive Train Specialist

The **Manual Drive Train Specialist Certificate** Program requires a total of 13 units 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 and Axle repair and in Automotive Electricity and Electronics.

### Required Courses (13 units)

- AUTO 050 F Automotive Specialty Practice (2)
- AUTO 060 F Automotive Power Trains (5)
- AUTO 065 F Automotive Electrical and Electronic Systems (5)

## Automotive Courses

### **AUTO 050 F Automotive Specialty Practice (2-2-2-2)**

Corequisite: Concurrent enrollment in any automotive technology course

One hour lecture and up to six hours lab practice per week. Emphasis is placed on the development of skill in the specialty areas of the students' 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, 1-4, 1-4, 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 Automotive Fundamentals

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 Automotive Fundamentals

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 laboratory assignments. (Degree credit)

**AUTO 065 F Automotive Electrical and Electronic Systems (5)**

Advisory: AUTO 131 F Automotive Fundamentals

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 Automotive Fundamentals

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 Automotive Fundamentals

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 laboratory sessions. (Degree credit)

**AUTO 073 F Brake Systems Repair (7)**

Advisory: AUTO 131 F Automotive Fundamentals

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 Automotive Fundamentals

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 (8-8)**

Advisory: AUTO 131 F Automotive Fundamentals

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 Automotive Fundamentals

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 Automotive Fundamentals

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 (3-3)**

Advisory: AUTO 131 F Automotive Fundamentals

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 Automotive Fundamentals

Three hours demonstrated lecture and three hours laboratory 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 Automotive Fundamentals

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 laboratory units or on other vehicles. (Degree credit)

**AUTO 090 F Emission Control Systems and Advanced Diagnosis (6)**

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 Automotive Fundamentals

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)

**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)

## Biology

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)****Any two of the following:**

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)

**Additional 8-11 units from the above list and/or the following:**

CHEM	111AF	General Chemistry	(5)
CHEM	111BF	General Chemistry	(5)
CHEM	200 F	Elementary Organic Chemistry	(3)
CHEM	211AF	Organic Chemistry	(5)
CHEM	211BF	Organic Chemistry	(5)
MATH	141 F	College Algebra	(4)
MATH	142 F	Trigonometry	(4)
MATH	150AF	Calculus	(4)
MATH	150BF	Calculus	(4)
PHYS	205 F	College Physics	(4)
PHYS	206 F	College Physics	(4)
PHYS	210 F	Physics	(4)
PHYS	211 F	Physics	(4)
PHYS	221 F	General Physics	(4)
PHYS	222 F	General Physics	(4)
PHYS	223 F	General Physics	(4)

## Biology Technician

The **Biological Technician Associate in Science Degree** program requires a total of 18 units chosen from the courses listed below.

**Normal High School Preparation: Biology Recommended Complete 9-10 units from the following:**

BIOL	101 F	General Biology	(5) or
BIOL	170 F	Organismal Biology	(5)
BIOL	109 F	Genetics and Biotechnology in Society	(3)
CHEM	101 F	Introduction to Chemistry	(5) or
CHEM	107 F	Elementary Chemistry	(5)
CIS	111 F	Introduction to Information Systems	(3)
ELEC	100 F	DC/AC Theory	(1-4)
ELEC	100LF	DC/AC Lab	(1-2)
HORT	001 F	Principles of Horticulture	(4)
HORT	002 F	Principles of Horticulture	(4)
MICR	220 F	Medical Microbiology	(4)
TECH	082 F	Technical Mathematics	(3)

**Select additional 8-9 units from below:**

BIOL	222 F Marine Biology (3)
CHEM	111AF Chemistry (5)
ESC	130 Introduction to Oceanography
HORT	205 F Applied Entomology (3)
MICR	262 F Microbiology (5)

*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. (Non-degree credit)

**BIOL 071 F Biological Techniques and Applications (4)**

Three hours lecture and three hours laboratory per week. A semester course introducing students to modern laboratory skills. Various instruments are used to sample and collect data under laboratory and natural conditions. Course includes units on lab safety; basic microbiology; culture techniques; histotechnology; environmental sampling and monitoring systems; the fundamentals of experimental design; and applications of the microcomputer. Class emphasizes practical hands-on experience and can help prepare students for entry-level positions in industry. (Degree credit)

**BIOL 100 F General 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)

**BIOL 101 F General Biology (5)**

Four hours lecture and three hours lab per week. This integrated lecture-laboratory 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. (CSU) (UC; no UC credit if taken after a 200 level Biology) (Degree credit)

**BIOL 101HF Honors General Biology (5)**

Four hours lecture and three hours lab per week. This integrated lecture-laboratory 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)

**BIOL 102 F Human Biology (3)**

Three hours lecture and discussion per week. Integrated lectures, discussions and films are designed to study modern biological concepts presented in a human context. The concepts include biological chemistry, cellular basis of life, energetics, cell cycle, anatomy, physiology, reproduction, development, genetics, demography, ecology and evolution. Included in the course are discussions of current topics on environmental, nutritional and public health issues as they relate to the human condition. (CSU) (UC; no UC credit if taken after BIOL 101 F or 101HF) (Degree credit)

**BIOL 102LF Human Biology Laboratory (1)**

Corequisite: BIOL 102 F Human Biology

Three hours lab per week. This laboratory supplements the BIOL 102 F Human Biology lecture. This is a general education course for non-biology majors providing direct participation in experiments, demonstrations, and discussions. Topics include: elements of human anatomy and physiology, fitness, nutrition, disease, elements of human heredity and environmental adaptations. (CSU) (UC; no UC credit if taken after BIOL 101 F or 101HF) (Degree credit)

**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)

**BIOL 108 F Plants and People (3)**

Letter grade or credit/no credit 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 hands-on learning activities. Specific topics include plant structure, function, origins of agriculture and domestication. Historical and contemporary uses of important plant products such as drugs, medicines, oils, resins, beverages, foods and industrial products are included. The nutritional values of major food plants are evaluated. (CSU) (UC) (Degree credit)

**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)

**BIOL 109LF Genetics and Biotechnology in Society Laboratory (2)**

Six hours lab per week. A semester course introducing students to the modern biological laboratory. Various instruments used to sample, measure, and collect data under laboratory and natural conditions. Course includes units on lab safety; basic microbiology; culture techniques; molecular analysis; and applications of the computer. Class emphasizes practical hands-on experience and an understanding of the basic principles behind the technologies. (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)

**BIOL 170 F Organismal Biology (5)**

Prerequisite: High School Biology with a grade of "B" 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 laboratory 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)

**BIOL 222 F Marine Biology (3)**

Prerequisite: A biological science laboratory 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 field-work 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)

**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 laboratory 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)

**BIOL 268 F General Botany (5)**

Prerequisite: A biological science laboratory 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)

**BIOL 272 F Cell and Molecular Biology (4)**

Prerequisite: BIOL 170 F Organismal Biology 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 laboratory techniques and instrumentation used in modern biology. Discussion topics which are supported by laboratory 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)

**BIOL 274 F General Ecology (4)**

Prerequisite: BIOL 170 F Organismal Biology

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 laboratory sessions emphasize basic ecological principles and relationships. These include identification of plants and animals, community analysis, environmental survey techniques, laws of thermodynamics, behavioral and physiological adaptations of organisms, and ecological models. (CSU) (UC) (Degree credit)

**BIOL 276 F Genetics and Evolutionary Biology (4)**

Prerequisite: BIOL 272 F Cell and Molecular Biology 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. Laboratory 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 (1-1-1)**

Prerequisite: A 200-level course in the Biological Sciences Division with a grade of "B" or better.

Laboratory and/or field investigations with 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 laboratory 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

### Business Administration A.A. Degree

Curriculum leads to the **Associate in Arts Degree in Business Administration**. This degree requires 18 units of which 18 units are in required courses listed below.

#### Complete 18 units from the following:

ACCT	101AF	Financial Accounting (4)
ACCT	101BF	Managerial Accounting (4)
BUS	131 F	Principles of International Business (3)
BUS	100 F	Introduction to Business (3)
BUS	211 F	Writing for Business (3)
BUS	240 F	Legal Environment of Business (3) or
BUS	241AF	Business Law (3) (See counselor for determination of correct course.)
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) or
MATH	130 F	Calculus for Business (4) or
MATH	150AF	Calculus (4)
MKT	100 F	Introduction to Marketing (3)
PHIL	160 F	Introduction to Ethics (3) or
PHIL	170 F	Logic and Critical Thinking (3)

### Business Management A.S. Degree

Curriculum leads to the **Associate in Science Degree in Business Management**. This degree requires 29-30 units chosen from the required courses listed below.

#### Required Courses (6 units):

BUS	262 F	Principles of Management (3)
CIS	100 F	Introduction to Personal Computers (3)

#### One course from the following for a total of 3-4 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 (3)
BUS	211 F	Writing for Business (3)

#### One course from the following for a total of 3 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:

BUS	162 F	Business Economics (3)
BUS	251 F	Business Finance (3)
ECON	101 F	Principles of Economics — Micro (3)

#### 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 (3)
BUS	241AF	Business Law (3)

#### One course from the following for a total of 3 units:

BUS	266 F	Human Relations in Business (3)
BUS	267 F	Principles of Supervision (3)

#### One course from the following for a total of 2 units:

CIS	150 F	Introduction to the Internet (2)
MKT	151 F	Internet Marketing (2)

#### One course from the following for a total of 3 units:

MKT	100 F	Introduction to Marketing (3)
BUS	224 F	International Marketing (3)

### Business and Technology Skills Certificate

Curriculum leads to the **Business and Technology Skills Certificate** and/or entry-level employment in business. The certificate program is 38-44 units and satisfies the goals of Tech Prep and SCANS. Students create a career path and select electives. This certificate program is designed to promote communications, decision-making and interpersonal skills used in business. A minimum grade of "C" is required in each course taken.

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

\* 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.

**Restricted Electives (10-16 units)**

Student selects four electives that have been pre-approved by the counselor and department coordinator and that provide the skills required for the student's career path. Student is responsible for completing any necessary prerequisites.

BUS	061 F Business Skills Internship (1-4)
TECH	Elective 1 (3)
TECH	Elective 2 (3)
TECH	Elective 3 (3)
TECH	Elective 4 (3)

***Business Management Certificate***

The **Business Management Certificate** requires the completion of 29-30 units chosen from the courses listed below. A minimum grade of "C" required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

**Required course:**

CIS	100 F Introduction to Personal Computers (3)
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**One course from the following for a total of 3-4 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 (3)
BUS	211 F Writing for Business (3)

**One course from the following for a total of 3 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:**

BUS	162 F Business Economics (3)
BUS	251 F Business Finance (3)
ECON	101 F Principles of Economics — Micro (3)

**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 (3)
BUS	241AF Business Law (3)

**One course from the following for a total of 3 units:**

BUS	090 F Current Issues in Business (.5-3) (Must take a total of 3 units to meet requirement)
BUS	262 F Principles of Management (3)

**One course from the following for a total of 3 units:**

BUS	266 F Human Relations in Business (3)
BUS	267 F Principles of Supervision (3)

**One course from the following for a total of 2 units:**

BUS	269 F Managing Business Projects (2)
CIS	150 F Introduction to Internet (2)
MKT	151 F Internet Marketing (2)

**One course from the following for a total of 3 units:**

BUS	224 F International Marketing (3)
MKT	100 F Introduction to Marketing (3)

***E-Business Development Certificate***

The **E-Business Development Certificate** requires the completion of 15-17 units chosen from the required courses listed below.

**Required Courses (9 units):**

BUS	170 F Principles of E-Business (3)
BUS	182 F Doing Business Online (2)
CIS	150 F Introduction to Internet (2)
MKT	151 F Internet Marketing (2)

**One course from the following for a total of 2-3 units:**

BUS	180 F Small Business Management (3) or
BUS	181 F Business Plan Development (2)

**One course from the following for a total of 2-3 units:**

CIS	100 F Introduction to Personal Computers (3)
CIS	105 F Spreadsheet I (2)

**One course from the following for a total of 2 units:**

CIS	050 F Web Page Design I (2)
CIS	152 F Web Page Design II (2)

***Entrepreneurship A.S. Degree***

Curriculum leads to the **Associate in Science Degree in Entrepreneurship**. This degree requires 29-30 units chosen from the required courses listed below.

**Required Courses (6 units):**

BUS	180 F Small Business Management (3)
CIS	100 F Introduction to Personal Computers (3)

**One course from the following for a total of 3-4 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 (3)
BUS	211 F Writing for Business (3)

**One course from the following for a total of 3 units:**

BUS	100 F Introduction to Business (3)
BUS	170 F Principles of E-Business (3)

**One course from the following for a total of 3 units:**

BUS 162 F Business Economics (3)  
 BUS 251 F Business Finance (3)  
 ECON 101 F Principles of Economics—Micro (3)

**One course from the following for a total of 2 units:**

BUS 181 F Business Plan Development (2)  
 BUS 182 F Doing Business Online (2)

**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 (3)  
 BUS 241AF Business Law (3)

**One course from the following for a total of 3 units:**

BUS 266 F Human Relations in Business (3)  
 BUS 267 F Principles of Supervision (3)

**One course from the following for a total of 3 units:**

MKT 100 F Introduction to Marketing (3)  
 MKT 201 F Small Business Promotions (3)

### Entrepreneurship Certificate

The **Entrepreneurship Certificate** requires the completion of 29-30 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 (6 units):**

BUS 180 F Small Business Management (3)  
 CIS 100 F Introduction to Personal Computers (3)

**One course from the following for a total of 3-4 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 (3)  
 BUS 211 F Writing for Business (3)

**One course from the following for a total of 3 units:**

BUS 100 F Introduction to Business (3)  
 BUS 170 F Principles of E-Business (3)

**One course from the following for a total of 3 units:**

BUS 162 F Business Economics (3)  
 BUS 251 F Business Finance (3)  
 ECON 101 F Principles of Economics — Micro (3)

**One course from the following for a total of 2 units:**

BUS 181 F Computerized Business Plan Development (2)  
 BUS 182 F Doing Business Online (2)  
 BUS 269 F Managing Business Projects (2)

**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 (3)  
 BUS 241AF Business Law (3)

**One course from the following for a total of 3 units:**

BUS 090 F Current Issues in Business (.5-3) (Must take 3 units to meet requirement)  
 BUS 266 F Human Relations in Business (3)  
 BUS 267 F Principles of Supervision (3)

**One course from the following for a total of 3 units:**

MKT 100 F Introduction to Marketing (3)  
 MKT 201 F Small Business Promotions (3)

### International Business Management A.S. Degree

Curriculum leads to the **Associate in Science Degree in International Business Management**. This degree requires 29-30 units of which all 29-30 units are required courses.

**Required Courses (15 units):**

BUS 131 F Principles of International Business (3)  
 BUS 132 F Principles of Import/Export (3)  
 BUS 224 F International Marketing (3)  
 BUS 225 F International Business Management (3)  
 CIS 100 F Introduction to Personal Computers (3)

**One course from the following for a total of 3-4 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 (3)  
 BUS 211 F Writing for Business (3)

**One course from the following for a total of 3 units:**

BUS 100 F Introduction to Business (3) or  
 BUS 180 F Small Business Management (3)

**One course from the following for a total of 3 units:**

BUS 240 F Legal Environment of Business (3) or  
 BUS 241AF Business Law (3) (See counselor for determination of correct course)

**One course from the following for a total of 2 units:**

CIS 150 F Introduction to Internet (2) or  
 MKT 151 F Internet Marketing (2)

## International Business Certificate

The **International Business Certificate** requires a total of 9 units.

### **Required Courses (9 units)**

- BUS 131 F Principles of International Business (3)
- BUS 132 F Principles of Import/Export (3)
- BUS 224 F International Marketing (3) or
- BUS 225 F International Management (3)

## International Business Management Certificate

The **International Business Management Certificate** requires the completion of 29-30 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.

It is strongly recommended that students majoring in International Business become proficient in one or more foreign languages. The following languages are offered in the Foreign Language Department: Chinese, French, German, Italian, Japanese, and Spanish.

### **Required Courses (15 units):**

- BUS 131 F 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)
- CIS 100 F Introduction to Personal Computers (3)

### **One course from the following for a total of 3-4 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 (3)
- BUS 211 F Writing for Business (3)

### **One course from the following for a total of 3 units:**

- BUS 100 F Introduction to Business (3)
- BUS 180 F Small Business Management (3)

### **One course from the following for a total of 3 units:**

- (See counselor for determination of correct course)
- BUS 240 F Legal Environment of Business (3)
  - BUS 241AF Business Law (3)

### **One course from the following for a total of 2 units:**

- MKT 150 F Introduction to Internet (2)
- MKT 151 F Internet Marketing (2)

## Managerial Communications Certificate

The **Managerial Communications Certificate** requires a total of 9 units of which 9 units are required courses.

### **Required Courses (9 units):**

- BUS 211 F Writing for Business (3)
- BUS 290 F Managerial Communications (3)
- BUS 266 F Human Relations in Business (3) or
- MKT 208 F Principles of Selling (3)

## Marketing Management A.S. Degree

Curriculum leads to the **Associate in Science Degree in Marketing Management**. This degree requires 29-30 units chosen from the required courses listed below.

### **Required Courses (5 units):**

- CIS 100 F Introduction to Personal Computers (3)
- MKT 151 F Internet Marketing (2)

### **One course from the following for a total of 3-4 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 (3)
- BUS 211 F Writing for Business (3)

### **One course from the following for a total of 3 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:**

- BUS 162 F Business Economics (3)
- BUS 170 F Principles of E-Business (3)
- ECON 101 F Principles of Economics — Micro (3)

### **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 (3)
  - BUS 241AF Business Law (3)

### **One course from the following for a total of 3 units:**

- BUS 224 F International Marketing (3)
- MKT 100 F Introduction to Marketing (3)

### **One course from the following for a total of 3 units:**

- MKT 103 F Principles of Advertising (3)
- MKT 205 F Multicultural Markets in the U.S. (3)

### **One course from the following for a total of 3 units:**

- MKT 201 F Small Business Promotions (3)
- MKT 208 F Principles of Selling (3)

## Marketing Management Certificate

The **Marketing Management Certificate** requires completion of 28-30 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):

CIS 100 F Introduction to Personal Computers (3)  
MKT 151 F Internet Marketing (2)

### One course from the following for a total of 3-4 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 (3)  
BUS 211 F Writing for Business (3)

### One course from the following for a total of 3 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:

BUS 162 F Business Economics (3)  
BUS 170 F Principles of E-Business (3)  
ECON 101 F Principles of Economics — Micro (3)

### 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 (3)  
BUS 241AF Business Law (3)

### One course from the following for a total of 3 units:

BUS 224 F International Marketing (3)  
MKT 100 F Introduction to Marketing (3)

### One course from the following for a total of 3 units:

MKT 103 F Principles of Advertising (3)  
MKT 205 F Multicultural Markets in U.S. (3)

### One course from the following for a total of 2-3 units:

BUS 269 F Managing Business Projects (2)  
MKT 090 F Current Issues in Marketing (.5-3) (Must take a minimum of 2 units to meet requirement)  
MKT 201 F Small Business Promotions (3)  
MKT 208 F Principles of Selling (3)

## Project Management Certificate

The Project Management Certificate program requires a total of 6 units of which 6 units are in required courses.

### Required Courses (6 units):

BUS 269 F Managing Business Projects (2)  
CIS 120AF Project Management I (2)  
CIS 120BF Project Management II (2)

## Business Management Consumer-Related Courses

### **BUS 021 F Securities Market (1)**

Credit/no credit only

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. (Degree credit)

### **BUS 022 F Common Stocks (1)**

Credit/no credit only

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. (Degree credit)

### **BUS 023 F Fixed Income Securities (1)**

Credit/no credit 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)**

Credit/no credit only. Recommended: BUS 021 F The Securities Market.

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 return-risk characteristics. (Degree credit)

### **BUS 025 F Investment and Retirement Plans (1)**

Credit/no credit 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 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. (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)

## English-Related Courses

### **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) (Non-degree credit)

### **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)

### **BUS 113 F Introduction to Technical Writing (3)**

Three hours lecture per week. This introductory technical writing class covers research, editing, proofreading and writing skills. Designed for students who wish to develop their professional technical writing skills and for students who are exploring careers as technical writers or editors. Emphasis is placed on organizing technical data into a specified format and on editing technical material. (CSU) (Degree credit)

### **BUS 211 F Writing for Business (3)**

Prerequisite: ENGL 100 F College Writing 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, 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)

## International Business

### **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)

### **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 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 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)

## Law-Related Courses

### **BUS 041 F Survey of Business Law (3)**

Three hours lecture per week. This law course emphasizes California business law and includes an introduction to law concerning the practicing attorney and the court systems. The general subject areas to be studied are contracts, agency, sales, negotiable instruments, personal and real property, partnerships and corporations, insurance, suretyship and guaranty, and creditors' rights and bankruptcy. (Degree credit)

### **BUS 240 F Legal Environment of Business (3) (CAN BUS 12)**

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) (Degree credit)

### **BUS 241AF Business Law (3) (CAN BUS 8)**

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)

### **BUS 241BF Business Law (3)**

Prerequisite: BUS 241AF Business Law.

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)

## *Management-Related Courses*

### **ACCT 105 F Accounting for Supervisors and Managers (3)** (See Accounting.)

#### **BUS 061 F Business Skills Internship (1-4)**

Prerequisite: Completion of 7 units or 20 percent of the Business and Technology Skills Certificate. Credit/no credit only.

One hour lecture per week and 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 a student through employment in business or industry. Students must have completed 7 units or 20 percent 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 and Technology Skills Certificate. (Degree credit)

#### **BUS 080 F E-Business Technology (.5)**

One hour lecture per week. This course explains the essential Internet technology needed to implement electronic business strategies for the small business. Designed for non-technical persons, topics include understanding e-business terminology, defining e-business goals, determining hardware and software requirements, evaluating different types of connectivity, identifying resources, and estimating costs. (Degree credit)

#### **BUS 090 F Current Issues in Business (.5-3)**

Maximum of three hours lecture and maximum of 9 hours lab. This course offers timely business-related topics 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 semester. Consult the class schedule to verify specific topic area and credit offered for a particular semester. May be taken for credit four times.

#### **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 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)

#### **BUS 170 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 251 F Business Finance (3)**

Three hours lecture per week. An introductory course to the field of finance, the focus is on the practical significance of the fundamental concepts of finance. The class will include the analysis of financial markets, financial statements, planning and control, working capital management, time value of money, valuation models, capital budgeting, dividend policy, and mergers and acquisitions. (CSU) (Degree credit)

#### **BUS 262 F Principles of Management (3)**

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 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)

**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 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, issues of diversity, managing meetings, making presentations, interviewing, performance appraisals, negotiation, conflict resolution, using electronic communications technology, and group communication strategies. (CSU) (Degree credit)

## *Math-Related Courses*

**BUS 051 F Basic Business Mathematics (3)**

Three hours lecture per week. This course reviews the fundamentals of addition, subtraction, multiplication, division, fractions, decimals, and interest. Practice drills are provided to improve accuracy and speed. Recommended to all majors in the Business and CIS Division who lack proficiency in basic mathematics as determined by the learning skills evaluation instrument. (Non-degree credit)

**BUS 151 F Business Mathematics (3)**

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. BUS 151 F Business Mathematics is recommended of all majors in the Business Division. This course does not meet math requirements for transfer to CSU. (CSU) (Degree credit)

## *Carpentry*

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:**

- ARCH 113 F Architectural Drawing I (3)
- CSTR 006 F Introduction to Residential Plumbing & Mechanical 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 Construction (4)
- CSTR 104 F Concrete and Masonry (2.5)
- CSTR 108 F Surveying for Builders (2)
- CSTR 110 F Residential Estimating (3)
- CSTR 112 F Construction Materials, Specifications, and Purchasing (2)
- CSTR 116 F Residential Construction Practice I (4)
- WOOD 012 F Cabinetmaking/Millwork (4)

## *Chemistry*

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)**

- CHEM 111AF General Chemistry (5)
- CHEM 111BF General Chemistry (5)

**Restricted Electives (8 units)**

- CHEM 211AF Organic Chemistry (5)
- CHEM 211BF Organic Chemistry (5)
- PHYS 205 F College Physics (4)
- PHYS 206 F College Physics (4)
- PHYS 210 F Physics (4)
- PHYS 211 F Physics (4)
- PHYS 221 F General Physics (4)
- PHYS 222 F General Physics (4)
- PHYS 223 F General Physics (4)
- MATH 150AF Calculus (4)
- MATH 150BF Calculus (4)

## 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 laboratory provides hands-on experience with chemical phenomena. The course is designed for the non-science major seeking a laboratory science. (CSU) (UC; no credit if taken after CHEM 111AF.) (Degree credit)

### **CHEM 101 F Introduction to Chemistry (5) (CAN CHEM 6)**

Prerequisite: MATH 040 F Intermediate Algebra with a grade of "C" or better.

Four hours of lecture, one hour problem solving, three hours of lab per week. This introductory course emphasizes the principles of inorganic and organic chemistry and includes a laboratory. It will meet physical science transfer requirements and is required of numerous allied health sciences majors. (CSU) (UC Credit Limitation: no credit if taken after CHEM 111AF) (Degree credit)

### **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. The course emphasizes basic principles of chemistry and their relationship to the modern world. This course will foster an interest in science by preparing students 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)

### **CHEM 107 F Elementary Chemistry (5)**

Prerequisite: MATH 040 F Intermediate Algebra 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. Laboratory work supports topics of Chemistry 107 F. (CSU) (UC Credit Limitation; no credit if taken after CHEM 111AF) (Degree credit)

### **CHEM 111AF General Chemistry (5) (CAN CHEM 2) (CHEM 111AF + 111BF = CAN CHEM SEQ A)**

Prerequisite: CHEM 107 F Elementary Chemistry with a grade of "C" or better or a passing score on the Chemistry Proficiency Test; and MATH 040 F Intermediate Algebra with grade of "C" or better or two years of high school algebra.

Three hours lecture, two hours of problem solving, three hours lab, 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. Laboratory work supports topics of Chemistry 111AF. (CSU) (UC) (Degree credit)

### **CHEM 111BF General Chemistry (5) (CAN CHEM 4) (CHEM 111AF + 111BF = CAN CHEM SEQ A)**

Prerequisite: CHEM 111AF General Chemistry with a grade of "C" or better.

Three hours lecture, two hours of problem solving, three hours lab, and one hour discussion per week. Chemistry lecture topics are selected from kinetics, equilibria, acid-base, thermodynamics, electrochemistry, transition metals and coordination compounds. Laboratory work supports topics of Chemistry 111BF. (CSU) (UC) (Degree credit)

### **CHEM 200 F Elementary Organic Chemistry (3)**

Prerequisite: CHEM 111AF General Chemistry with a grade of "C" or better.

Three hours lecture per week. This is a brief introductory organic chemistry course intended for students majoring in areas other than chemistry. Emphasis is upon nomenclature, structure, reactivity, chemical and physical properties, reaction mechanisms, and structure determination using spectroscopy. (CSU) (UC credit limitation) (Degree credit)

### **CHEM 201 F Basic Concepts of Organic and Biochemistry (5)**

Prerequisite: CHEM 101 F Introduction to Chemistry 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 211AF Organic Chemistry (5)**

Prerequisite: CHEM 111BF General Chemistry 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 pre-medical, 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. Laboratory work includes techniques such as distillation, extraction, chromatography, and synthesis and qualitative analysis. (CSU) (UC Credit Limitation) (Degree credit)

**CHEM 211BF Organic Chemistry (5)**

Prerequisite: CHEM 211AF Organic Chemistry 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. Laboratory work is on synthesis and qualitative analysis employing techniques learned in CHEM 211AF. (CSU) (UC Credit Limitation) (Degree credit)

## *Child Development and Family Life*

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 CDFL 225 F ECE: Student Teaching with Field Experience will meet the Title V Child Development Teacher Permit requirement. This degree requires a total of 18 units of which 15 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 (15 units)**

- CDFL 110 F Anti-Bias Perspective (3)
- CDFL 120 F Human Development: Early Years (3)
- CDFL 200 F Human Development: Adolescence (3)
- CDFL 201 F Child in the Home and Community (3)
- CDFL 204 F Introduction to Special Education (3)

**Restricted Electives (3 units)**

- CDFL 115 F Introduction to ECE Curriculum (2)
- CDFL 122 F ECE: Principles (3)
- CDFL 123AF ECE Art Creativity Education (2)
- CDFL 123BF ECE Language Literacy Education (2)
- CDFL 123CF ECE Science Math Education (2)
- CDFL 123DF ECE Music Education (2)
- CDFL 151 F School Age Child: Programs, Curriculum & Guidance (3)
- CDFL 173 F The Process of Parenting (3)
- CDFL 238 F ECE Curriculum Design (3)

## *Child Development*

### *After School Care Certificate*

The **After School Care Certificate** is designed to train adults for employment in programs serving school-age children in after school settings. Completion of this certificate will meet the State requirements for school-age providers in a facility licensed for after-school care. The **After School Care Certificate** requires completion of 15 units of which 12 units 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)**

- CDFL 110 F Anti-bias Perspective Seminar (3)
- CDFL 120 F Human Development: Early Years (3)
- CDFL 151 F School Age Child: Programs, Curriculum and Guidance (3)
- CDFL 201 F Child in Home and Community (3)

**Restricted Electives (3 units)**

- CDFL 112 F Teaching Peace (2)
- CDFL 123BF ECE: Language Literacy Education (2)
- CDFL 123DF ECE: Music Education (2)\*
- CDFL 200 F Human Development: Adolescence (3)
- CDFL 208 F Working with Families of Children with Special Needs (3)
- CDFL 215 F Food and Nutrition for Children (2)

### *Associate Teacher Certificate*

The **Associate Teacher Certificate** exceeds the minimum requirements for a Title 22 qualified preschool teacher. The Associate Teacher Certificate plus required experience qualifies the student for the Title V Child Development Permit, Associate Teacher Level. The **Associate Teacher Certificate** requires 15 units of which 11 are in required courses. An additional 4 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in each course taken.

**Required Courses (11 units)**

- CDFL 120 F Human Development: Early Years (3)
- CDFL 121 F Preschool Child (1.5)
- CDFL 121LF Preschool Child Lab (.5)
- CDFL 122 F ECE: Principles (3)
- CDFL 201 F Child in Home and Community (3)

**Restricted Electives (4 units)**

- CDFL 123AF ECE: Art Creativity Education (2)  
 CDFL 123BF ECE: Literacy Education (2)  
 CDFL 123CF ECE: Science Math Education (2)  
 CDFL 123DF ECE: Music Education (2)\*

\* Students recommended for articulation with certificates from NOCROP Careers with Children, Preschool Occupations Program or Cooperative Vocational Education, Preschool Teacher Program receive two units of credit for CDFL 121 F and 121LF. This credit will be posted to the transcript upon completion of four units in Child Development at Fullerton College. For information call (714) 992-7731.

Articulation for students who qualify for the Placentia-Yorba Linda High School District. Student will receive one and a half units for CDFL 121 F The Preschool Child Lecture. The Preschool Lab will be completed in the Fullerton College Child Development Lab School site.

***Weekend Associate Teacher Certificate***

The **Weekend Associate Teacher Certificate** is the same number of units as required in the Associate Teacher Certificate, and will provide students a weekend option to complete the minimum State requirements under Title 22 for employment as a teacher or assistant in privately owned children's programs serving children 2 to 5 years of age. The weekend certificate meets the educational requirements for the Child Development Permit Matrix, Associate Teacher level. Weekend sessions include Friday, Saturday, and Sunday. The **Weekend Associate Teacher Certificate** requires 15 units of which 11 are in required courses. An additional 4 units must be chosen from the restricted electives listed below. Students must complete 12 units during the weekend course offerings to be eligible for the Weekend Associate Teacher Certificate. A minimum grade of "C" is required in each course taken.

**Required Courses (11 units)**

- CDFL 120 F Human Development: Early Years (3)  
 CDFL 122 F ECE: Principles (3)  
 CDFL 135 F ECE: Health and Safety (2)  
 CDFL 201 F Child in Home and Community (3)

**Restricted Electives (4 units)**

- CDFL 123AF ECE: Art Creativity Education (2)  
 CDFL 123BF ECE: Literacy Education (2)  
 CDFL 123CF ECE: Science Math Education (2)  
 CDFL 123DF ECE: Music Education (2)\*

\* Students recommended for articulation with certificates from NOCROP Careers with Children, Preschool Occupations Program or Cooperative Vocational Education, Preschool Teacher Program receive one and one half units of credit for CDFL 121 F The Preschool Child Lecture. This credit will be posted to the transcript upon completion of four units in Child Development at Fullerton College. For information call (714) 992-7731.

***Early Childhood Education Teacher Certificate***

The **Early Childhood Education Teacher Certificate** Program requires the completion of 30 units of which 26 are in required courses. An additional 4 units must be chosen from the restricted electives listed below. A minimum grade of "C" 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. A valid American Red Cross First Aid Card or equivalent must be on file.

**Required Courses (26 units)**

- CDFL 110 F Anti-bias Perspective Seminar (3)  
 CDFL 120 F Human Development: Early Years (3)  
 CDFL 122 F ECE: Principles (3)  
 CDFL 201 F Child in Home and Community (3)  
 CDFL 215 F Food and Nutrition for Children (2)  
 CDFL 225 F ECE: Student Teaching with Field Experience (3)  
 CDFL 238 F Curriculum Design in Early Childhood Education (3)

**Plus any 6 units from the following:**

- CDFL 123AF ECE Curriculum: Creative Arts (2)  
 CDFL 123BF ECE Curriculum: Language Arts (2)  
 CDFL 123CF ECE Curriculum: Science (2)  
 CDFL 123DF ECE Curriculum: Music & Movement (2)\*

**Restricted Electives (4 units)**

- CDFL 112 F Teaching Peach (2)  
 CDFL 121 F Preschool Child (1.5)  
 CDFL 121LF Preschool Child Lab (.5)  
 CDFL 135 F ECE: Health and Safety (2)  
 CDFL 141 F Principles of Infant Toddler Care (3)  
 CDFL 173 F The Process of Parenting (3)  
 CDFL 200 F Human Development: Adolescence (3)  
 CDFL 202 F Contemporary Family Living (3)  
 CDFL 204 F Introduction to Special Education (3)  
 CDFL 206 F Perceptual-Motor Development for Children (2)  
 CDFL 207 F Principles and Techniques for EC Special Ed with Field Exp (3)  
 CDFL 208 F Working with Families of Children with Special Needs (3)

\* Students recommended for articulation with certificates from NOCROP Careers with Children, Preschool Occupations Program or Cooperative Vocational Education, Preschool Teacher Program receive two units of credit for CDFL 121 F and 121LF. This credit will be posted to the transcript upon completion of six units in Child Development at Fullerton College. For information call (714) 992-7731.

Articulation for students who qualify for the Placentia-Yorba Linda High School District. Student will receive one and a half units for CDFL 121 F The Preschool Child Lecture. The Preschool Lab will be completed in the Fullerton College Child Development Lab School site.

## Early Childhood Education Administration Certificate

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 21 additional units, 14 of those units must be from required courses and 7 units must be chosen from the restricted electives shown below. 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 (14 units)

- CDFL 110 F Anti-bias Perspective Seminar (3)
- CDFL 204 F Introduction to Special Education (3)
- CDFL 205 F Planning Environments for Young Children (2)
- CDFL 230 F ECE: Administration (3)
- CDFL 231 F ECE: Administration II (3)

### Restricted Electives (7 units)

- CDFL 112 F Teaching Peace (2)
- CDFL 135 F ECE: Health and Safety (2)
- CDFL 141 F Principles of Infant/Toddler Care (3)
- CDFL 173 F The Process of Parenting (3)
- CDFL 200 F Human Development: Adolescence (3)
- CDFL 206 F Perceptual Motor Development for Children (2)
- CDFL 207 F Principles and Techniques for EC Special Ed with Field Exp (3)
- CDFL 208 F Working with Families of Children with Special Needs (3)
- CDFL 240 F Leadership in the Early Childhood Profession (3)

## Family Child Care Certificate

The **Family Child Care 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 14 units. A minimum grade of "C" is required in each course taken.

- CDFL 131 F Business Principles of Family Child Care (3)
- CDFL 132 F Environments and Programs for Family Child Care (3)
- CDFL 120 F Human Development: Early Years (3)
- CDFL 110 F Anti-bias Perspective Seminar (3)
- CDFL 135 F ECE: Health and Safety (2)\*

\* If the student is health and safety certified through a non-credit agency, then one of the following courses is required: CDFL 141 F, 121 F and CDFL 121LF, CDFL 123AF, CDFL 123BF, CDFL 123CF, CDFL 123DF, CDFL 151F.

Students are encouraged to add coursework specific to the ages of children whose care is provided.

## Infant/Toddler Caregiver Certificate

This certificate is designed to train 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 15 units. A minimum grade of "C" is required in each course taken.

### Required Courses (15 units)

- CDFL 110 F Anti-bias Perspective Seminar (3)
- CDFL 120 F Human Development: Early Years (3)
- CDFL 140 F Infant Development and Relationships (3)
- CDFL 141 F Principles of Infant/Toddler Care (3)
- CDFL 201 F Child in Home and Community (3)

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.

## Child Development and Family Life Courses

### **CDFL 110 F Anti-Bias Perspective Seminar (3)**

Three hours lecture per week. This course examines the stages of becoming an anti-bias educator. The focus of this course 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. An emphasis is placed on addressing issues of bias that children and families experience on a daily basis in our society. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree credit)

### **CDFL 112 F Teaching Peace (2)**

A total of thirty-two hours lecture. This course provides an overview of peace education and a framework for creating peaceful campus/programs for children and youth within the community and/or school setting. It includes child/youth tools to help create a safer world using skills in conflict management, the anti-bias perspective, promoting non-violence and community building. (CSU) (Degree credit)

### **CDFL 115 F Introduction to Early Childhood Education Curriculum (2) (CAN H EC 14)**

A total of 36 lecture hours. This is a foundational course in basic curriculum terminology, planning and development. It provides the students with information and experience in observing and planning curriculum and using the information gained through these observations. Individual and program assessment, an overview of curriculum models, and writing lesson plans are also included. (CSU) (Degree credit)

**CDFL 120 F Human Development: Early Years (3)  
(CAN FCS 14)**

Three hours lecture per week. This course provides students with research methodologies and studies the physical, intellectual, social and emotional development of the individual. Prenatal, infancy, toddler-hood, early childhood, middle childhood, and adolescent development are presented in a chronological sequence. Inclusive viewpoints of theory and practice are addressed. (CSU) (Degree credit)

**CDFL 121 F The Preschool Child (1.5)**

Prerequisite: CDFL 120 F Human Development: Early Years and CDFL 122 F Early Childhood Education: Principles completed with a grade of "C" or better.

Corequisite: CDFL 121LF The Preschool Child Laboratory

One and one-half hour lecture per week. This course emphasizes the role of the adult in fostering the physical, emotional, social, intellectual, and creative needs of each child in a group setting. It is designed to help students better understand and guide young children (not limited to child development majors). (CSU) (Degree credit)

**CDFL 121LF The Preschool Child Laboratory (.5)**

Concurrent enrollment: CDFL 121 F The Preschool Child

Three and one-half hours per week of observation and participation with young children in the Child Development Laboratory School. The practical application of guidance techniques promoting the child's physical, emotional, social, and intellectual development is emphasized. (CSU) (Degree credit)

**CDFL 122 F Early Childhood Education: Principles (3)**

Three hours lecture per week. The whole child is the focus of this course in relation to philosophy and culturally relevant, developmentally appropriate practices in Early Childhood Education. Issues addressed are professional ethics, cross-cultural/non-sexist education, curriculum, health and safety, working with parents, and the role of the adult as teacher and advocate. (CSU) (Degree credit)

**CDFL 123AF ECE Art and Creativity Education (2)**

Prerequisite: CDFL 115 F Introduction to ECE Curriculum

A total of 32 lecture/demonstration hours. This course examines the teacher's role in supporting children's artistic growth and providing developmental art experiences. Instructional topics include: "the child artist at work," "the arts and children's learning," "the arts and young children's development." The teacher's role in encouraging children to express and explore their creativity is strongly emphasized. (CSU) (Degree credit)

**CDFL 123BF ECE Language and Literacy Education (2)**

Prerequisite: CDFL 115 F Introduction to ECE Curriculum

A total of 32 lecture/demonstration hours. Students explore the four major areas of language arts: listening, speaking, pre-reading, and pre-writing. Literature appropriate for young children, including criteria for selection, presentation, and evaluation are emphasized. (CSU) (Degree credit)

**CDFL 123CF ECE Science and Math Education (2)**

Prerequisite: CDFL 115 F Introduction to ECE Curriculum

A total of 32 lecture/demonstration hours. Students learn techniques for developing science experiences that encourage children to explore, experience and problem solve within the natural and physical environment. Also included in the science course are: block play, wood working, and pre-number activities. (CSU) (Degree credit)

**CDFL 123DF ECE Music Education (2)**

Prerequisite: CDFL 115 F Introduction to ECE Curriculum

A total of 32 lecture/demonstration hours. Students learn to create musical environments for young children. This course includes the study and development of song activities, creative movement experience, and the creation of musical tools and instruments. (CSU) (Degree credit)

**CDFL 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)

**CDFL 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 quality environments and programs for the Family child care home. Current brain research, developmental theories and innovative models will be explored. This course is relevant for the new and experienced family child care provider. (CSU) (Degree credit)

**CDFL 135 F Early Childhood Education: Health and Safety (2)**

Two hours lecture per week. This course is designed to prepare the student to administer pediatric Cardio-Pulmonary Resuscitation (CPR) techniques as well as pediatric first-aid. Topics such as injury prevention, prevention of infectious diseases, disaster preparedness and care for the mildly ill child are also covered. This course meets the California Department of Social Services health and safety requirements for family child care and center-based providers. (CSU) (Degree credit)

**CDFL 140 F Infant Development and Observations (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)

**CDFL 141 F Principles of Infant/Toddler Care (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)

**CDFL 151 F School-Age Child: Program, Curriculum, Guidance (3)**

Three hours lecture/demonstration per week. This course is designed for those working with children in school-age extended-day programs. The course content includes philosophy and techniques of guidance and discipline, program/curriculum development, legal issues, and developmentally appropriate activities reflecting issues of diversity. Students develop criteria for evaluating quality programs. (CSU) (Degree credit)

**CDFL 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)

**CDFL 199 F Child Development Independent Study (1-1-1-1)**

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)

**CDFL 200 F Human Development: Adolescence (3)**

Three hours lecture per week. This course is designed to examine in depth the developmental period of adolescence. The 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)

**CDFL 201 F Child in Home and Community (3)**

Three hours lecture per week. This course is a sociological and environmental study of the interaction of the family, school, and community in the life of the developing child through age 12. Students explore the diversity of families and the validation and support of these families throughout various social structures. Particular emphasis is on child care, schools, community agencies, and the responsibility of the professional as an advocate. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree credit)

**CDFL 202 F Contemporary Family Living (3)**

Three hours lecture per week. A developmental approach to the study of marriage and family life is the focus of this course. Content includes the development and maintenance of relationships, communication and conflict resolution skills, gender roles, partner selection, parenting, divorce, family planning, adult development and old age within the context of cultural diversity. (CSU) (Degree credit)

**CDFL 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)

**CDFL 205 F Planning Environments for Young Children (2)**

A total of 32 hours of lecture. 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 through age 12 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)

**CDFL 206 F Perceptual-Motor Development for Children (2)**

A total of 32 hours lecture. 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 the area of perceptual-motor curriculum and activities will be explored. Techniques for early identification of learning and emotional problems and strategies for establishing an environment to enhance physical development will also be addressed. (CSU) (Degree credit)

**CDFL 207 F Principles and Techniques for Early Childhood Special Education with Field Experience (3)**

Two hours lecture and 3 hours lab/field experience 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)

**CDFL 208 F Working with Families of Children with 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 the course will focus on supporting families of children with special needs in early childhood settings. Developing techniques and strategies to provide this support will be emphasized, as well as building a knowledge base of resources available to parents and early childhood programs. There will be a focus on creating inclusive environments for young children and their families. (CSU) (Degree credit)

**CDFL 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)

**CDFL 225 F Early Childhood Education: Student Teaching with Field Experience (3)**

Prerequisite: CDFL 120 F Human Development: Early Years, 122 F ECE: Principles, 123AF/123BF/123CF/123DF ECE: Curriculum (two courses), and 201 F Child in Home and Community all with a grade of "C" or better. Corequisite: CDFL 238 F Curriculum Design for Children's Programs all with a grade of "C" or better

Two hours lecture and seven hours field placement per week. Placement may be in the Fullerton College Development Lab School/s in a Mentor Teacher site, or in an NAEYC accredited center. Student teachers observe and document the behavior of a diverse group of children in order to design, implement and evaluate meaningful and relevant child-child as well as child-adult interactions. Student teachers will learn to employ emergent curriculum techniques as they study the notion of child as researcher. Student teachers will explore their role in maintaining a professional environment to include authentic adult-child interactions, family dialogue, and co-teaching relationships. (CSU) (Degree credit)

**CDFL 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)

**CDFL 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)

**CDFL 235 F Bilingual/Cross-Cultural Teacher Aide Methods (3)**

Prerequisite: ETHS 101 F American Ethnic Studies or 118 Intro to Bilingual/Cross-Culturalism. Letter grade or credit/no credit option.

Three hours lecture per week. The course is for students preparing to become bilingual/cross-cultural 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/cross-cultural curriculum methods and evaluation. Information on employment trends, ways to find jobs, and ways to further career will be provided. (Not currently being offered — if interested, contact Division Office.) (CSU) (Degree credit)

**CDFL 238 F Curriculum Design for Early Childhood Education (3)**

Prerequisite: CDFL 115 F Introduction to ECE Curriculum

Three hours lecture per week. Students examine innovative curriculum development strategies based upon observation, reflection and documentation of children's thinking. The course will focus on the development of a child-centered, play-based curriculum, utilizing constructivist theories. Students will explore the Reggio Emilia Philosophy, the Project Approach, the Emergent Curriculum, intentionality of environmental design and home-school connections. Course meets the specialization unit requirements for the Master Teacher level Child Development Permit Matrix. (CSU) (Degree credit)

**CDFL 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 will explore leadership strategies for positive growth and change in the early childhood profession. Course will focus on the promotion of quality professional teaching environments that will include the study of the following: mentoring, supervising, communication skill development, effective working relationships and innovations in the field. Class lectures will 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. For entry into the course, the student must qualify at the Associate Teacher level on the Child Development Permit Matrix. Course meets requirements for adult supervision and application to the Mentor Teacher Project. 12 ECE units and one year of employment experience with young children.

**PE 232 F Games and Rhythms for Elementary Schools (2)**

(See Division of Physical Education.)

## Chinese

**CHIN 101 F Elementary Chinese — Mandarin I (5)**

Letter grade or credit/no credit 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)**

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. Letter grade or credit/no credit option.

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)

**CHIN 203 F Intermediate Chinese — Mandarin III (4)**

Prerequisite: CHIN 102 F with a grade of "C" or better or two years high school Chinese with grade of "C" or better. Letter grade or credit/no credit option.

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. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**CHIN 204 F Intermediate Chinese — Mandarin IV (4)**

Prerequisite: CHIN 203 F with a grade of "C" or better or three years high school Chinese with a grade of "C" or better. Letter grade or credit/no credit option.

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-Television*

### *Radio Broadcasting Certificate*

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)**

- CRTV 118 F Introduction to Radio, Television 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 Radio Announcing (3)
- CRTV 235 F On-Air Radio Broadcasting (3)

**Restricted Electives (6 units)**

- CIS 100 F Introduction to Personal Computers (3)
- CRTV 128 F Writing for Radio, Television and Film (3)
- CRTV 235 F On-Air Radio Broadcasting (3)
- CRTV 290 F Career Advancement/Internship in Radio-Television-Film (2-4)
- SPCH 105 F Interpersonal Communication (3)
- THEA 127 F Oral Interpretation (3)
- THEA 129 F Beginning Voice for Actors (3)

### *Radio and Television/Video Production Certificate*

The **Radio and Television/Video Production Certificate** Program prepares students for entry-level employment in the radio broadcasting and television/video production industries. A total of 37 units must be completed of which 32 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.

**Required Courses (32 units)**

- CRTV 118 F Introduction to Radio, Television 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 Radio Announcing (3)
- CRTV 150 F Television Studio Production (3)
- CRTV 164AF Digital Production and Non-Linear Editing for Video/Film (3)
- CRTV 235 F On-Air Radio Broadcasting (3)
- CRTV 245AF Digital Editing, Graphics and Effects (3)
- CRTV 280 F Television Production Workshop (2)

**Restricted Electives (5 units)**

- CRTV 127 F Screenwriting (3)
- CRTV 137 F Television Announcing (3)
- CRTV 164BF Advanced Digital Production and Non-Linear Editing for Video/Film (3)
- CRTV 196 F Communication Seminars (1-3)
- CRTV 235 F On-Air Radio Broadcasting (3) (Level B)
- CRTV 290 F Career Advancement in Radio-Television-Film (2-4)

### *Sports Broadcasting Certificate*

The **Communications: Sports Broadcasting Certificate** requires a total of 17 units of which 12 units 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. Upon completion of this certificate, the student will be prepared for entry-level position in radio, television or cable television sports broadcasting.

**Required Courses (12 units)**

- CRTV 118 F Introduction to Radio, Television and Film (3)
- CRTV 122 F Audio Production Techniques (3)
- CRTV 129 F Broadcast News (3)
- CRTV 145AF Sports Broadcasting (3)

**Restricted Electives (5 units)**

- CRTV 130 F Audio Production (3)
- CRTV 135 F Radio Announcing (3)
- CRTV 137 F Television Announcing (3)
- CRTV 145BF Sports Broadcasting (3)
- CRTV 150 F Television Studio Production (3)
- CRTV 164AF Digital Production and Non-Linear Editing for Video/Film (3)
- CRTV 235 F On-Air Radio Broadcasting (3)
- CRTV 290 F Career Advancement/Internship in Radio-Television-Film (2-4)
- JOUR 101 F Reporting and Writing (3)
- JOUR 102 F Reporting and Writing (3)
- PE 247 F Sports Management (3)

## Television/Video Certificate

The **Television/Video Certificate** Program provides the background and skills needed for an entry-level position in the television/video industry. This certificate requires a total of 30 units of which 9 units are in required courses. An additional 3 units of restricted courses and at least 18 units of recommended electives must be chosen from the lists below. A minimum grade of "C" is required in each course taken. A student may earn one or more endorsements on their certificate by completing the suggested endorsement criteria.

### **Required Courses (9 units)**

- CRTV 118 F Introduction Radio, Television and Film (3)
- CRTV 122 F Audio Production Techniques (3)
- CRTV 150 F Television Studio Production (3)

### **Restricted Courses (3 units)**

- CRTV 127 F Screenwriting (3)
- CRTV 128 F Writing for Radio-Television-Film (3)
- CRTV 129 F Broadcast News (3)

### **Recommended Electives (18 units)**

- CRTV 030 F Media Industry Independent Contractor (1)
- CRTV 120 F Media Aesthetics (3)
- CRTV 121 F The American Cinema (3)
- CRTV 127 F Screenwriting (3)
- CRTV 128 F Writing for Radio-Television-Film (3)
- CRTV 129 F Broadcast News (3)
- CRTV 130 F Broadcast Audio Production (3)
- CRTV 137 F Television Announcing (3)
- CRTV 164AF Digital Production and Non-Linear Editing for Video/Film (3)
- CRTV 164BF Advanced Digital Production and Non-Linear Editing for Video/Film (3)
- CRTV 196 F Communication Seminars (1-3)
- CRTV 245AF Digital Editing, Graphics and Effects (3)
- CRTV 245BF Advanced Digital Editing, Graphics and Effects (3)
- CRTV 280 F Television Production Workshop (2-5)
- CRTV 290 F Career Advancement/Internship in Radio-Television-Film (2-4)

## Endorsements to the Television/Video Certificate

### **Performance (6 units)**

- CRTV 129 F Broadcast News (3)
- CRTV 137 F Television Announcing (3)

### **Electronic Field Production (9 units)**

- CRTV 120 F Media Aesthetics (3)
- CRTV 164AF Digital Production and Non-Linear Editing for Television/Film (3)
- CRTV 164BF Advanced Digital Production and Non-Linear Editing for Television/Film (3)

### **Remote Van Production (6 units)**

- CRTV 120 F Media Aesthetics (3)
- CRTV 280 F Television Production Workshop (3)

### **Studio Production (9 units)**

- CRTV 120 F Media Aesthetics (3)
- CRTV 150 F Television Studio Production (3)
- CRTV 196 F Communications Seminars (1-3)
- CRTV 280 F Television Production Workshop (2-5)

### **Video Post-Production (12 units)**

- CRTV 120 F Media Aesthetics (3)
- CRTV 164AF Digital Production and Non-Linear Editing for Television/Film (3)
- CRTV 164BF Advanced Digital Production and Non-Linear Editing for Television/Film (3)
- CRTV 245AF Digital Editing, Graphics and Effects (3)
- CRTV 245BF Advanced Digital Editing, Graphics and Effects (3)

### **Writing (15 units)**

- CRTV 120 F Media Aesthetics (3)
- CRTV 127 F Screenwriting (3-3)
- CRTV 128 F Writing for Radio, Television and Film (3)
- CRTV 129 F Broadcast News (3)

## Cinema-Radio-Television Courses

### **CRTV 030 F Media Industry Independent Contractor (1) (formerly RTV 030 F)**

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) (formerly RTV 118 F)**

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)

**CRTV 120 F Media Aesthetics (3) (formerly RTV 120 F)**

Three hours lecture per week. This course provides a background in understanding aesthetics used in television, motion pictures, and computer graphics 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)

**CRTV 121 F The American Cinema (3) (formerly RTV 121 F)**

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 related to technology; industrial and economic models; aesthetic styles and genres; production, marketing, and distribution processes; and audiences are examined. (CSU) (UC) (Degree credit)

**CRTV 122 F Audio Production Techniques (3) (formerly RTV 122 F)**

Advisory: CRTV 118 F Introduction to Radio, Television and Film

Two hours lecture/discussion and four hours laboratory per week. This course provides instruction in the operation of radio and television audio equipment broadcast microphones, and computer software associated with media recording. 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) (formerly RTV 124 F)**

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) (formerly RTV 126AF)**

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)

**CRTV 126BF World Cinema 1946 to Present (3) (formerly RTV 126BF)**

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)

**CRTV 127 F Screenwriting (3-3) (formerly RTV 127 F)**

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) (formerly RTV 128 F)**

Three hours lecture/discussion per week. This course covers the concepts, practices and forms for film and television. This is a course in all forms of media writing. (CSU) (Degree credit)

**CRTV 129 F Broadcast News (3) (formerly RTV 129 F)**

Two hours lecture and four hours laboratory 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, gathering, writing, and delivering news for radio and television. (CSU) (Degree credit)

**CRTV 130 F Broadcast Audio Production (3) (formerly RTV 130 F)**

Prerequisite: CRTV 122 F Broadcast Audio Operations with a grade of "C" or better.

Two hours lecture/discussion and four hours laboratory 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, and media production. (CSU) (Degree credit)

**CRTV 131 F Contemporary Cinema (3) (formerly RTV 131 F)**

Three hours lecture per week. This course focuses on motion pictures made during the last thirty years and the production processes, economic factors, and social influences that have shaped and been shaped by them. This will include changes in industry practices relating to production aesthetics and techniques, marketing, distribution, and technology. (CSU) (UC) (Degree credit)

**CRTV 135 F Radio Announcing (3) (formerly RTV 135 F)**

Prerequisites: CRTV 122 F Broadcast Audio Operations

Corequisite: CRTV 122 F Broadcast Audio Operations

Two hours lecture/discussion, three hours laboratory per week. This is a course in announcing technique focusing on the announcing skills most needed in contemporary radio. This course concentrates on disc jockey voice technique, commercial interpretation, news announcing, and ad-libbing. (CSU) (Degree credit)

**CRTV 137 F Television Announcing (3) (formerly RTV 137 F)**

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 (3-3-3-3) (formerly RTV 145 F)**

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. This course may be repeated up to three times for credit. (CSU) (Degree credit)

**CRTV 150 F Television Studio Production (3) (formerly RTV 150 F)**

Advisory: CRTV 118 F Introduction to Radio, Television and Film

Two hours lecture/discussion and three hours laboratory 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. Laboratory work will center on video programs. (CSU) (Degree credit)

**CRTV 160 F Introduction to Filmmaking (3) (formerly RTV 160 F)**

Two hours lecture and three hours lab per week. Introduction to the fundamental techniques and aesthetics of film production. The lecture/laboratory 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 164AF Single-Digital Production and Non-Linear Editing for Video/Film (3) (formerly RTV 164AF)**

Prerequisite: CRTV 150 F Television Studio Operations or 160 F Introduction to Filmmaking, with a grade of "C" or better

Two hours lecture and four hours lab per week. This course introduces single-camera video and film 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 164BF Advanced Digital-Camera Production and Non-Linear Editing for Video/Film (3) (formerly RTV 164BF)**

Prerequisite: CRTV 164AF Digital Production and Non-Linear Editing for Video/Film 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 needs and industry. (CSU) (Degree credit)

**CRTV 196 F Communications Seminars (.5-4, .5-4, .5-4) (formerly RTV 196 F)**

Lecture and laboratory 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 Independent Study (1-3, 1-3, 1-3, 1-3) (formerly RTV 199 F)**

Prerequisite: Approval of Communications Department Coordinator

One hour lecture or scheduled conference or three hours independent laboratory 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 laboratory research problems with staff supervision may be approved. Course may be taken up to a maximum of four times for credit. (CSU) (UC review required.) (Degree credit)

**CRTV 235 F On-Air Radio Broadcasting (3-3-3-3) (formerly RTV 235 F)**

Prerequisite: CRTV 122 F Broadcast Audio Operations and CRTV 135 F Radio Announcing, with a grade of "C" or better.

One hour lecture/discussion and six hours laboratory 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. This course may be repeated until a total of 12 units has been accumulated or up to a maximum of four semesters. (CSU) (Degree credit)

**CRTV 245AF Digital Editing, Graphics and Effects (3) (formerly RTV 245AF)**

Prerequisite: CRTV 164AF Digital Production and Non-Linear/Editing for Video/Film with a grade of "C" or better

Two hours lecture and four hours laboratory per week. The course builds on the knowledge and skills received in CRTV 164A Digital-Camera Production/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) (formerly RTV 245BF)**

Prerequisite: CRTV 245AF Digital Editing, Graphics and Effects with a grade of "C" or better

Two hours lecture and four hours laboratory 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, 2-5, 2-5) (formerly RTV 280 F)**

**First semester:** Prerequisite: CRTV 150 F Television Studio Production with a grade of "C" or better

**Second semester:** Prerequisite: First semester CRTV 280 F Television Production Workshop with a grade of "C" or better

**Third semester:** Prerequisite: Second semester CRTV 280 F Television Production Workshop with a grade of "C" or better

**Fourth semester:** Prerequisite: Third semester CRTV 280 F Television Production Workshop with a grade of "C" or better

One hour lecture and one hour laboratory plus three hours arranged per week for the first two units. An additional three hours laboratory per week is required for each added unit for a maximum of five units each semester and a cumulative total of 20 units. Students participate as crew members on Media Services and Communication Department cable and campus productions utilizing four-camera remote van, studio, and EFP Equipment. Instruction is 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 Career Advancement/Internship in Cinema-Radio-Television (2-4, 2-4, 2-4, 2-4)**  
(formerly RTV 290 F)

Prerequisite: Students must have declared the Cinema-Radio-Television major and have either applicable employment or a verified internship.

One hour lecture per week and five hours of supervised employment or unpaid internship per week in a radio or television station, television/video or audio production facility, or program origination facility. An additional five hours per week of supervised employment or unpaid internship is required for each additional unit of credit. This course offers career development opportunities for students and industry professionals who need to broaden or strengthen their skills to retain their current position or wish to advance in their careers. Students obtain vocational learning opportunities through employment/internship at radio, television and cable stations, audio, video and film production facilities and allied entertainment offices. Course may be taken four times for credit. (CSU) (Degree credit)

## Civil Engineering Technology

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 Bachelor's 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)**

ENGR 101AF Surveying (4)  
ENGR 101BF Surveying (4)  
ENGR 102 F Engineering Drawing (3)  
ENGR 105 F Engineering CAD (4)  
TECH 081 F Technical Mathematics I (3) or  
MATH 141 F College Algebra (4)

**Restricted Courses (7-8 units)**

CHEM 107 F Elementary Chemistry (5)  
ESC 100 F, 100LF Physical Geology and Lab (3,1)  
MATH 142 F Trigonometry (4)  
RE 101 F Principles of Real Estate (3)  
TECH 088 F Technical Science (3)

## Communications

### Communications: General

The **Communications: General Associate in Arts Degree** requires 18 units chosen from the list below. This A.A. Degree provides a sound base for students interested in all areas of Communications. This degree is especially beneficial to students interested in Broadcast Journalism

**Required Courses (18 units)**

CRTV 118 F Introduction to Radio, Television and Film (3)  
CRTV 122 F Broadcast Audio Operations (3)  
CRTV 129 F Broadcast News (3)  
CRTV 137 F Television Announcing (3)  
CRTV 145 F Radio/TV Sports Broadcasting (3)  
CRTV 150 F Television Studio Production (3)  
CRTV 164AF Digital Production and Non-Linear Editing for Video/Film (3)  
JOUR 101 F Reporting and Writing (3)  
JOUR 102 F Reporting and Writing (3)  
JOUR 110 F Mass Media Survey (3)  
PHOT 101 F Introduction to Photography (3)

### Communications: Journalism

Curriculum leads to the **Associate in Arts Degree** and/or entry-level employment in radio and television communications. High School Preparation: typing and speech. This degree requires 18 units chosen from the courses listed below.

**Required Courses (18 units)**

JOUR 101 F Reporting and Writing (3)  
JOUR 102 F Reporting and Writing (3)  
JOUR 110 F Mass Media Survey (3)  
JOUR 126 F Advertising Copy and Layout (3)  
JOUR 225 F Newspaper Production (3)  
PHOT 101 F Introduction to Photography (3) or  
PHOT 219 F Photojournalism (3)

### Communications: Radio Broadcasting

The **Communications: Radio Broadcasting Associate in Arts Degree** 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 entry-level employment in radio broadcasting.

**Required Courses (15 units)**

CRTV 118 F Introduction to Radio, Television and Film (3)  
CRTV 122 F Audio Production Techniques (3)  
CRTV 130 F Broadcast Audio Production (3)  
CRTV 135 F Radio Announcing (3)  
CRTV 235 F On-Air Radio Broadcasting (3)

**Restricted Electives (3 units)**

- CRTV 124 F Broadcast Advertising Sales (1)  
 CRTV 128 F Writing for Radio, Television and Film (3)  
 CRTV 129 F Broadcast News (3)  
 CRTV 145 F Radio/Television Sports Broadcasting (3)

*Communications: Radio Production*

The **Communications: Radio Production Associate in Arts Degree** requires a total of 18 units of which 12 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below. Curriculum leads to the A.A. Degree in Radio Production and/or entry-level employment in radio/audio production.

**Required Courses (12 units)**

- CRTV 118 F Introduction to Radio, Television 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)**

- CRTV 124 F Broadcast Advertising Sales (1)  
 CRTV 129 F Broadcast News (3)  
 CRTV 135 F Radio Announcing (3)  
 CRTV 235 F On-Air Radio Broadcasting (3)  
 CRTV 290 F Career Advancement/Internship in Radio-Television-Film (2-4)

*Communications: Television/Film*

The **Communications: Television/Film Associate in Arts Degree** requires a total of 18 units of which 6 units are required courses. An additional 12 units must be chosen from the restricted electives listed below.

**Required Courses (6 units)**

- CRTV 120 F Media Aesthetics (3)  
 CRTV 150 F Television Studio Production (3)

**Restricted Electives (12 units)**

- CRTV 118 F Introduction to Radio, Television & 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, 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 160 F Introduction to Filmmaking (3)  
 CRTV 164AF Digital Production and Non-Linear Editing for Video/Film (3)  
 CRTV 164BF Advanced Digital Production and Non-Linear Editing for Video/Film (3)  
 CRTV 196 F Communications Seminars (.5-3)  
 CRTV 245AF Digital Editing, Graphics and Effects (3)

- CRTV 245BF Advanced Digital Editing, Graphics and Effects (3)  
 CRTV 280 F Television Production Workshop (2-5)  
 CRTV 290 F Career Advancement/Internship in Radio-Television-Film (2-4)  
 JOUR 110 F Mass Media Survey (3)

*Advertising Certificate*

The **Advertising Certificate** Program totals 23 units, of which 17 are in required courses. An additional 6 units must be chosen from restricted electives below. A minimum grade of "C" is required in each course taken.

**Required Courses (17 units)**

- ACG 100 F Introduction to Computer Graphics/Macintosh (3)  
 JOUR 101 F Reporting and Writing (3)  
 JOUR 126 F Advertising Copy and Layout (3-3) (Levels A and B)  
 JOUR 140 F Public Relations and Publicity (3)  
 MKT 103 F Principles of Advertising (3)

**Restricted Electives (6 units)**

- ART 140 F Advertising/Graphic Design I (2)  
 JOUR 135 F Magazine Production (3)  
 JOUR 225 F Newspaper Production (3)  
 MKT 100 F Introduction to Marketing (3)  
 MKT 208 F Principles of Selling (3)  
 PHOT 101 F Introduction to Photography (3)  
 PRNT 130 F Graphics (2)  
 WKEX 091 F Work Experience/Vocational (Communications) (2)

*Computer Graphics**Computer Animation/Multi Media Certificate*

The **Computer Animation/Multi Media Certificate** Program requires the completion of 31 units chosen from the courses listed below. This certificate provides skills necessary to create animated and/or interactive projects for distribution on a variety of media, including video tape, CD-ROM, etc. A minimum grade of "C" is required in each course taken.

**Select one of the Introduction classes (3 units)**

- ACG 100 F Introduction to Computer Graphics/Mac (3) or  
 ACG 102 F Introduction to Macintosh Graphics (3)

**Required Courses (17 units)**

- ACG 120 F 3D Computer Graphics for Macintosh (3) or  
 ACG 126 F Solid Modeling/Paint for Macintosh (3)  
 ACG 150 F 3D Computer Animation for Macintosh (3)

- ACG 162 F Multi Media for Macintosh (3)  
 ACG 164 F Multi Media Authoring for Macintosh (3)  
 ART 118 F Color Theory (3) or  
 ART 120 F Basic Design (3)  
 ART 144 F Fundamentals of Cartooning (2)

**Restricted Electives (11 units)**

- ACG 112 F Electronic Illustration (3)  
 ACG 132 F Electronic Paint (3)  
 ACG 140 F Desktop Publishing I (3)  
 ACG 146 F Desktop Publishing II (3)  
 ART 118 F Color Theory (3) or  
 ART 120 F Basic Design (3)  
 ART 123 F Business Practices in Art (3)  
 ART 180 F Perspective Drawing and Rendering (2)  
 ART 182 F Basic Drawing (3)  
 ART 299 F Independent Study — Art (1)  
 MUS 124 F Beginning Studio Recording Techniques (3)  
 CRTV 150 F Basic Television Studio Operations (3)  
 CRTV 164AF Single-Camera Production/Editing for  
 Television/Film (3)  
 CRTV 245AF Videotape Post-Production (3)

*Computer Graphics Certificate*

The **Computer Graphics Certificate** Program requires the completion of 30 units chosen from the courses listed below. This certificate provides the skills to create computer-designed graphs, charts, layouts, logos and presentation graphics. A minimum grade of "C" is required in each course taken.

**Select one of the Introduction classes (3 units)**

- ACG 100 F Introduction to Computer Graphics/Mac (3) or  
 ACG 102 F Introduction to Macintosh Graphics (3)

**Required Courses (15 units)**

- ACG 112 F Electronic Illustration (3)  
 ACG 132 F Electronic Paint (3)  
 ART 118 F Color Theory (3) or  
 ART 120 F Basic Design (3)  
 ART 140 F Introduction to Advertising and Graphic  
 Design (3)  
 ART 182 F Basic Drawing (3)

**Plus two from the following (6 units):**

- ACG 140 F Desktop Publishing I (3)  
 ACG 146 F Desktop Publishing II (3) or  
 ACG 162 F Multi Media for Macintosh (3)

**Restricted Electives (6 units)**

- ACG 120 F 3D Computer Graphics for Macintosh (3)  
 ACG 126 F Solid Modeling/Paint for Macintosh (3)  
 ACG 140 F Desktop Publishing I (3)  
 ACG 146 F Desktop Publishing II (3)  
 ACG 150 F 3D Computer Animation for Macintosh (3)  
 ACG 162 F Multi Media for Macintosh (3)  
 ACG 164 F Multi Media Authoring for Macintosh (3)  
 ART 118 F Color Theory (3) or

- ART 120 F Basic Design (3)  
 ART 123 F Business Practices in Art (3)  
 ART 145 F Publication Design (3)  
 ART 146 F Advertising Design (3)  
 ART 147 F Production Techniques for Graphic  
 Designers (3)  
 ART 299 F Independent Study — Art (1)  
 PRNT 101 F Introduction to Printing (3)  
 PRNT 130 F Graphics (2)

*Desk Top Publishing Certificate*

The **Desk Top Publishing Certificate** Program requires the completion of no fewer than 29 units from the courses listed below. This certificate provides an individual with the skills to create computer generated page layouts including text and graphics. A minimum grade of "C" is required in each course taken.

**Select one of the Introduction classes (3 units)**

- ACG 100 F Introduction to Computer Graphics/Mac (3) or  
 ACG 102 F Introduction to Macintosh Graphics (3)

**Required Courses (15 units)**

- ACG 112 F Electronic Illustration (3)  
 ACG 132 F Electronic Paint for Macintosh (3)  
 ACG 140 F Desktop Publishing I (3)  
 ACG 146 F Desktop Publishing II (3)  
 ART 140 F Introduction to Advertising and Graphic  
 Design (3)

**Select at least two from the following (6 units)**

- ART 120 F Basic Design (3)  
 ART 145 F Publication Design (3)  
 PRNT 070 F Quick Print/In-Plant Graphics (3)  
 PRNT 075 F Electronic Pre Press (3)

**Restricted Courses (5 units)**

- ACG 120 F 3D Computer Graphics for Macintosh (3)  
 ACG 150 F 3D Computer Animation for Macintosh (3)  
 ACG 162 F Multi Media for Macintosh (3)  
 ACG 164 F Multi Media Authoring for Macintosh (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)  
 JOUR 227 F Newspaper Management, Makeup and  
 Editing (3)  
 PRNT 101 F Introduction to Printing (3)  
 PRNT 075 F Electronic Pre Press (3)  
 PRNT 130 F Graphics (2)

## Computer Graphics Courses

### **ACG 068 F Multimedia Sound for Macintosh (3)**

Prerequisite: ACG 100 F Introduction to Computer Graphics for Macintosh or ACG 102 F Introduction to Macintosh Graphics

Two hours lecture and three hours lab per week. Study of current means (including computer hardware and software, and audio equipment) for designing sound and music components of interactive multimedia presentations. The student learns: 1) the role of sound in combination with various other media (text, still and motion pictures); 2) the role of sound in eliciting and guiding the viewer's interaction with the presentation. Interactive multimedia is used in education and training (i.e., military/vocational), entertainment (game industry), informative dissemination (INTERNET, library materials, and creative self expression). (Degree credit)

### **ACG 100 F Intro: Computer Graphics/MAC (3)**

Two hour lecture and three hours lab per week. This course focuses on the creation of graphic imagery including the use of the major programs used in computer graphics. The areas covered are paint and photo-manipulation, drawing, and paste-up programs. The uses of various input and output devices will be covered. This class teaches the fundamentals of computer graphics to input, create, manipulate and output graphic imagery for print. Open lab work may be needed to complete lab assignments. (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: 3D 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 2D Computer Graphics and Paint for DOS (3)**

Two hours lecture and three hours lab per week. This course focuses on computer generated 2D 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 presentation techniques of designs 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 Graphics Applications (3)**

Two hours lecture and three hours lab per week. This is a survey of the many uses of computer multimedia. The course emphasis is on using all graphics applications for electronic publishing over the Internet. 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 the student can pursue more in-depth study on the topic(s) that most attracted them during this survey class. (CSU) (Degree credit)

### **ACG 112 F Electronic Illustration (3)**

Prerequisite: ACG 100 F Intro: Computer Graphics/Mac, or ACG 102 F Intro: Web Graphics/Mac or ACG 104 F Intro: 3D Graphics/Mac, or ACG 106 F Intro: Dimensional Design/Mac, or ACG 108 F Survey Graphics Applications/Mac, or six months related industry experience.

Two hours lecture and three hours lab per week. Teaches how to make pictures using vector graphics programs. 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. Visually, vector images are often characterized by a stylized, hardedge 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.

### **ACG 120 F 3D Modeling (3)**

Prerequisite: ACG 100 F Intro: Computer Graphics/Mac, or ACG 102 F Intro: Web Graphics/Mac or ACG 104 F Intro: 3D Graphics/Mac, or ACG 106 F Intro: Dimensional Design/Mac, or ACG 108 Survey Graphics Applications/Mac, or six months related industry experience.

Two hours lecture and three hours lab per week. The course emphasis is on further development of computer modeling and animation concepts with a program that is a standard in the industry. The course focus is on advanced three-dimensional concepts and the use of complex modeling tools, texture mapping, and lighting. Motion control using control parenting, IK structures, and other modeling and animation fundamentals is introduced. Additional open lab work will be necessary to complete assignments.

### **ACG 132 F Electronic Paint for Macintosh (3)**

Prerequisite: ACG 100 F Introduction to Computer Graphics for Macintosh or ACG 102 F Introduction to Macintosh Graphics or ACG 104 F 2D Computer Graphics and Paint for Macintosh, or consent of instructor with portfolio review

Two hours lecture and three hours lab per week. The course focus is on the creation of bit-mapped (raster) images. Original art work, photographs, videotape or scanned image provide the basis for image manipulation. The course also offers the professional artist basic Macintosh skills needed for employment and/or advancement. (CSU) (Degree credit)

### **ACG 140 F Desk Top Publishing I for Macintosh (3)**

Prerequisite: ACG 100 F Introduction to Computer Graphics for Macintosh

Two hours lecture and three hours lab per week. This course focuses on the use of computer as a design aid to generate the "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)**

Prerequisite: ACG 100 F Intro: Computer Graphics/Mac, or ACG 102 F Intro: Web Graphics/Mac or ACG 104 F Intro: 3D Graphics/Mac, or ACG 106 F Intro: Dimensional Design/Mac, or ACG 108 F Survey Graphics Applications/Mac, or six months related industry experience.

Two hours lecture and three hours 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 maybe required for completing assignments. (CSU) (Degree credit)

**ACG 150 F 3D Computer Animation for Macintosh (3-3)**

Prerequisite: ACG 120 F 3D Computer Graphics for Macintosh, or six months professional/industry related experience

Two hours lecture and three hours lab per week. This course is an extension of ACG 130 F Solid Modeling/Full Color Paint. Course focus is on computer animated 3D image making, which includes project development from storyboard to finished video tape output. Additional open-lab work may be necessary to complete assignments. Course may be taken twice for credit. (CSU) (Degree credit)

**ACG 162 F Multi Media for Macintosh (3)**

Prerequisite: ACG 100 F Introduction to Computer Graphics for Macintosh or ACG 102 F Introduction to Macintosh Graphics or ACG 104 F 2D Computer Graphics and Paint for Macintosh, or consent of instructor with portfolio review.

Two hours lecture and three hours lab per week. This course focuses on the multi-media approach by using charts, graphs, sound text and 2D animation as a promotional technique. The final presentations will use various outputs including videotape and color or black and white laser printers. (CSU) (Degree credit)

**ACG 164 F Multimedia Authoring (3)**

Prerequisite: ACG 100 F Intro: Computer Graphics/Mac, or ACG 102 F Intro: Web Graphics/Mac or ACG 104 F Intro: 3D Graphics/Mac, or ACG 106 F Intro: Dimensional Design/Mac, or ACG 108 F Survey Graphics Applications/Mac, or six months related industry experience.

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 CD-ROMS, web pages, complete web sites, videos, cartoons, animated shorts, games, education, instructional training, and creative self-expression. Students' familiarity with computer graphics and sound is assumed. 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. The course focus is 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.

**ACG 180 F Digital Video (3)**

Two hours lecture and three hours lab per week. The course includes the study and hands on use of Macintosh computers, assorted software, CD-ROMs, videodiscs, and other tools and techniques used for digitalizing, editing and composition of video and audio sources. The course is to provide an in-depth introduction to the world of desktop video used in the fields of multimedia, video editing (both on line and off line) and the creation of Quick time movies.

## Computer Information Systems

*(Also see Office Technology)*

### Computer Information Systems

#### A.S. Degree

Curriculum leads to the **Associate in Science Degree in Computer Information Systems** 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)**

CIS 107 F Intro to Operating Systems (2)  
CIS 180 F Introduction to Networking Concepts (3)  
CIS 217 F Visual Basic Programming I (3)

**One of the following for a total of 3-4 units:**

ACCT 001 F Accounting for Small Business (3)  
ACCT 100BF Financial Accounting Principles (3)  
ACCT 101AF Financial Accounting (4)

**One of the following for a total of 3 units:**

BUS 111 F Business Communications (3)  
BUS 211 F Writing for Business (3)

**One of the following for a total of 2 units:**

BUS 182 F Doing Business Online (2)  
MKT 151 F Internet Marketing (2)

**One of the following for a total of 3 units:**

CIS 100 F Introduction to Personal Computers (3)  
CIS 111 F Introduction to Information Systems (3)

**One of the following for a total of 2 units:**

CIS 105 F Spreadsheet I (2)  
CIS 205 F Spreadsheet II (2)

**One of the following for a total of 2 units:**

- CIS 142 F Database I (2)  
 CIS 242 F Database II (2)

**One of the following for a total of 2 units:**

- CIS 150 F Introduction to Internet (2)  
 CIS 151 F Internet Research (2)

**One of the following for a total of 2 units:**

- CIS 152 F Web Page Design II (2)  
 CIS 252 F Web Page Design III (2)

**One of the following for a total of 3 units:**

- CIS 225 F Netware System Manager (3)  
 CIS 291 F Enterprise Networking (3)

### Computer Information Systems Certificate

The **Computer Information Systems Certificate** requires the completion of 29-34 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)**

- 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:**

- 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 (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 (2)  
 MKT 151 F Internet Marketing (2)

**One course from the following for a total of 3 units:**

- CIS 100 F Introduction to Personal Computers (3)  
 CIS 111 F Introduction 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:**

- 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 109 F Personal Computer Security (2)  
 CIS 149 F Internet Entertainment (3)  
 CIS 150 F Introduction to Internet (2)  
 CIS 151 F Internet Research (2)

**One course from the following for a total of 2-3 units:**

- CIS 152 F Web Page Design II (2)  
 CIS 252 F Web Page Design III (2)  
 CIS 157 F Dreamweaver I (3)  
 CIS 212 F Robotic Programming (3)  
 CIS 230 F PHP & MySQL Programming (3)  
 CIS 154 F JavaScript Programming I (2)  
 CIS 254 F JavaScript Programming II (2)  
 CIS 155 F Web Page Multimedia Design I (2)  
 CIS 255 F Web Page Multimedia Design II (2)

**One course from the following for a total of 3 units:**

- CIS 217 F Visual Basic Programming I (3)  
 CIS 218 F Visual Basic Programming II (3)  
 CIS 219 F Visual Basic Programming III (3)  
 CIS 220 F Web Programming (3)  
 CIS 223 F Programming in C++ (3)  
 CIS 226 F Java Programming I (3)  
 CIS 228 F Java Programming II (3)  
 CIS 229 F XML Programming (3)  
 CIS 257 F Dreamweaver II (3)

**Choose one from the following for a total of 2-3 units:**

- CIS 183 F Network Security Fundamentals (3)  
 CIS 225 F NetWare System Manager (3)  
 CIS 260 F Solaris System Administration (3)  
 CIS 280 F Introduction to Oracle: SQL and PL/SQL (3)  
 CIS 285 F Windows Server (2)  
 CIS 291 F Enterprise Networking (3)

### Computer Software Applications Specialist Certificate

The **Computer Software Applications Specialist Certificate** requires the completion of 36-37 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 (27 units)**

- CIS 048 F Intro to PC Communications (2)  
 CIS 050 F Web Page Design I (2)  
 CIS 090 F Office Certification Preparation (1)  
 CIS 104 F Presentation Graphics (2)  
 CIS 105 F Spreadsheet (2)  
 CIS 107 F Intro to Operating Systems (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)  
 CIS 242 F Database II (2)  
 CIS 150 F Introduction to the Internet (2)  
 CIS 151 F Internet Research (2)  
 CIS 152 F Web Page Design II (2)

**One course from the following for a total of 3 units:**

- CIS 100 F Introduction to Personal Computers (3)  
 CIS 102 F Intro to Open Source Software (3)

**One course from the following for a total of 2 units:**

- BUS 182 F Doing Business Online (2)  
 MKT 151 F Internet Marketing (2)

**One course from the following for a total of 2-3 units:**

- CIS 153 F Business Web Graphics (2)  
 CIS 155 F Web Page Multimedia Design I (2)  
 CIS 157 F Dreamweaver I (3)

**One course from the following for a total of 2 units:**

- CIS 205AF Spreadsheet II (2)  
 CIS 205BF Macro Programming (2)

### Database Applications Certificate

The **Database Applications 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)**

- CIS 090 F Office Certification Preparation (1)  
 CIS 142 F Database I (2)  
 CIS 242 F Database II (2)  
 CIS 218 F Visual Basic Programming III (3)

### E-Commerce Programming Certificate

The **E-Commerce Programming 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)**

- CIS 152 F Web Page Design II (2)  
 CIS 180 F Introduction to Networking Concepts (3)

**One of the following for a total of 2-3 units:**

- CIS 154 F JavaScript Programming I (2)  
 CIS 211 F Basic Programming for Business (3)

**One of the following for a total of 3 units:**

- CIS 217 F Visual Basic Programming I (3)  
 CIS 220 F Web Server Programming (3)

**One of the following for a total of 3 units:**

- CIS 226 F Java Programming I (3)  
 CIS 230 F PHP & MySQL Programming (3)

**One of the following for a total of 2 units:**

- CIS 252 F Web Page Design III (2)  
 CIS 254 F JavaScript Programming I (2)

### Enterprise Database Certificate

The **Enterprise Database 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 environment. 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 (2)  
 CIS 242 F Database II (2)  
 CIS 270 F SQL Server Administration (3)  
 CIS 280 F Introduction to Oracle: SQL and PL/SQL (3)

### Internet Certificate

The **Internet Certificate** requires the completion of 15 units chosen from the 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)**

- 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 (2)  
 MKT 151 F Internet Marketing (2)

**One of the following for a total of 2 units:**

- CIS 150 F Introduction to Internet (2)  
 CIS 151 F Internet Research (2)

**One of the following for a total of 2 units:**

- CIS 153 F Business Web Graphics (2)  
 CIS 155 F Web Page Multimedia Design (2)

### Networking Certificate

The **Networking Certificate** prepares the student for a career using computer networks in business. This will include skills in installing and managing Windows networks. The **Networking Certificate** Program requires a total of 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)**

- 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)

**One of the following courses for a total of 3 units:**

- CIS 260 F Solaris System Administration (3)
- CIS 286 F Web Server Management (3)
- CIS 287 F Exchange Server (3)
- CIS 289 F Windows Active Directory (3)
- CIS 290 F Unix Operating System (3)

### PC Application Certificate

The **PC Application Certificate** requires the completion of 16 units chosen from the 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)**

- 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)

**One of the following for a total of 2 units:**

- CIS 050 F Web Page Design I (2)
- CIS 150 F Introduction to Internet (2)

**One of the following for a total of 2 units:**

- CIS 048 F Introduction to PC Communications (2)
- CIS 109 F Personal Computer Security (2)

**One of the following for a total of 2 units:**

- CIS 205AF Spreadsheet II (2)
- CIS 205BF Macro Programming (2)

### Programming Certificate

The **Programming Certificate** requires the completion of 15 units of which 12 units are in required classes listed below. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

**Required Courses (12 units)**

- CIS 211 F Basic Programming for Business (3)
- CIS 217 F Visual Basic Programming I (3)
- CIS 218 F Visual Basic Programming III (3)
- CIS 223 F Programming in C++ (3) or
- CIS 226 F Java Programming I (3)

**One of the following for a total of 3 units:**

- CIS 212 F Robotic Programming (3)
- CIS 219 F Visual Basic Programming II (3)
- CIS 222 F CGI/Perl Scripting
- CIS 228 F Java Programming II (3)
- CIS 229 F XML Programming (3)
- CIS 230 F PHP & MySQL Programming (3)

### Project Management Certificate

See page 129 (Business).

### Spreadsheet Applications Certificate

The **Spreadsheet Applications 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)**

- CIS 090 F Office Certification Preparation (1)
- CIS 105 F Spreadsheets I (2)
- CIS 205AF Spreadsheets II (2)
- CIS 205BF Macro Programming (2)

### Web Design Certificate

The **Web Design 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.

**One of the following for a total of 2 units:**

- CIS 107 F Intro to Operating Systems (2)
- CIS 120AF Microsoft Project I (2)
- CIS 120BF Microsoft Project II (2)

**One of the following for a total of 2-3 units:**

- CIS 050 F Web Page Design I (2)
- CIS 157 F Dreamweaver I (3)

**One of the following for a total of 2 units:**

- CIS 150 F Introduction to Internet (2)
- CIS 152 F Web Page Design II (2)
- CIS 159 F Introduction to XML (2)

**One of the following for a total of 2 units:**

- CIS 153 F Business Web Graphics (2)
- CIS 155 F Web Page Multimedia Design I (2)

**One of the following for a total of 2-3 units:**

- CIS 154 F JavaScript Programming I (2)
- CIS 156AF Web Master – Foundations (3)
- CIS 156BF Web Master – Designer (3)
- CIS 156CF Web Master – Administration (3)
- CIS 180 F Introduction to Networking Concepts (3)
- CIS 222 F CGI/Perl Scripting (3)
- CIS 229 F XML Programming (3)
- CIS 252 F Web Page Design III (2)

**One of the following for a total of 2-3 units:**

- CIS 254 F JavaScript Programming II (2)
- CIS 255 F Web Page Multimedia Design II (2)
- CIS 257 F Dreamweaver II (3)

## *Web Scripting Certificate*

The **Web Scripting Certificate** program prepares the student for a career using various Web scripting tools to create and manage databases. Skills include using typical Web scripting tools to create Web pages and Web sites. The **Web Scripting Certificate** requires a total of 11 units of which 11 units are in required courses.

### **Required Courses (11 units)**

CIS	152 F	Web Page Design II (2)
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 & MySQL Programming (3)

## *Computer Information Systems Courses*

### **CIS 048 F Intro to PC Communications (2)**

Advisory: CIS 150 F Introduction to the Internet

One and one-half hour lecture and one and one-half hour 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. (Degree credit)

### **CIS 050 F Web Page Design I (2)**

Advisory: CIS 150 F Introduction to the Internet

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, to insert graphics, components, multimedia content, and other Web-related components. Students will also 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 up to three hours lab per week. This course is for students who wish to increase their knowledge and skills in various computer 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) (Degree credit)

### **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 107 F Intro to Operating Systems (2) (formerly CIS 040 F)**

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. (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) (CAN BUS 6)**

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) (Degree credit)

**CIS 120AF Project Management I (2) (formerly CIS 120 F)**

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 Project Management I

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) (formerly WP 020 F)**

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) (formerly WP 021 F)**

Advisory: CIS 123AF Word Processing I

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. (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 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 (2)**

One and one-half hour lecture and one and one-half hour 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 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); log in to remote computers using Telnet; locating network resources using Search Engines; participating in discussion groups using Usenet; 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). (CSU) (Degree credit)

**CIS 151 F Internet Research (2)**

Advisory: CIS 150 F Introduction to the Internet

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 multi-media; industry specific search engines, methods, and sources; electronic bulletin board services; Listserv; archives; File Transfer Protocol, and information literacy. Other topics include evaluation of Internet materials; legal issues and copyrights of Internet information; and citing Web and Internet resources. (CSU) (Degree credit)

**CIS 152 F Web Page Design II (2)**

One and one-half hour lecture and one and one-half hour lab per week. This course will prepare students to create Internet Web pages for personal and business purposes. Students will learn basic Internet concepts, using an Internet browser, and Web page creation. 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 (2)**

Advisory: CIS 150 F Introduction to the Internet

One and one-half hour lecture and one and one-half hour 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 Web components using a graphical editor and using graphical elements in Web page design. Students should be familiar with using the Internet. (CSU) (Degree credit)

**CIS 154 F JavaScript Programming I (2)**

Advisory: CIS 150 F Introduction to the Internet with a grade of "C" or better or 152 F Web Page Design II 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 Web Page Design II 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 Webmaster — Foundations, CIS 150 F Intro to Internet, or CIS 152 F Web Page Design II, 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)**

Advisory: CIS 150 F Introduction to the Internet

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 Web Page Design II

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 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 Introduction to Operating Systems and CIS 180 F Introduction to Networking Concepts 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) (formerly CIS 205 F)**

Advisory: CIS 105 F Spreadsheet I

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 Windows-based software. State-of-the-art software will be used. (CSU) (Degree credit)

**CIS 205BF Macro Programming (2)**

Advisory: CIS 105 F Spreadsheet I

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 (2) (formerly 211BF)**

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 II (3)**

Advisory: CIS 105 F Spreadsheet I and CIS 142 F Database I

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 VBA in Excel, Word, Access, and Outlook. The may be taken four times for credit. (CSU) (Degree Credit)

**CIS 219 F Visual Basic Programming III (3)**

Prerequisite: CIS 217 F Visual Basic Programming I 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 Web Page Design II and CIS 217 F Visual Basic Programming I

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 222 F CGI/Perl Scripting (3)**

Advisory: Complete CIS 152 F — Web Page Design II

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 Java Programming I or CIS 211 F Basic Programming for Business

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 CSC1 233 F combined: maximum credit one course) (Degree credit)

**CIS 225 F Netware System Manager (3-3)**

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 Basic Programming for Business or CIS 217 F Visual Basic Programming I or CIS 223 F Programming in C++ 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 228 F Java Programming II (3)**

Advisory: CIS 226 F Java Programming I and CIS 107 F Intro to Operating Systems 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 CORBA 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 Introduction to XML

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 & MySQL Programming (3)**

Advisory: CIS 152 F Web Page Design II and CIS 154 F JavaScript Programming I

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 Database I

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 Web Page Design II

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 JavaScript Programming I

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 152 F — Web Page Design II

One and one half hour lecture and one and one-half hour lab per week. This course teaches advanced concepts in Flash. Students learn how to use advanced features of Flash to create and script Web pages. Topics include using Flash interactively, connecting Flash scripts to servers, and connecting Flash scripts to databases. Students should have a working knowledge of Flash. (CSU) (Degree credit)

**CIS 257 F Dreamweaver II (3)**

Advisory: CIS 157 F Dreamweaver I

Three hours lecture and two hours lab per week. This course covers advanced topics in Dreamweaver. Topics include using layers, styles, and automation to create Web pages. Topics also include using Dreamweaver with JavaScript and other Web components. Students should be familiar with Dreamweaver. (CSU) (Degree credit)

**CIS 260 F Solaris System Administration (3)**

Advisory: Complete CIS 290 F Unix Operating System

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) (formerly CIS 915 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 107 F Intro to Operating Systems 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. (Degree credit)

**CIS 280 F Intro to Oracle: SQL and PL/SQL (3)**

Advisory: Complete CIS 142 F Database I

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 284 F Windows Professional (2) (formerly CIS 929 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 107 F Intro to Operating Systems 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 the latest Microsoft Operating System software. Students learn an overview of the Windows environment, installing and administering software, software management, performance tuning, and connecting to a network. Emphasis is placed on configuring Windows as a network client. (Degree credit)

**CIS 285 F Windows Server (3) (formerly CIS 940 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 040 F Introduction to Windows 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. (Degree credit)

**CIS 286 F Web Server Management (3) (formerly CIS 918 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 107 F Intro to Operating Systems 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. (Degree credit)

**CIS 287 F Exchange Server (3) (formerly CIS 920 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 107 F Intro to Operating Systems 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. (Degree credit)

**CIS 289 F Windows Active Directory (3) (formerly CIS 948 F)**

Advisory: CIS 180 F Introduction to Networking Concepts and CIS 107 F Intro to Operating Systems 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 Directory network, setting up user accounts and user access and managing resources. (Degree credit)

**CIS 290 F Unix Operating System (3) (formerly CIS 910 F)**

Advisory: CIS 107 F Intro to Operating Systems

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 as a Microsoft Windows or Windows NT. (Degree credit)

**CIS 291 F Enterprise Networking (3)**

Advisory: CIS 180 Introduction to Networking Concepts and either CIS 285 F Windows Server, CIS 225F Netware System Manager, or CIS 260 F Solaris System Administration.

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)

## Computer Science

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The **Computer Science Associate in Science Degree** program requires 20 units of which 16 units are in required courses. An additional 4 units must be chosen from the restricted electives listed below. A minimum grade of "C" is required in all required and restricted courses.

**Required Courses (16 units)****Suggested sequence**

CSCI	123 F Introduction to Programming Concept in C++ (4) (1st semester)
CSCI	133 F Data Structures in C++ (4) (2nd semester)
MATH	171 F Discrete Mathematical (4)
MATH	172 F Graph Theory and Linear Algebra (4)

**Restricted Electives (4 units)**

CSCI	223 F C Language for Mathematics and Science (4)
CSCI	241 F Assembly Language Programming (4)

## Computer Science Courses

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**CSCI 123 F Introduction to Programming Concepts in C++ (4)**

Prerequisite: MATH 141 F College Algebra or MATH 142 F Trigonometry, or equivalent with a grade of "C" or better

Advisory: READ 096 F Preparation for College Reading or the recommended score for placement in READ 142 F College Reading: Logical Analysis and Evaluation on the Reading evaluation exam.

Four hours lecture and one hour 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, 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)

**CSCI 133 F Data Structures in C++ (4)**

Prerequisite: CSCI 123 F Introduction to Programming Concepts in C++ or equivalent, with a grade of "C" or better

Four hours lecture and one hour 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)  
(CAN CSCI 16)**

Prerequisite: CSCI 123 F Introduction to Programming Concepts in C++ or one prior programming language with a grade of "C" or better

Four hours lecture and one hour 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 Assembly Language Programming (4)  
(CAN CSCI 10)**

Prerequisite: CSCI 133 F Data Structures C++ or CSCI 223 F C Programming for Mathematics and Science with a grade of "C" or better

Four lecture hours and one hour 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 credit limitation) (Degree credit)

## *Construction*

### *Construction Estimating*

The **Construction Estimating Certificate** Program requires a total of 17 units in required courses. A minimum grade of "C" is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College.

**Required Courses (17 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 Materials, Specifications, and Purchasing (2)

### *Construction Inspection*

Curriculum leads to the **Associate in Science Degree** and/or entry-level employment in the construction industry.

**Required courses (18 units)**

- CSTR 030 F Construction Blueprint Reading (3)
- CSTR 032 F Uniform Plumbing Code (3)
- CSTR 034 F National Electric Code (3)
- CSTR 036 F Uniform Building Code — Residential (3)
- CSTR 037 F Uniform Building Code — Commercial/Industrial (3)
- CSTR 038 F Uniform Mechanical Code (3)

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)**

- CSTR 032 F Uniform Plumbing Code (3)
- CSTR 034 F National Electrical Code (3)
- CSTR 036 F Uniform Building Code — Residential (3)
- CSTR 037 F Uniform Building Code — Commercial/Industrial (3)
- CSTR 038 F Uniform Mechanical Code (3)

**Restricted Electives (10 units)**

- CSTR 006 F Introduction to Residential Plumbing and Mechanical 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*

Curriculum leads to the **Associate in Science Degree** and/or employment in the construction industry. A total of 24 units are required. High School preparation: woodwork, drafting, and mathematics are recommended.

**Complete 24 or more units from the following list:**

- ACCT 101AF Financial Accounting (4)
- BUS 161 F Introduction to Business (3)
- BUS 180 F Entrepreneurship: Small Business Management (3)
- CIS 100 F Introduction to Personal Computers (3)
- CSTR 014 F Construction Office Practice (3)
- CSTR 015 F Construction Management (3)
- CSTR 030 F Construction Blueprint Reading (3)
- CSTR 110 F Residential Estimating (3)
- CSTR 112 F Construction Materials, Specifications & Purchasing (2)

### *Construction Technology*

Curriculum leads to the **Associate in Science Degree** and/or employment in the construction industry. A total of 24 units are required.

High School preparation in woodwork, drafting, and mathematics are recommended.

**Complete 24 or more units from the following list:**

- CSTR 006 F Introduction to Residential Plumbing and Mechanical Systems (3)
- CSTR 007 F Residential Electrical Systems (2)

CSTR	014 F Contractor's Office Practices (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 Construction (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 Materials, Specifications & Purchasing (2)
CSTR	116 F Residential Construction Practice I (4)
WOOD	110 F Fundamentals of Woodwork (3)

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)

CSTR	006 F Introduction to Residential Plumbing and Mechanical Systems (3)
CSTR	100 F Beginning Residential Construction (4)
CSTR	102 F Residential Finish Construction (4)
CSTR	104 F Concrete and Masonry (3)
CSTR	110 F Residential Estimating (3)

#### Restricted Electives (12 units)

Any classes offered by the Construction Technology Department fulfill the requirements for restricted electives. (Architecture, Construction, and Woodworking)

## *Construction Courses*

#### **CSTR 005 F Construction Technology Lab (0.5-2)**

Corequisite: Concurrent enrollment in any one of the following courses: CSTR 006 F Introduction to Residential Plumbing and Mechanical Systems, CSTR 007 F Residential Electrical Systems, CSTR 100 F Beginning Residential Construction, CSTR 102 F Residential Finish Construction, CSTR 104 F Concrete and Masonry.

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 laboratory participation. Course may be repeated four times for credit for a maximum of 8 units. Open Entry. (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 laboratory per week. This course is an introduction to load center sizing, wiring circuits and grounding systems used in residential construction. Laboratory 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 Residential Finish Construction

Two hours lecture and six hours laboratory 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 Beginning Residential Construction

Two hours lecture and six hours laboratory 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 Residential Finish Construction

Two hours lecture and six hours laboratory 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 F Hazardous Materials Management Applications

Three 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 laboratory 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 Beginning Residential Construction.

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

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Curriculum leads to the **Associate in Science Degree** and prepares the student to pass the California Bureau of Barbering and Cosmetology board examination. The program requires 54 units in required courses.

**Required Courses (54 units):**

COSM 055AF Cosmetology (11)  
 COSM 055BF Cosmetology (11)  
 COSM 055CF Cosmetology (11)  
 COSM 055DF Cosmetology (11)  
 COSM 055EF Cosmetology (11)

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 (54 units)**

COSM 055AF Cosmetology (11)  
 COSM 055BF Cosmetology (11)  
 COSM 055CF Cosmetology (11)  
 COSM 055DF Cosmetology (11)  
 COSM 055EF Cosmetology (11)

## Cosmetology Instructor

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)**

COSM 060 F Instruction Techniques in Cosmetology (15)

**Restricted Electives (3-4 units)**

COSM 061AF Pivot Point Instruction (1)  
 COSM 061BF Pivot Point Instruction (1)  
 COSM 061CF Pivot Point Instruction (1)  
 COSM 070 F Continuing Education for Instruction Techniques in Cosmetology (2, 2)

## Cosmetology Courses

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**COSM 041 F Esthetician: Level 1 (10)**

Prerequisite: 10th grade education

Advisory: Must be 17 years of age when applying for State Board Examination

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 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. (Degree credit) Pivot Point Member School.

**COSM 042 F Esthetician: Level 2 (10)**

Prerequisite: COSM 041 F Esthetician Level 1 with a grade of "C" or better

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. (Degree credit) Pivot Point Member School.

**COSM 055AF Cosmetology: Level 1 (11)**

Prerequisite: 10th grade education

Advisory: Must be 17 years of age when applying for State Board Examination

This course includes basic hair styling, manicuring, facial, and day make-up, permanent waving, scalp treatments, hair cutting, tinting, and bleaching. Related subjects, as they are applicable to cosmetology, are covered. The program is designed toward preparation for the Bureau of Barbering and Cosmetology examination, 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. (Degree credit) Pivot Point Member School.

**COSM 055BF Cosmetology: Level 2 (11)**

Prerequisite: COSM 055AF Cosmetology: Level 1 with a grade of "C" or better

Advisory: Must be 17 years of age when applying for State Board Examination

The course includes basic hair styling, manicuring, facials, make-up, permanent waving, scalp treatments, hair cutting, tinting and bleaching, soft permanent wave and 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. This is the second of five consecutive segments. (Degree credit) Pivot Point Member School.

**COSM 055CF Cosmetology: Level 3 (11)**

Prerequisite: COSM 055BF Cosmetology: Level 2, with a grade of "C" or better

Advisory: Must be 17 years of age when applying for State Board Examination

The 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. 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 055DF Cosmetology: Level 4 (11)**

Prerequisite: COSM 055CF Cosmetology: Level 3 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 (11)**

Prerequisite: COSM 055DF Cosmetology: Level 4 with a grade of "C" or better; or equivalent

The 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 relaxing-sodium hydroxide. Related subjects, as they are applicable to cosmetology, are covered. The course also includes State Board of Barbering and Cosmetology mock written and performance examinations. The program is designed toward preparation for the Board 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. This is the fifth of five consecutive segments. (Degree Credit) Pivot Point Member School.

**COSM 060 F Instruction Techniques in Cosmetology (15)**

Prerequisite: COSM 051AF, COSM 051BF, COSM 051CF, COSM 051DF Cosmetology with a "B" average or better. Valid California cosmetology license. Verified work experience as a cosmetologist in a licensed cosmetological establishment. Minimum of five year's experience, one year of which is within the last two years.

Designed to prepare the student for the teacher's examination required by the California Bureau of Barbering and Cosmetology and enable the student to secure employment as an instructor in a private beauty school. The lecture section consists of demonstrations in teaching with the student participating in both lectures of related information and practical trade demonstrations. A laboratory period involves the instructor trainee in the teaching of Cosmetology students in practical salon work. Fifteen units for 600 clock hours of technical instruction. Offered as a self-pacing, open entry course with flexible hours with a minimum of twelve lab hours per week. Pivot Point Member School. (Degree credit)

**COSM 061AF Pivot Point Instruction (1)**

Prerequisite: Valid California Cosmetology License and Cosmetology Instructor's License or proof of enrollment in an Instructor Trainee Program

This course is specifically designed for cosmetologists, 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 (1)**

Prerequisite: Valid California Cosmetology License and Cosmetology Instructor's License or proof of enrollment in an Instructor Trainee Program

This course is specifically designed for cosmetologists, 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 061CF Pivot Point Instruction (1)**

Prerequisite: Valid California Cosmetology License and Cosmetology Instructor's License or proof of enrollment in an Instructor Trainee Program

This program course is specifically designed for cosmetologists, 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 070 F Continuing Education Instruction Techniques in Cosmetology (2-2-2-2)**

Prerequisite: Valid California Cosmetology Instructor's License

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 lectures of related information and practical trade demonstration. Course may be taken four times for credit. Pivot Point Member School. (Degree credit)

## *Counseling and Guidance*

**COUN 050 F College Orientation (1)**

Credit/no credit only.

One hour of lecture per week or equivalent. 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)**

Credit/no credit only.

One hour of lecture per week or equivalent. 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 063 F Self-Esteem: Pathway to Success (1)**

Letter grade or credit/no credit option.

One hour of lecture per week or equivalent. This course provides students with skills necessary for developing a positive self-image. Students will acquire knowledge and experiences in areas such as awareness/perception, behavior, communication, personality, stress management, motivation, and success. Recommended for students interested in personal growth and in improvement of their success in college. (Degree credit)

**COUN 101 F The College Experience (2)**

Two hours of lecture per week or equivalent. 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 credit/no credit option.

Two hours lecture per week and 50-100 laboratory hours per semester. Orientation to teaching as a profession. This course surveys the nature of the work, qualifications, and the 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 140 F Educational Planning (.5)**

Credit/no credit only.

Two hours per week for four weeks or equivalent. Students taking this course will review 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. (CSU) (Degree credit)

**COUN 141 F Career Exploration (1)**

Letter grade or credit/no credit option.

One hour of lecture per week or equivalent. This course is designed to introduce students to a career decision-making process that includes both evaluation of self and exploration of the world of work. Self-evaluation activities include identification of personality/temperament, interests, skills, goals, and values. Career research activities are utilized to examine the world of work. The focus of the course is on self-description in relation to choice of occupation and career. (CSU) (Degree credit)

**COUN 143 F Creative Job Search (1)**

Letter grade or credit/no credit option.

One hour of lecture per week or equivalent. The 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 credit/no credit option.

One hour of lecture per week or equivalent. 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 about 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 credit/no credit option.

One hour of lecture per week or equivalent. This course will facilitate 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 credit/no credit option.

Three hours of lecture per week. A course designed for, but not restricted to, undecided students and persons in career transition. Includes training in life problem-solving and self-management skills. Topics include extensive exploration of one's values, interests, and abilities; adult development theory and the changes that occur over the life span; self-assessment including identifying one's skills and matching personality with work; an intensive career investigation; decision making, goal setting and motivation; and job search and interview techniques. (CSU) (Degree credit)

**COUN 161 F Assertion Skills/Communication (1, 1)**

Letter grade or credit/no credit 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 199 F Counseling and Guidance Independent Study (.5-2, .5-2, .5-2, .5-2)**

Letter grade or credit/no credit 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

The **Dance Associate in Arts Degree** program requires a total of **18 units** of which **18 units** are in required courses. An additional **0 units** must be chosen from the restricted units listed below.

**Required Courses (18 Units)**

- DANC 103 F Dance Technique I (1) or
- DANC 104 F Dance Technique II (1)
- DANC 105 F Ballet I (1) or
- DANC 106 F Ballet II (1)
- DANC 107 F Modern Dance I (1) or
- DANC 108 F Modern Dance II (1)
- DANC 111 F Jazz I (1) or
- DANC 112 F Jazz II (1)
- DANC 120 F Dance History (3)
- DANC 202 F Dance Composition and Choreography (2)
- DANC 203 F Dance Production (2)
- DANC 204 F Dance Rehearsal and Performance (1)
- DANC 205 F Dance ensemble (2)

**Restricted Electives (4 Units)****Select 2 Units from the following:**

- DANC 110 F Ballet Folkloric (1)
- DANC 115 F Hip Hop Dance I (1)
- DANC 130 F Afro-Caribbean Dance (1)
- DANC 132 F Flamenco Dance (1)

**Select 2 Units from the following:**

- DANC 102 F Conditioning for Dance (1)
- DANC 113 F Tap Dance I (1)
- DANCE 114 F Tap Dance II (1)
- DANC 119 F Dance for Theatre (1)
- DANC 214 F Dance Repertory (2)

## Drafting Technology: Industrial

Curriculum leads to the **Associate in Science Degree** and/or employment in a variety of industries. A total of 24 units are required.

High School preparation: algebra (two years recommended) and mechanical drafting are recommended.

**Complete 24 or more units from the following list:**

- DRAF 140 F AutoCAD for Industry (2)
- DRAF 141 F Adv Computer Aided Design for Industry (2)
- DRAF 142 F Customizing AutoCAD (2)
- DRAF 143 F 3D Applications Using AutoCAD (2)
- DRAF 145 F CAD/CAM (2)
- DRAF 171 F Fundamentals of Drafting (2)
- DRAF 173 F Geometric Dimensioning, and Tolerancing (2)
- DRAF 944 F AutoCAD Mechanical Desktop (3)
- DRAF 958 F Electronics Drafting using AutoCAD (2)
- ENGR 102 F Engineering Drawing (3)
- MACH 116 F Machine Tools (2) (Level A)
- TECH 108 F Manufacturing Processes (3)

## AutoCAD for Industrial Drafting Certificate

The **AutoCAD for Industrial Drafting Certificate Program** requires completion of all 9 units in required courses. A grade of 'B' or better is required in each course taken. All units toward the certificate must be completed at Fullerton College. The goal of this certificate is to provide preparation for entry-level employment as a user of the AutoCAD computer aided design software application in an industrial setting.

**Required Courses (9 units)**

- DRAF 141 F Advanced Computer Aided Design for Industry (2)
- DRAF 142 F Customizing AutoCAD (2)
- DRAF 143 F 3D Applications using AutoCAD (2)
- DRAF 944 F AutoCAD Mechanical Desktop (3)

## *Industrial Drafting — Level 1 Certificate*

The **Industrial Drafting – Level I Certificate** 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 Courses (6 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)

### **Restricted Electives (12 units)**

DRAF 171 F Fundamentals of Drafting (2)  
 DRAF 958 F Electronics Drafting Using AutoCAD (2)  
 ENGR 102 F Engineering Drawing (3)  
 MACH 116 F Machine Tools (2)  
 TECH 081 F Technical Mathematics I (3)  
 TECH 088 F Technical Science (3)  
 WELD 121AF Introduction to Welding (2)

## *Industrial Drafting — Level 2 Certificate*

The **Industrial Drafting – Level II Certificate** requires completion of the Level I Certificate plus a minimum of 18 units. A grade of “C” or better is required in each course taken. At least one half of the units toward the certificate must be completed at Fullerton College. Eleven units are from a list of required courses; 7 units are from a list of restricted electives.

### **Completion of 18 units from Level I Certificate, plus:**

#### **Required Courses (11 units)**

DRAF 141 F Adv Computer Aided Design for Industry (2)  
 DRAF 142 F Customizing AutoCAD (2)  
 DRAF 143 F 3D Applications Using AutoCAD (2)  
 DRAF 145 F CAD/CAM (2)  
 DRAF 944 F AutoCAD Mechanical Desktop (3)

#### **Restricted Electives (7 units)**

MACH 050 F CNC Programming Using Mastercam (3) or  
 MACH 060 F CNC Programming Using SURFCAM (3)  
 MACH 116 F Machine Tools (2)  
 WELD 121BF Introduction to Welding (2)

## *Drafting Technology 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)**

(See Engineering)

### **DRAF 140 F AutoCAD for Industry (2)**

Advisory: DRAF 171 F Fundamentals of Drafting 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, 2D AutoCAD drawing commands, plotting, symbol libraries, dimensioning, productivity, and basic 3D commands. (CSU) (Degree credit)

### **DRAF 141 F Advanced Computer Aided Design for Industry (2)**

Advisory: DRAF 140 F AutoCAD for Industry 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 “2D” approach to AutoCAD will be used. (CSU) (Degree credit)

### **DRAF 142 F Customizing AutoCAD (2)**

Advisory: DRAF 140 F AutoCAD for Industry or equivalent industry experience

One and one-half hour lecture and one and one-half hour lab per week. This is an advanced level CAD course using AutoCAD software. It is designed for practicing drafters, engineers, and other manufacturing oriented persons who need to increase their AutoCAD productivity and customize the software for their application. Topics will include symbol attributes, system performance and database management, DOS, menu customization, script files, macros, and AutoLisp. (CSU) (Degree credit)

### **DRAF 143 F 3D Applications Using AutoCAD (2)**

Advisory: DRAF 140 F AutoCAD for Industry 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 3D environment. Topics will include an introduction to 3D applications, the 3D coordinate system, display control wire frame modeling, surface modeling, solids modeling, analysis of a solids model (mass properties), model rendering, hardcopy output, and 2D/3D transfer. The course will be taught with an emphasis on mechanical drafting applications.

**DRAF 145 F CAD/CAM (2)**

Advisory: DRAF 140 F AutoCAD for Industry 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 laboratory per week. A beginning drafting course. Proper use of drafting instruments, lettering, geometric construction, pictorial drawings, orthographic projection, dimensions, single-auxiliary views and sections are introduced. Emphasis is placed on line quality and lettering. Some problems drawn from the industrial field. (CSU) (Degree credit)

**DRAF 173 F Geometric Dimensioning and Tolerancing (2)**

Advisory: DRAF 070 F Blueprint Reading for the Metal Trades or DRAF 171 F Fundamentals of Drafting 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 AutoCAD Mechanical Desktop (3)**

Advisory: DRAF 143 F 3D Applications using AutoCAD or industry experience using AutoCAD in a 3D drafting environment

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 Autodesk Mechanical Desktop. Students will demonstrate the features of the software by creating parametric solid models. (Degree credit)

**DRAF 958 F Electronics Drafting Using AutoCAD (2)**

Advisory: DRAF 140 F AutoCAD for Industry 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)

## Earth Sciences

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### Astronomy

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)**

ESC	116 F Astronomy (3)
ESC	116LF Astronomy Lab (2)
PHYS	221 F General Physics (4)
PHYS	222 F General Physics (4)
PHYS	223 F General Physics (4)

**Restricted Electives (1 unit)**

CHEM	111AF General Chemistry (5)
CHEM	111BF General Chemistry (5)
MATH	150AF Calculus (4)
MATH	150BF Calculus (4)
MATH	250AF Intermediate Calculus (4)
MATH	250BF Linear Algebra and Differential Equations (4)

## Earth Sciences Courses

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**ESC 100 F Physical Geology (3) (CAN GEOL 6) (ESC 100 F + 100LF — CAN GEOL 2)**

Letter grade or credit/no credit 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 Physical Geology 100 Laboratory is recommended. Field trips may be taken. (CSU) (UC) (Degree credit)

**ESC 100LF Physical Geology Laboratory (1) (ESC 100 F + 100LF — CAN GEOL 2)**

Letter grade or credit/no credit option. Corequisite: ESC 100 F Physical Geology.

Three hours lab per week. The course supplements ESC 100 F Physical Geology. Laboratory 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)

**ESC 101 F Earth Science Survey (3)**

Three hours lecture per week. Laboratory 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)

**ESC 101LF Earth Science Survey Laboratory (1)**

Corequisite: ESC 101 F Earth Science Survey

Three hours lab per week. This laboratory 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 if taken after a college level course in astronomy, geology or oceanography.) (Degree credit)

**ESC 102 F Survey of Natural Disasters (3)**

Three hours lecture per week. This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornadoes 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)

**ESC 103 F Historical Geology (4)  
(CAN GEOL 4)**

Letter grade or credit/no credit 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)

**ESC 104 F Geology of National Parks and Monuments (3)**

Letter grade or credit/no credit 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 or monuments. (CSU) (Degree credit)

**ESC 105 F Elements of 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)

**ESC 116 F Astronomy (3)**

Three hours lecture per week. An introduction to the tools and methods of astronomy and the study of the universe, with particular emphasis on the solar system. High school algebra and plane geometry or their equivalents are highly desirable. (CSU) (UC) (Degree credit)

**ESC 116LF Astronomy Laboratory (2)**

Corequisite: ESC 116 F Astronomy.

Four hours laboratory 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)

**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) (Degree credit)

**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)

**ESC 130LF Introduction to Oceanography Field Experience (1)**

Corequisite: ESC 130 F Introduction to Oceanography

Four hours field study per week for eight weeks or the equivalent. Field studies to correspond to material covered in ESC 130 F Introduction to Oceanography. Each field experience will be preceded by an orientation lecture/discussion period. May include field work from boats. (CSU) (UC) (Degree credit)

**ESC 133 F Navigation and Seamanship (3)**

Two hours lecture and three hours laboratory per week. This course is designed to present the basics of navigation theory and the fundamentals of small boat handling and safety. Laboratory and field exercises are designed to give practical experience in navigation techniques and small boat seamanship. (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. Laboratory 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)**

Letter grade or credit/no credit option.

Three hours lecture per week. This course explores those geologic processes that affect human activities. These worldwide processes are occurring today. 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)

**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)

**ESC 198AF Geology of California Coastal Areas (2)**

Two hours of lecture per week or equivalent. 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 198BF Geology of the Anza-Borrego Desert State Park Area (1)**

One hour of 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 198CF Geology of the Mojave Desert Area (1)**

One hour of 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 198DF Geology of the Owens Valley/Mammoth Lakes Area (1)**

One hour of lecture per week or equivalent. This course involves lecture and field study of geologic processes and features in the Owens Valley — Mammoth Lakes area. Lectures will examine the geologic importance of the area and how to recognize key geologic features in the field. Particular attention will be focused on identifying geologic hazards and understanding the natural resource potential. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree credit)

**ESC 198EF Geology of the Southern California Mountain Areas (1)**

One hour of lecture per week or equivalent. This course involves lecture and field study of geologic processes and features in the Transverse Ranges 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 198FF Geology of the Death Valley National Park Area (1)**

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 understanding the natural resource potential of the region. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree credit)

**ESC 198GF Geology of the Joshua Tree National Park Area (1)**

One hour of 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 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)

## Economics

Curriculum leads to the **Associate in Arts Degree**. 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)

ECON 101 F Principles of Economics – Micro (3) or  
 ECON 101HF Honors Principles of Economics – Micro (3)  
 ECON 102 F Principles of Economics – Macro (3) or  
 ECON 102H Honors Principles of Economics – Macro (3)

### Restricted Electives (12 units)

ACCT 101AF Financial Accounting (4)  
 BUS 131 F Principles of International Marketing (3)  
 ENGL 102 F Introduction to Literature (3)  
 GEOG 260 F Economic Geography (3)  
 HIST 110 F Western Civilization (3)  
 HIST 111 F Western Civilization (3)  
 HIST 170 F History of the United States (3)  
 HIST 171 F History of the United States (3)  
 MATH 120 F Introductory Probability and Statistics (4)  
 MATH 130 F Calculus for Business (4)  
 MATH 150AF Calculus (4)  
 MATH 150BF Calculus (4)  
 PHIL 100 F Introduction to Philosophy (3)  
 PHIL 160 F Introduction to Ethics (3)  
 PHIL 165 F Business and Professional Ethics (3)  
 Foreign Language 203F Intermediate (4)  
 Foreign Language 204F Intermediate (4)

## Economics Courses

### ECON 101 F Principles of Economics — Micro (3) (CAN ECON 4)

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)

### 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)

### ECON 102 F Principles of Economics — Macro (3) (CAN ECON 2)

Prerequisite: ECON 101 F Principles of Economics — Micro

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) (Degree credit)

### ECON 102HF Honors Principles of Economics — Macro (3)

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) (Degree Credit)

### GEOG 260 F Economic Geography (World and National Trade Relationships) (3) (see Geography)

## Electronics and Computer Technology

Curriculum leads to the **Associate in Science Degree** and/or employment as electronics technician. This degree requires completion of 18 units of which 12 units are in required courses. An additional 6 units must be chosen from the restricted electives listed below.

Normal High School preparation in algebra (two years recommended) and drafting is recommended.

### Required Courses (12 units)

ELEC 050 F Electronics Fabrication/Prototyping (3)  
 ELEC 056AF Electronics Math (3)  
 ELEC 056BF Electronics Math (3)  
 ELEC 100 F Direct Current-Alternating Current Theory (4)  
 ELEC 100LF Direct Current-Alternating Current Lab (2)  
 ELEC 101 F Electronic Devices (4)  
 ELEC 101LF Electronic Devices Laboratory (2)  
 ELEC 153 F Electronic Instruments: Use and Application (2)  
 ELEC 172 F Introduction to Computer/Digital Logic (4)  
 ELEC 173 F Digital Microcomputer Theory (4)

**Restricted Electives (6 units)**

- ELEC 067 F C Programming for Technicians (3)
- ELEC 166 F Electronic Circuit Analysis (3)
- ELEC 174 F Microcomputer Systems and Troubleshooting I (4)
- ELEC 176 F Microcomputer Systems/A+ Certification Preparation (4)
- ELEC 202 F Electronic Circuits and Systems (3)
- ELEC 202LF Electronic Circuits and Systems Laboratory (3)
- ELEC 203 F Electronic Circuits and Systems (3)
- ELEC 203LF Electronic Circuits and Systems Laboratory (3)
- ENGR 203 F Electric Circuits (4)
- ENGR 203LF Electric Circuits Laboratory (1)

*Digital Electronics Certificate*

The **Digital Electronics Certificate** Program requires the completion of 20 units chosen from the courses listed below, 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.

**Complete 20 units from the following list:**

- ELEC 067 F "C" Programming for Technicians (3)
- ELEC 100 F Direct Current-Alternating Current Theory (1-4)
- ELEC 100LF Direct Current-Alternating Current Lab (1-2)
- ELEC 101 F Electronic Devices (1)
- ELEC 153 F Electronics Instruments: Use and Application (2)
- ELEC 172 F Introduction to Computer/Digital Logic (4)
- ELEC 173 F Digital Microcomputer Theory (4)
- ELEC 174 F Microcomputer Systems and Troubleshooting I (4)
- ELEC 176 F Microcomputer Systems/A+ Certification Preparation (4)

*Electronics Certificate*

The **Electronics Certificate Program** requires the completion of 33 units chosen from the courses listed below with the minimum grade of "C" in each course taken. At least 16 of the units toward the certificate must be completed at Fullerton College. The Endorsements require the completion of the Electronics certificate and the units listed in the Endorsement with a minimum grade of "C" in each course taken.

**Required Courses (33 units)**

- ELEC 050 F Electronics Fabrication/Prototyping (3)
- ELEC 056AF Electronics Math (3)
- ELEC 056BF Electronics Math (3)
- ELEC 100 F Direct Current-Alternating Current Theory (4)
- ELEC 100LF Direct Current-Alternating Current Lab (2)
- ELEC 101 F Electronic Devices (4)
- ELEC 101LF Electronic Devices Lab (2)
- ELEC 153 F Electronic Instruments (2)
- ELEC 172 F Introduction to Computer/Digital Logic (4)
- ELEC 202 F Electronic Circuits and Systems (3)
- ELEC 202LF Electronic Circuits and Systems Lab (3)

**Advanced Electronics Endorsement (6 units)**

- ELEC 203 F Electronic Circuits and Systems (3)
- ELEC 203LF Electronic Circuits and Systems Laboratory (3)

**Digital Endorsement (12 units)**

- ELEC 173 F Digital Microcomputer Theory (4)
- ELEC 174 F Microcomputer Systems and Troubleshooting I (4)
- ELEC 176 F Microcomputer Systems/A+ Certification Preparation (4)

**Additional Recommended Course in Electronics\***

- ELEC 067 "C" Programming for Technician (3)

\* Note: With Approval from the Technology and Engineering Division, courses listed as "Additional Recommended Courses" may be used in place of specific requirements for the Certificate or the Endorsement.

*Microcomputer Technology Certificate*

The **Microcomputer Technology Certificate** Program requires the completion of 31 units of which 17 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. At least one half of the units toward the certificate must be completed at Fullerton College.

**Required Courses (17 units)**

- ELEC 101 F Electronic Devices (1)
- ELEC 172 F Introduction to Computers and Digital Logic (4)
- ELEC 173 F Digital Microcomputer Theory (4)
- ELEC 174 F Microcomputer Systems and Troubleshooting I (4)
- ELEC 176 F Microcomputer Systems/A+ Certification Preparation (4)

**Restricted Electives (14 units)**

- ELEC 050 F Electronics Fabrication/Prototyping (3)
- ELEC 056BF Electronics Mathematics (1-3)
- ELEC 067 F "C" Programming for Technicians (3)
- ELEC 100 F Direct Current-Alternating Current Theory (4)
- ELEC 100LF Direct Current-Alternating Current Lab (2)
- ELEC 101 F Electronic Devices (1-3)
- ELEC 101LF Electronic Devices Lab (1-2)
- ELEC 153 F Electronic Instruments: Use and Application (2)
- ELEC 202 F Electronic Circuits and Systems (3)
- ELEC 202LF Electronic Circuits and Systems Lab (3)
- ELEC 203 F Electronic Circuits and Systems (3)
- ELEC 203LF Electronic Circuits and Systems Lab (3)

## *Technical Networking Certificate*

The goal of the program is to provide the student with the computer hardware knowledge and networking skills to be successful in the computer-networking field. The combined hardware and networking background will provide the student with the necessary tools for entry-level employment in the computer-networking field. The **Technical Networking Certificate** requires a total of 15 units of which 15 units are 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 (15)**

- ELEC 176 F Microcomputer Systems/A+ Certification Prep (4)  
 ELEC 082 F Cisco Internetworking I (4)  
 ELEC 083 F Cisco Internetworking II (4)  
 ELEC 085 F Network+ Certification Prep (3)

## *Electronics and Computer Technology Courses*

### **ELEC 050 F Electronics Fabrication/Prototype Development (3)**

Corequisite: ELEC 100LF DC/AC Laboratory

Two hours lecture and three hours lab per week. The student develops the knowledge and skills necessary for hardware implementation of electronic circuitry. Included are hand tool skills including soldering and wire work, recognition of common components, readying component marking and codes, reading and wiring from schematics, layout and fabrication of chassis, circuit boards, brackets. (Degree credit)

### **ELEC 051 F Survey of Electronics (3)**

Three hours lecture per week. A non-mathematical survey of the entire field of electronics beginning with the electron theory and ending with complete integrated systems. (Degree credit)

### **ELEC 056AF Electronic Mathematics (1-3)**

Prerequisite: One year of high school algebra

One to three hours lecture per week. The study of fundamental mathematical operations essential to achieving success in basic electronics courses. Units of instruction include signed numbers, powers of ten, scientific notation and prefixes, fundamental algebra, and graphs. Self-pacing, open entry, flexible hours, and variable units; or may be offered as a structured class. (Degree credit)

### **ELEC 056BF Electronic Mathematics (1-3)**

Prerequisite: ELEC 056A Electronic Mathematics or grade of "B" or better in two years of high school algebra.

One to three hours lecture per week. The study of the fundamental operations of trigonometry, periodic functions, logarithms, and phasor analysis as applied to the study of alternating current theory. Self-pacing, open entry, flexible hours, and variable units. (Degree credit)

### **ELEC 065F Audio Systems (3)**

Prerequisite: ELEC 100 F DC/AC Theory and ELEC 101 F Electronic Devices.

Two hours lecture and three hours lab per week. Provides electronic technicians and broadcasting majors with the general principles of sound recordings and reproduction, voltage and power amplifiers circuits, equalizer networks, loudspeakers, microphones and enclosures, alternators and mixers, feedback amplifiers, and measuring characteristics of amplifiers. (Degree credit)

### **ELEC 067 F "C" Programming for Technicians (3)**

Prerequisite: ELEC 056AF Electronic Mathematics

Two hours lecture and three hours lab per week. This is an introductory course in computer programming for non-programmer technical students who would benefit from learning a high level language. The course concentrates on the elements of the "C" programming language with applications in technology. Topics include: comparison of machine language, assembly language, and high level languages, the relationship between the programming language, the operating system, and the system hardware, and the basic elements of the "C" programming language including data types, functions, decision and looping structures, and pointers. Extensive "hands-on" practical experience, using the Microsoft QuickC compiler, is provided to emphasize important "C" concepts and provide practical programming experience. (Degree credit)

### **ELEC 070AF General Radiotelephone License Preparation (3)**

Prerequisite: ELEC 100 F DC/AC Theory.

Two hours lecture and three hours lab per week. Provides instruction in F.C.C. rules and regulations and electronics theory, which prepares students to be eligible for F.C.C. General Telephone License. Deals with F.C.C. license examinations. Includes formal lecture, lecture demonstration, and emphasizes directed study of typical F.C.C. examination questions. (Degree credit)

### **ELEC 070BF Radiotelephone Certification Preparation (3)**

Prerequisite: ELEC 070AF General Radiotelephone License Preparation or F.C.C. General Radiotelephone License.

Two hours lecture and three hours lab per week. Provides instruction in electronics theory that prepares students to be eligible for industry-required specialty certification in areas such as aviation, marine, and international fixed public radio service. (Degree credit)

### **ELEC 082 F Cisco Internetworking I (4)**

Three hours lecture and three hours lab per week. This class provides instruction in the material contained in the first two semesters of the Cisco Computer Networking Academy Curriculum covering computer internetworking. Topics covered include network topology, the OSI model, cabling, bridges, hubs, routers and Cisco Internet Operating System setup and configuration. Provides the student with the skills needed to design, build, and maintain small to medium-size networks. Upon completion of this course and the second semester Cisco Internetworking II, the student is prepared to take the Cisco Certified Network Associate test. (Degree credit)

### **ELEC 083 F Cisco Internetworking II (4)**

Prerequisite: ELEC 082 F Cisco Internetworking I

Three hours lecture and three hours lab per week. This course consists of the third and fourth courses in the Cisco Systems Networking Academy curriculum. Topics covered include the advanced features of router and routing concepts including IPX access lists, LAN segmentation using bridges and switches, network congestion issues, cut-through and store-and-forward switches, operation of the Spanning Tree protocol, and Wide Area Network services including LAPB, Frame Relay, ISDN, HDLC, PPP and DDR. This class includes hands-on experience using Cisco routers. (Degree credit)

**ELEC 085 F Network+ Certification Prep (3)**

This course provides the instructional scope and content, as defined by CompTIA, for students preparing to pass CompTIA's broad-based, vendor independent networking certification exam, Network+. This course covers a wide range of networking concepts including local area networks, wide area networks, protocols, topologies, transmission media, and security. Upon course completion, students will be prepared to pass the Network+ Certification exam.

**ELEC 100 F Direct Current/Alternating Current Theory (1-4)**

Corequisite: ELEC 056AF Electronic Mathematics

Four hours lecture per week. Direct and Alternating Current Theory is presented through the application of Ohm's Law, Kirchoff's laws, and network analysis. Analysis techniques presented include: Thevenen's Theorem, Norton's Theorem, and Superposition. Series, parallel and combination circuits are studied. Other topics include RC and RL time constants, and the response of basic circuits to the application of voltages of varying frequency. This course is offered as a standard structured class and/or self pacing, open entry with flexible hours and variable units. (CSU) (Degree credit)

**ELEC 100LF Direct Current/Alternating Current Laboratory (1-2)**

Corequisite: ELEC 100 F DC/AC Theory

Six hours laboratory per week. Laboratory exercises are performed that complement ELEC 100 F DC/AC Theory. The student is introduced to the use and application of basic measurement equipment. The measurement of circuit performance is emphasized through data analysis. Self-pacing, open entry and flexible hours. (CSU) (Degree credit)

**ELEC 101 F Electronic Devices (1-4)**

Prerequisite: ELEC 100 F DC/AC Theory, ELEC 100LF DC/AC Laboratory

Four hours lecture per week. The theory of electronic devices is presented through the study of diodes, bipolar transistors and field effect transistors. Devices will be treated in both discrete and integrated circuit packages. Emphasis will be placed upon the study of the response to DC and AC forcing functions, biasing methods and the development of AC models. Both small signal and large signal applications will be considered. Response of devices and circuits to AC voltages over normal frequency ranges will be studied. This class is offered as a standard structured class or self pacing, open entry with flexible hours and variable units. (CSU) (Degree credit)

**ELEC 101LF Electronic Devices Laboratory (1-2)**

Corequisite: ELEC 101 F Electronic Devices

Six hours lab per week. Laboratory exercises are performed that complement ELEC 101 F Electronic Devices. Students continue to expand working knowledge of test equipment. Self pacing, open entry and flexible hours. (CSU) (Degree credit)

**ELEC 153 F Electronic Instruments: Use and Applications (2)**

Prerequisite: ELEC 101LF DC/AC Laboratory

One and one-half hour lecture and one and one-half hour lab per week. This is the instruments course for ELEC 172 F Introduction to Computer/Digital Logic. Provides the student with experience in the use and application of electronics instruments to obtain desired measurements. Principles of instrument operation and instrument specifications are considered in terms of setup and operation for optimum performance. Also considered are instrument and test circuit input/output characteristics as they affect measurements. (CSU) (Degree credit)

**ELEC 158 F Video Systems: Principles and Servicing (3)**

Prerequisite: ELEC 100 F DC/AC Theory

Three hours lecture and one hour lab per week. This course will provide the user and servicer of video equipment with basic understanding of the principles of operation, diagnostic and maintenance procedures, and proper interfacing of various video equipment making up a system. (CSU) (Degree credit)

**ELEC 166 F Electronic Circuit Analysis (3)**

Prerequisite: ELEC 101 F Electronic Devices and ELEC 056BF Electronic Mathematics

Three hours lecture per week. A study of electronics circuit analysis, including network theorems and circuit parameters. Practical applications will be stressed through the utilization of circuit analysis techniques applied to passive and active circuitry. (CSU) (Degree credit)

**ELEC 172 F Introduction to Computers/Digital Logic (4)**

Corequisite: ELEC 100 F DC/AC Theory

Three hours lecture and three hours lab per week. This course provides students with a basic knowledge of digital electronics and introductory computer system concepts. Topics covered will include basic computer and operating system concept, number systems, logic gates, analysis and design of combinational logic circuits using standard logic and programmable logic devices, and combinational functions such as adders, comparators, decoders, encoders, and parity generation and checking. Emphasis will be placed on learning how to troubleshoot digital circuits. (CSU) (Degree credit)

**ELEC 173 F Digital/Microcomputer Theory (4)**

Prerequisite: ELEC 172 F Introduction to Computers/Digital Logic.

Three hours lecture and three hours lab per week. This course provides the student with instruction in intermediate level concepts in digital electronics and microcomputers. Topics include flip flops, counters, shift registers, semiconductor memory, memory expansion techniques, computer bus structures, and sequential logic applications of programmable logic devices. (CSU) (Degree credit)

**ELEC 174 F Microcomputer Systems and Troubleshooting I (4)**

Prerequisite: ELEC 173 F Digital/Microcomputer Theory.

Three hours lecture and three hours lab per week. This course introduces students to basic microcomputer architecture, based on the IBM PC, and troubleshooting techniques. The Intel 8088 and 8086 microprocessors are studied in detail with an overview of the architecture of the entire family of Intel microprocessors also presented. Common industry software tools such as the assembler and debugger are introduced as aides in understanding the operation of the microprocessor and the personal computer. (CSU) (Degree credit)

**ELEC 175 F Microcomputer Systems and Troubleshooting II (4)**

Prerequisite: ELEC 174 F Microcomputer Systems and Troubleshooting I

Three hours lecture and three hours lab per week. An advanced course in microcomputer peripheral I/O interfacing and troubleshooting. Topics include I/O interfacing concepts and techniques, I/O port and controller integrated circuits, and microcomputer peripheral devices, such as disk drives, printers, keyboards, and analog-to-digital/digital-to-analog converters. Troubleshooting techniques include the use of diagnostic software and static stimulus testing. Microcomputer system installation, configuration, and maintenance also are covered. (CSU) (Degree credit)

**ELEC 176 F Microcomputer Systems/A+ Certification Preparation (4)**

Advisory: ELEC 174 F Microcomputer Systems and Troubleshooting I  
 Three hours lecture and three hours lab per week. This class is an introduction to microcomputer system architecture and organization and test taking preparation for A+ Certification. The class provides the student with a thorough background in the hardware and software aspects of microcomputer systems as well as hands-on and computer-based training leading to the computer industry nationally recognized A+ Certification credential. Timed, computer administered sample tests are used to increase the student's test taking ability and confidence in his/her knowledge. (CSU) (Degree credit)

**ELEC 202 F Electronic Circuits and Systems (3)**

Prerequisite: ELEC 101 F Electronic Devices.  
 Three hours lecture per week. An advanced course in electronics. The course will include electronic devices at low and RF frequencies, frequency response of devices and circuits, feedback theory and application, and analog integrated circuits, circuit stability and oscillation. A systems approach is used throughout this course intended for advanced technicians. (CSU) (Degree credit)

**ELEC 202LF Electronic Circuits and Systems Laboratory (3)**

Prerequisite: ELEC 101LF Electronic Devices Laboratory.  
 Corequisite: ELEC 202 F Electronic Circuits and Systems  
 Two hours lecture and four hours lab per week. An advanced laboratory course paralleling the material covered in ELEC 202 F Electronic Circuits and Systems. The student is given the opportunity to deal with more complex circuits composed of numerous devices in varied configurations. The student is given the opportunity to develop circuits on an individual basis and to perform varied troubleshooting techniques. (CSU) (Degree credit)

**ELEC 203 F Electronic Circuits and Systems (3)**

Prerequisite: ELEC 202 F Electronic Circuits and Systems  
 Three hours lecture per week. An advanced course in electronics systems, with emphasis on theory and application. The frequency response of circuits, systems, and active filters is developed. The theory and application of modulation, demodulation, RF transmission lines, antennas and other aspects of information transmission systems. (CSU) (Degree credit)

**ELEC 203LF Electronic Circuits and Systems Laboratory (3)**

Prerequisite: ELEC 101LF Electronic Devices Laboratory.  
 Corequisite: ELEC 203 F Electronic Circuits and Systems.  
 Two hours lecture and four hours lab per week. An advanced laboratory course paralleling the material covered in ELEC 203 F Electronic Circuits and Systems. The student is given the opportunity to deal with more complex circuits composed of numerous devices in varied configurations. The student is given the opportunity to develop circuits on an individual basis and to perform varied troubleshooting techniques. (CSU) (Degree credit)

# Engineering

Curriculum leads to the **Associate in Science Degree**. This degree requires a minimum of 22 units chosen from the courses listed below.

**Select 22 units from the courses listed below:**

ENGR 101AF Surveying (4)  
 ENGR 102 F Engineering Drawing (3)  
 ENGR 105 F Engineering CAD (4)  
 ENGR 201 F Statics (3)  
 ENGR 203 F Electric Circuits (4)  
 MATH 150AF Calculus (4)  
 MATH 150BF Calculus (4)  
 MATH 250AF Intermediate Calculus (4)  
 MATH 250BF Intermediate Calculus (4)  
 CHEM 111AF General Chemistry (5)  
 CHEM 111BF General Chemistry (5)  
 PHYS 221 F General Physics (4)  
 PHYS 222 F General Physics (4)  
 PHYS 223 F General Physics (4)

## Engineering Courses

**ENGR 101AF Surveying (4)**

Corequisite: TECH 081 F Technical Mathematics I and DRAF 171 F Fundamentals of Drafting or one year high school drafting with a grade of "B" or better.

Three hours lecture and three hours laboratory per week. Principles and practices of measuring distances, directions and elevation. Study of errors, computation of areas, volumes and coordinates. Use and care of instruments and equipment. (CSU) (Degree credit)

**ENGR 101BF Surveying (4)**

Prerequisite: ENGR 101AF Surveying with a grade of "C" or better.  
 Three hours lecture and three hours laboratory per week. Application of surveying techniques to engineering and construction problems. Public and private land, route and topographic surveys. Introduction to photogrammetry, triangulation, level adjustments, and applications of astronomical observations. (CSU) (Degree credit)

**ENGR 102F Engineering Drawing (3)**

Prerequisite: Three years of college preparatory mathematics or MATH 040 F Intermediate Algebra and 030 F Plane Geometry with grades of "C" or better. Advisory: One year of high school mechanical drawing.

Three hours lecture and three hours laboratory 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)**

Prerequisite: ENGR 102 F Engineering Drawing

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 2D and 3D design problems. Topics included are file management, layering, orthographic projection, dimensioning, line types and axonometric projection. (CSU) (UC) (Degree credit)

**ENGR 201 F Statics (3) (CAN ENGR 8)**

Prerequisite: MATH 150BF Calculus and PHYS 221 F General Physics 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 used. 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) (CAN ENGR 12)****(ENGR 203 F + 203LF = CAN ENGR 6)**Prerequisite: PHYS 222 F General Physics, MATH 150BF Calculus  
Corequisite: ENGR 203LF Electric Circuits Lab

Four hours lecture per week. Introduction to the analysis of circuits under steady state and transient conditions using multiple methods including bode plots, phasors and sinusoidal signals, analysis of networks, magnetically coupled and polyphase circuits. (CSU) (UC) (Degree credit)

**ENGR 203LF Electric Circuits Laboratory (1)****(ENGR 203 F + 203LF = CAN ENGR 6)**Prerequisite: PHYS 222 F General Physics, MATH 150BF Calculus  
Corequisite: ENGR 203 F Electric Circuits

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

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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 chosen from the courses listed below:

**Required Courses:**

ENGL 102 F Introduction to Literature (3)

**And one survey sequence (6 units) from the following:**

ENGL 211 F and 212 F English Literature (3, 3) or  
ENGL 221 F and 222 F American Literature (3, 3) or  
ENGL 223 F and 224 F World Literature (3, 3)

**And one course (3 units) from the following:**

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)

**Restricted Electives:**

**6 additional units from any of the above courses or the following:**

ENGL 105 F Introduction to Creative Writing (3)  
ENGL 205 F The Film: From the beginning to 1950 (3)  
ENGL 206 F The Film: From 1950 to the Present (3)  
ENGL 209 F Intermediate Creative Writing (3)  
ENGL 214 F Contemporary Literature (3)  
ENGL 218 F California Writers (3)  
ENGL 234 F Introduction to Shakespeare (3)  
ENGL 239 F Survey of Children's Literature (3)  
ENGL 243 F 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 254 F Intermediate Creative Writing: Poetry (3)  
SPAN 205 F Introduction to Spanish Literature (3)  
SPAN 206 F Introduction to Latin-American Literature (3)

**Plus 6 additional units from the above or the following:**

ENGL 105 F Introduction to Creative Writing (3)  
ENGL 209 F Intermediate Creative Writing (3)  
ENGL 205 F The Film: From the Beginning to 1950 (3)  
ENGL 206 F The Film: From 1950 to the Present (3)  
Foreign Language 203 F Intermediate (4)  
Foreign Language 204 F Intermediate (4)  
SPAN 205 F Introduction to Spanish Literature (3)  
SPAN 206 F Introduction to Latin-American Literature (3)

## English Courses

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**ENGL 039 F Basic Writing (4)**

Credit/no credit only. Recommended: Concurrent enrollment in READ 056 F Developmental Reading

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. (Non-degree credit)

**ENGL 059 F Developmental Writing (4)**

Credit/no credit only. Prerequisite: Recommended score on the English Placement test or credit in ENGL 039 F Basic Writing. Advisory: Concurrent enrollment in READ 056 F Developmental Reading

Four lecture hours 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. (Non-degree credit)

**ENGL 060 F Preparation for College Writing (4)**

Credit/no credit only. Prerequisite: Recommended score on the English Placement test or credit in ENGL 059 F Developmental Writing. Advisory: Concurrent enrollment in READ 096 F Preparation for College Reading

Four hours lecture per week. This course is designed to meet the needs of students who have not yet mastered the writing and editing skills necessary for college writing. Students will review English fundamentals, read and analyze professional essays, and write essays with the emphasis on exposition and critical thinking. (Degree credit)

**ENGL 100 F College Writing (3) (CAN ENGL 2) (ENGL 100 F + ENGL 102 F = CAN ENGL SEQ A)**

Prerequisite: Recommended score on the English Placement test or credit in ENGL 060 F Preparation for College Writing or credit in ESL 186 F Composition for Students of American English. Advisory: Concurrent enrollment in READ 142 F College Reading: Logical Analysis and Evaluation

Four hours lecture per week. This is a college level course in composition designed to develop 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 Credit Limitation) (Degree credit)

**ENGL 100HF Honors College Writing (3)**

Prerequisite: Recommended score on the English Placement test or credit in ENGL 060 F Preparation for College Writing or credit in ESL 186 F Composition for Students of American English. Advisory: Concurrent enrollment in READ 142 F College Reading: Logical Analysis and Evaluation

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)

**ENGL 102 F Introduction to Literature (3) (CAN ENGL 4) (ENGL 100 F + ENGL 102 F = CAN ENGL SEQ A)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

Three hours lecture per week. A continuation of ENGL 100 F College Writing, this course uses literary works as content for reading and writing with emphasis on analytical and critical approaches to drama, poetry, and prose fiction. (CSU) (UC Credit Limitation) (Degree credit)

**ENGL 102HF Honors Introduction to Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

Three hours lecture per week. A continuation of ENGL 100 F College Writing, 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, assignments calling for a higher level of critical thinking. The overall content and amount of work required in ENGL 102HF Honors will be the same as non-honors ENGL 102 F. (CSU) (UC Credit Limitation) (Degree credit)

**ENGL 103 F Critical Reasoning and Writing (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

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 College Writing. The course will focus on the development of logical reasoning and analytical and argumentative writing skills. (CSU) (UC Credit Limitation) (Degree credit)

**ENGL 103HF Honors Critical Reasoning and Writing (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

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 College Writing. 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 for students to take a more active role in the learning process. (CSU) (UC Credit Limitation) (Degree credit)

**ENGL 104 F Critical Thinking and Writing about Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

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)

**ENGL 105 F Introduction to Creative Writing (3) (CAN ENGL 6)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing. Advisory: ENGL 102 F Introduction to Literature. Letter grade or credit/no credit option.

Three hours lecture per week. Introduction to Creative Writing includes writing original fiction, drama, 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)

**ENGL 201 F Intermediate College Writing**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

Three hours lecture per week. This course is designed to develop academic writing and critical thinking skills beyond the level achieved in English 100 F. The course will stress analysis and evaluation of courses, 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.

**ENGL 203 F Introduction to Dramatic Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing. Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature.

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)

**ENGL 204 F Introduction to Poetry (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture 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)

**ENGL 205 F The Film: From the Beginning to 1950 (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

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 idea, values, concerns, and views reflected in the films are emphasized, and the artistic techniques employed are considered. (CSU) (UC) (Degree credit)

**ENGL 206 F The Film: From 1950 to the Present (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. The 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)

**ENGL 207 F The Short Story (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. The course includes reading and discussion of selected short stories emphasizing analysis, interpretation, and evaluation. The course will focus on the short story as a genre and as a source of significant insight into the human condition. (CSU) (UC) (Degree credit)

**ENGL 209 F Intermediate Creative Writing (3)**

Prerequisite: A grade of "C" or better in ENGL 105 F Introduction to Creative Writing.

Advisory: ENGL 102 F Introduction to Literature or 200 F Analysis of Literature.

Letter grade or credit/no credit option.

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 211 F English Literature to 1800 (3) (CAN ENGL 8) (ENGL 211 F + ENGL 212 F = CAN ENGL SEQ B)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. A survey of British literature from Anglo-Saxon times to 1800, the origins and development of the language are covered, as well as the historical backgrounds and literary trends. Readings from such writers as the author of the "Pearl Poet," Chaucer, Shakespeare, Donne, Milton, Swift, Pope, and Johnson introduce students to the writers and the literary heritage of the English-speaking world. (CSU) (UC) (Degree credit)

**ENGL 212 F English Literature Since 1800 (3) (CAN ENGL 10) (ENGL 211 F + ENGL 212 F = CAN ENGL SEQ B)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. This survey of British literature from 1800 to the present emphasizes 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)

**ENGL 214 F Contemporary Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

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 writer's view of contemporary society, our situation, and people's search for values; consideration is also given to the artistic techniques employed in each work. (CSU) (UC) (Degree credit)

**ENGL 218 F California Writers (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

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)

**ENGL 221 F American Literature to the Civil War (3) (CAN ENGL 14) (ENGL 221 F + ENGL 222 F = CAN ENGL SEQ C)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. A study of representative American writers from the beginnings through the Civil War, the course includes major writers such as Hawthorne, Poe, Melville, Emerson, Douglass, Thoreau, Dickinson, and Whitman. (CSU) (UC) (Degree credit)

**ENGL 222 F American Literature from Civil War to Present (3) (CAN ENGL 16) (ENGL 221 F + ENGL 222 F = CAN ENGL SEQ C)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. A survey of representative 20th century American writers, the course includes major writers such as Wharton, O'Neill, Cather, Frost, Lewis, Hemingway, Fitzgerald, Faulkner, Steinbeck, Jeffers, Plath, Baldwin, and Updike. The emphasis is on the diversity of American subjects and styles. (CSU) (UC) (Degree credit)

**ENGL 224 F World Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. World Literature 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 Renaissance, in the works of writers such as Homer, Aeschylus, Sophocles, Euripides, Dante, Boccaccio, Chaucer, Machiavelli, Montaigne, and Cervantes. (CSU) (UC) (Degree credit)

**ENGL 225 F World Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. World Literature 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 the neoclassical period to the present in the works of writers such as Moliere, Voltaire, Goethe, Dickinson, Flaubert, Ibsen, Dostoevsky, Yeats, Camus, and Soyinka. (CSU) (UC) (Degree credit)

**ENGL 234 F Introduction to Shakespeare (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. Introduction to Shakespeare 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 and character development, and irony will be emphasized. (CSU) (UC) (Degree credit)

**ENGL 239 F Survey of Children's Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture 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)

**ENGL 243 F Folklore and Mythology (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing. Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature. Letter grade or credit/no credit option.

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)

**ENGL 245 F The Bible as Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature. Letter grade or credit/no credit option.

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)

**ENGL 246 F The Novel (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature. Letter grade or credit/no credit option.

Three hours lecture per week. This is a study of the novel as an art form, concentrating on — but not limited to — representative novels illustrating the richness of the form: its thematic and stylistic variety, its philosophical breadth, its historical development, and the like. Emphasis will be placed on developing the student's analytical skills. (CSU) (UC) (Degree credit)

**ENGL 247 F Voices of America: Studies in Multicultural Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing.

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)

**ENGL 248 F Science Fiction (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture per week. ENGL 248 F is a survey of science or speculative fiction. This course emphasizes the literary, social, economic, cultural and environmental contexts of the works studied and traces the development of the genre from early scientific romances through current developments in postmodern and cyberpunk fiction. (CSU) (UC) (Degree credit)

**ENGL 249 F Survey of Chicano/a Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

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. (CSU) (UC) (Degree credit)

**ENGL 250 F Survey of African American Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

Three hours lecture 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 Americans writers in a variety of genres. (CSU) (UC) (Degree credit)

**ENGL 251 F Survey of Native American Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: A grade of "C" or better in ENGL 102 F Introduction to Literature

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)

**ENGL 252 F Women's Literature (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: ENGL 102 F Introduction to Literature or ENGL 102HF Introduction to Literature Honors

Three hours lecture per week. English 252 F is a survey of literatures by women. This course 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)

**ENGL 254 F Intermediate Creative Writing: Poetry (3)**

Prerequisite: A grade of "C" or better in ENGL 100 F College Writing or ENGL 100HF Honors College Writing

Advisory: ENGL 102 F Introduction to Literature or ENGL 102HF Introduction to Literature Honors

Three hours lecture per week. 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; study non-fiction essays related to the writing of poetry and poetics; and utilize creative writing workshops which provide an opportunity for analyzing and critiquing student writing. (CSU) (UC)

**ENGL 280 F Language Arts Tutoring Practicum (3)**

Prerequisite: A grade of "C" or better in ENGL 103 F Critical Reasoning and Writing or ENGL 103HF Honors Critical Reasoning and Writing or ENGL 104 F Critical Thinking and Writing About Literature

Two-hours lecture and three hours lab per week. The 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 (1-1-1)**

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)*

**ESL 025 F Basic English Grammar (3)**

Credit/no credit 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. (Non-degree credit)

**ESL 035 F Intermediate English Grammar (3)**

Credit/no credit 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. (Non-degree credit)

**ESL 045 F Advanced English Grammar (3)**

Credit/no credit 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. (Non-degree credit)

**ESL 036 F Basic Listening and Speaking (4)**

Credit/no credit 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. (Non-degree credit)

**ESL 046 F Intermediate Conversation (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 056 F Advanced Conversation: Academic Topics (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 038 F Fundamentals of American English Pronunciation (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 048 F Intermediate American English Pronunciation (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 058 F Advanced American English Pronunciation: Foreign Accent Reduction (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 029 F Idiomatic Expressions for Students of ESL (2)**

Credit/no credit 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). (Non-degree credit)

**ESL 039 F Vocabulary Expansion Techniques for Students of ESL (2)**

Credit/no credit 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. (Non-degree credit)

**ESL 049 F Academic Vocabulary for Advanced Students of ESL (3)**

Credit/no credit 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 is 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. (Non-degree credit)

**ESL 047 F Academic Preparation for American English Students (2, 2)**

Advisory: ESL skills evaluation

Credit/no credit only.

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. (Non-degree credit)

**ESL 050 F Occupational English (2)**

Corequisite: Occupational programs as designated in the Schedule of Classes. Credit/no credit only.

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. (Non-degree credit)

**ESL 080 F Fundamental Listening, Speaking, Reading and Writing for Students of American English (4)**

Prerequisite: ESL skills evaluation. Credit/no credit only.

Four 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. (Non-degree credit)

**ESL 081 F Low Intermediate English for Non-Native Speakers of English (4)**

Prerequisite: ESL skills evaluation or credit in ESL 080 F Fundamental Listening, Speaking, Reading and Writing for Students of American English. Credit/no credit only.

Four hours lecture and one arranged lab hour per week. This is a low intermediate integrated skills course designed to improve the reading, grammar, writing, listening comprehension, and speaking skills of non-native speakers with a basic command of English. (Non-degree credit)

**ESL 082 F Intermediate Reading and Writing for Students of American English (4)**

Prerequisite: ESL skills evaluation or credit in ESL 081 F Low Intermediate English for Non-Native Speakers of English. Credit/no credit only.

Four hours lecture and one arranged lab hour 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. (Non-degree credit)

**ESL 083 F High Intermediate Reading and Writing for Students of American English (5)**

Prerequisite: ESL skills evaluation or credit in ESL 082 F Intermediate Reading and Writing for Students of American English. Letter grade or credit/no credit option.

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. (Non-degree credit)

**ESL 184 F Low Advanced English for Non-Native Speakers of English (5)**

Prerequisite: ESL skills evaluation or ESL 083 F Intermediate Reading and Writing for Students of American English with a grade of "C" or better. Letter grade or credit/no credit option.

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)**

Prerequisite: ESL skills evaluation or ESL 184 F Low Advanced English for Non-Native Speakers of English with a grade of "C" or better. Letter grade or credit/no credit option.

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)**

Prerequisite: ESL skills evaluation or ESL 185 F Advanced Reading and Writing for Students of American English with a grade of "C" or better. Letter grade or credit/no credit option.

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 & Technology*

### *Environmental Science*

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)**

- BIOL 274 F General Ecology (4)  
 ENVS 105 F Environmental Biology (3)  
 ENVS 105LF Environmental Biology Lab (1)

**Restricted Electives (10)**

- AJ 100 F Introduction to Law Enforcement (3)  
 CHEM 111AF General Chemistry (5)  
 CHEM 111BF General Chemistry (5)  
 ESC 190 F Environmental Geology (3)  
 GEOG 102 F Physical Geography (3) or  
 SOC 101 F Introduction to Sociology (3)  
 GEOG 170 F Urban Geography: Introduction to the City (3) or  
 SOC 102 F Social Problems (3)  
 PSY 101 F General Psychology (3)  
 ECON 101 F Principles of Economics — Micro (3)

### *Environmental Science Courses*

**ENVS 105 F Environmental Biology (3)**

Environmental Biology introduces the student to the basic principles of organismal biology. These principles then are used to assess today's complex environmental issues. The ultimate concerns in environmental controversies inevitably involve biological processes on the ecological, organismal and cellular level. This course explores how human-caused environmental changes disrupt the normal conduct of the planet's biological systems. Core biological principles include: the philosophy of science, photosynthesis, aerobic respiration, genetic resources, protein synthesis, taxonomy of life, evolutionary principles, ecological structures, wildlife management, and human health. The core topics will be treated in a framework of the following environmental issues: loss of species, human population growth, air pollution, water pollution, energy use, resource consumption, and hazardous chemicals. (CSU) (UC) (Degree credit)

**ENVS 105LF Environmental Biology Laboratory (1)**

Corequisite: ENVS 105 F Environmental Biology.

One hour of lecture and three hours of laboratory or field study per week for eight weeks or the equivalent. Using experimental and investigative approaches, this course is designed to teach students biological principles and scientific methods of inquiry. Topics will include: development and critique of experimental designs using the scientific method of inquiry; an experimental study of the effects of acid rain on plants; basic concepts in photosynthesis, nutrient cycling, cell division, primary productivity, energy flow, competition, and reproductive strategies in ecosystems; field discovery and analysis of ecological structures in estuarine and arid ecosystems; plant anatomy and functional morphology; plant and animal physiological adaptations; behavioral adaptations; field identification of native and introduced plants and animals; transect distribution analyses; and impact of water distribution systems on wilderness ecosystems. Mathematical tools are accessed in support of data analyses, and "what if" scenarios. The student will submit experimental and investigative findings in a conventional scientific written format. (CSU) (UC) (Degree credit)

**ENVS 126 F Natural History of California (3)**

Corequisite: ENVS 126FF Natural History of California Field Lecture

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)

**ENVS 126FF Natural History of California Field Lecture (2)**

Corequisite: ENVS 126 F Natural History of California

Two hours of lecture per week. This course is designed to accompany ENVS 126 F Natural History of California, 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 Eastern Mojave Natural Area. (CSU) (UC) (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. (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)

**ENVS 198AF Desert Field Natural History (1)**

One hour of 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 xeric environments and ecological interrelationships. Students are trained in various field study techniques and in the use of specific scientific equipment. Field trips are required. (CSU) (Degree credit)

**ENVS 198CF Geology and Marine Biology of the Channel Islands (2)**

This course involves lecture and field study of geological and marine biological processes and features in the Channel Islands region of Southern California. Lectures will examine how to recognize key geologic landforms and marine habitats in the field. Particular attention will be focused on the relationship between geology and the marine life. Students are trained in various field study techniques and the use of scientific instruments. Field trips are required. (CSU) (Degree credit)

**ENVS 198DF Baja California Field Studies (2)**

Two hours of 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 inter-tidal, desert and 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 198E F Marine Biology of Baja California (2)**

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 factors shaping the Gulf of California versus Pacific Coasts will be discussed, including the roles of tidal and wind-driven upwelling in dampening El Niño effects in the Gulf. Students are trained in various field study techniques, data analysis, and the use of scientific instruments. Field trips are required. (CSU) (Degree credit)

**ENVS 198FF Marine Vertebrate Ecology of the Channel Islands (1)**

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)

*Environmental Technology*

Curriculum leading to the **Environmental Technology (ET) Certificate** Program refers to the knowledge and skills that allow a person to work with hazardous materials in compliance with governmental regulations and at the same time protect human health and the environment. The **ET Certificate** is designed to be a one-year program that can either prepare students or upgrade working individuals with technician-level skills. This certificate requires completion of 35 units of which 32 units are in 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 (32 units)**

BIOL	102 F Human Biology (3)
CHEM	101 F Introduction to Chemistry (5)
ENVS	105 F Environmental Biology (3)
ET	100 F Introduction to Environmental Technology (3)
ET	110 F Waste Stream Generation/Reduction/ Treatment (3)
ET	130 F Health Effects of Hazardous Materials (3)
ET	150 F Hazardous Waste Management Applications (4)
ET	200 F Hazardous Materials Management Applications (4)
ET	230 F Safety and Emergency Response (4)

**Restricted Electives (3 units)**

BUS	111 F Business Communication (3)
CIS	100 F Introduction to Personal Computers (3)
SPCH	100 F Public Speaking (4)

**Recommended Electives**

BUS	161 F Introduction to Business (3)
BUS	266 F Human Relations in Business (3)
CHEM	200 F Elementary Organic Chemistry (3)
ESC	100 F Physical Geology (3)
POSC	100 F American Government (3)
PSY	101 F General Psychology (3)

The curriculum leads to an **Associate in Science Degree** for employment as an Environmental Hazardous Materials Technician. The knowledge and skills gained in this program allow a person to work with hazardous materials in compliance with governmental regulations and at the same time protect human health and the environment. This program currently does not fulfill requirements for transfer to any four-year university. The degree requires 32 units of which 18 units are in required courses. An additional 14 units must be chosen from the restricted electives listed below.

**Required Courses (18 units)**

ET	110 F Waste Stream Generation/Reduction/ Treatment (3)
ET	130 F Health Effects of Hazardous Materials (3)
ET	150 F Hazardous Waste Management Applications (4)
ET	200 F Hazardous Materials Management Applications (4)
ET	230 F Safety and Emergency Response (4)

**Restricted Electives (14 units)**

BIOL	102 F Human Biology (3) or
BIOL	170 F Organismal Biology (5)
CHEM	101 F Introduction to Chemistry (5) or
CHEM	111AF General Chemistry (5) or
CHEM	200 F Elementary Organic Chemistry (3)
ET	100 F Introduction to Environmental Hazardous Materials Technology (3)
ENVS	105 F Environmental Biology (3)
BUS	111 F Business Communications (3) or
CIS	100 F Introduction to Personal Computers (3) or
SPCH	100 F Public Speaking (4)

*Environmental Technology Courses***ET 100 F Introduction to Environmental Technology (3)**

Three hours lecture per week. This course is designed to give the student a general overview of the environmental technology area. The history of pollution leading to current legislation, environmental effects of pollution, and an overview of the regulatory framework will be presented. Career opportunities in the areas of handling and management of hazardous substances will be discussed. (CSU) (Degree credit)

**ET 110 F Waste Stream Generation/Reduction/Treatment (3)**

Advisory: CHEM 101 F Introduction to Chemistry and MATH 020 F Elementary Algebra

Three hours lecture per week. The study of industrial processes and their generation of waste streams in seven selected industries: electroplating, metal finishing and printed circuit board production, oil refining and chemical production, general manufacturing, printing and graphic reproduction, agriculture, and consumer services. The course will center on various raw materials and chemicals used in industry, examining the changes that occur as they move through the industrial process, and understanding the material balance concept of inventory. Throughout the course, discussion of applicable regulations will be included, and the importance of waste minimization/treatment concepts will be stressed. Home hazardous waste generation and reduction will also be considered. (CSU) (Degree credit)

**ET 130 F Health Effects of Hazardous Materials (3)**

Prerequisite: BIOL 101 F General Biology

Three hours lecture per week. This course covers the acute and chronic health effects produced by exposure to chemical, physical, and biological agents. Emphasis will be placed on those hazardous materials commonly associated with industrial operations, waste disposal, and remediation sites. Topics will include routes of entry, toxic effects, risk evaluation, permissible exposure limits, medical surveillance, control methods for reducing exposure and understanding a Material Safety Data Sheet (MSDS). (CSU) (Degree credit)

**ET 150 F Hazardous Waste Management Applications (4)**

Prerequisite: ET 100 F Introduction to Environmental Technology and CHEM 101 F Introduction to Chemistry.

Three hours lecture and three hours laboratory per week. This course provides an overview of hazardous waste regulation with emphasis in generator compliance, site investigation and remediation, permitting, enforcement, and liability. The lecture portion of the course explains the hazardous waste regulatory framework, introduces the student to a wide variety and types of environmental resources available, and develops research skills in the hazardous waste area. The laboratory portion of the course complements the lectures by providing "hands on" application of the regulations at the technician level. Proper methods of preparing a hazardous waste manifest, labeling of storage containers, sampling and analysis, preparing a Phase I Environmental Audit, and selecting environmental consultants are among the many skills developed in the laboratory. (CSU) (Degree credit)

**ET 200 F Hazardous Materials Management****Applications (4)**

Prerequisite: ET 100 F Introduction to Environmental Technology, ET 130 F Health Effects of Hazardous Materials, and CHEM 101 F Introduction to Chemistry.

Three hours lecture and three hours laboratory per week. A study of the requirements and applications of federal, state, and local laws and regulations relating to hazardous materials. The course will emphasize compliance with Department of Transportation, OSHA Hazard Communication, SARA Title II Right-To-Know, Underground Tank, Asbestos, Proposition 65, and Air Toxic Regulations. The lecture portion of the course will provide the student with an understanding of the legal framework of hazardous materials laws; the laboratory portion will focus on applications of these laws, such as: proper labeling, interpreting Material Safety Data Sheets (MSDS's), permitting and monitoring functions, as well as planning and reporting functions. (CSU) (Degree credit)

**ET 230 F Safety and Emergency Response (4)**

Prerequisite: ET 130 F Health Effects of Hazardous Materials.

Three hours lecture and three hours laboratory per week. This course is designed to provide students with "hands on" instruction in safety and emergency response to chemical and physical exposures in industrial and field settings. Topics include: hazard analysis, contingency planning, house keeping and safety practices including proper use and selection of PPE, site control and evaluation, handling drums and containers, field sampling and monitoring, proper use of instruments, incident response planning, emergency response including field exercises in the use of PAPR and SCBA, and an understanding of the ICS system. This course satisfies the requirements for generalized employee training under OSHA (1919.120). (CSU) (Degree credit)

## *Ethnic Studies*

Curriculum leads to the **Associate in Arts Degree**. 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)**

- 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 Native Americans (3)
- ETHS 170 F Introduction to Asian American Studies (3)

**Restricted Electives (3 units)**

- ENGL 250 F Survey of Native American Literature (3)
- ENGL 251 F Survey of African American Literature (3)
- ETHS 118 F Introduction to Bilingual-Crossculturalism (3)
- ETHS 130 F History of African Americans in the United States (3)
- ETHS 141 F Chicano/Chicana History (3)
- ETHS 142 F The Chicano-a/Latino-a in Contemporary Society (3)
- HIST 160AF Asia: Basic Heritage (3) or
- HIST 160BF Modern China and Japan (3)
- HIST 162AF History of the Americas (3) or
- HIST 162BF History of the Americas (3)
- HIST 270 F Women in United States History (3)
- WMNS 100 F Introduction to Women's Studies (3)

## *Ethnic Studies Courses*

**ETHS 101 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)

**ETHS 118 F Introduction to Bilingual-Crossculturalism (3)**

Letter grade or credit/no credit 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)

**ETHS 130 F History of African Americans in the United States (3)**

Three hours lecture per week. An introduction to the historical roots and characteristics of Black culture in the United States. This survey course will demonstrate how the historical process works while tracking the historical/factual base of the African American experience. (CSU) (UC) (Degree credit)

**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)

**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)

**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)

**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)

**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)

**ETHS 199 F Ethnic Studies Independent Study (1-1-1)**

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 (1-1-1)**

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)

**ART 116 F Art History - Mexico (3)**

(see Art)

**ART 212 F Asian Art History (3)**

(see Art)

**ART 213 F Pre-Columbian Art (3)**

(see Art)

**MUS 117 F American Popular Music (3)**

(see Music)

## *Family Studies*

The **Family Studies Certificate** Program requires the completion of 21 units of which 12 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.

**Required Courses (12 units)**

CDFL	120 F Human Development: Early Years (3) or
CDFL	200 F Human Development: Adolescence (3)
CDFL	201 F Child in Home and Community (3)
CDFL	202 F Contemporary Family Living (3) or
PSY	101 F General Psychology (3) or
PSY	110 F Introduction to Applied Psychology (3)
PSY	139 F Developmental Psychology: Life Cycle (3) or
PSY	145 F Child Psychology (3) or
SOC	101 F Introduction to Sociology (3) or
SOC	275 F Marriage and Family (3)

**Restricted Electives (6 units)****3 units from the following:**

CDFL	173 F The Process of Parenting (3)
PSY	120 F Human Sexuality (3)

**3 units from the following:**

- ANTH 102 F Cultural Anthropology (3)  
 CDFL 140 F Infant Development and Relationships (3)  
 CDFL 204 F Introduction to Special Education (3)  
 SOC 102 F Social Problems (3)  
 SOC 225 F Sociology of Women (3)

**Students are encouraged to take additional electives from the following:**

- PSY 143 F Developmental Psychology: Practicum (3)  
 PSY 202 F Introduction to Experimental Psychology (3)  
 PSY 222 F Abnormal Psychology (3)

**CDFL 120 F Human Development: Early Years****CDFL 140 F Infant Development and Relationships****CDFL 200 F Human Development: Adolescence****CDFL 201 F Child in Home and Community****CDFL 202 F Contemporary Family Living****PSY 120 F Human Sexuality****PSY 139 F Developmental Psychology: Life Cycle****PSY 145 F Child Psychology****SOC 275 F Marriage and the Family**

## *Fashion Careers*

### *Dressmaking-Alterations Certificate*

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)**

- FASH 050 F Careers in Fashion (1)  
 FASH 085 F Bridal and Special Occasion Wear (2)  
 FASH 093 F Pattern Alteration and Fitting (2)  
 FASH 107 F Apparel Analysis (3)  
 FASH 108AF Flat Pattern Methods and Design (2)  
 FASH 150 F Introduction to the Fashion Industry (3)  
 FASH 152 F Ready-to-Wear Evaluation (3)  
 FASH 188 F Apparel Production (2)  
 FASH 201 F Clothing (2)  
 FASH 205AF Tailoring (2)  
 FASH 206 F Textiles (3)  
 FASH 209AF Draping (2)

**Restricted Electives (9 units)**

- FASH 060 F Professional Image (2)  
 FASH 101 F Clothing (2)  
 FASH 108BF Flat Pattern Methods and Design (2)  
 FASH 145 F Field Studies In Fashion (1)  
 FASH 186 F Workroom Sketching (2-2)  
 PSY 110 F Introduction to Applied Psychology (3)

### *Fashion Design*

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:**

- FASH 108BF Flat Pattern Methods and Design (2)  
 FASH 150 F Introduction to the Fashion Industry (3)  
 FASH 186 F Workroom Sketching (2)  
 FASH 201 F Clothing (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*

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)**

- 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 (2)  
 FASH 108BF Flat Pattern Methods and Design (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 (1)  
 FASH 201 F Clothing (2)  
 FASH 206 F Textiles (3)  
 FASH 209AF Draping (2)  
 FASH 242 F History of Costume (3)  
 FASH 284AF Fashion Design (2)  
 FASH 297 F Fashion Design Portfolio (1)

**Restricted Electives (4 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 (2)
FASH	975 F Patternmaking: Collections (2)
FASH	299 F Fashion Industry Internship (1-4)

Fashion Design majors may also be interested in Theatrical Costuming.

*Advanced Fashion Design Certificate*

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)**

ART	119 F Design and Color for Non-art Majors (2)
ART	120 F Basic Visual Design Concepts (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 (2)
FASH	284BF Fashion Design (2)
FASH	244 F Ethnic Costume (2)

**Restricted Electives (2 units)**

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 or 205BF Tailoring (2)

*Fashion Illustration*

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 Sketching (2)
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 (2)
FASH	107 F Apparel Analysis (3)
FASH	145 F Field Studies in Fashion (1)
FASH	150 F Introduction to Fashion Industry (3)
FASH	186 F Workroom Sketching (2)
FASH	242 F History of Costume (3)
FASH	297 F Fashion Design Portfolio (1)

**Restricted Electives (7 units)**

ART	144 F Fundamentals of Cartooning (2)
ART	186 F Intermediate/Advanced Life Drawing (3-3) (third and fourth semester)
ART	188 F Watercolor Painting (3-3)
FASH	050 F Careers In Fashion (1)
FASH	101 F Clothing (2)
FASH	201 F Clothing (2)

*Fashion Journalism*

Curriculum leads to the **Associate in Arts Degree** and/or employment in fashion journalism fields such as fashion magazines, trade magazines, promotion writing, radio and television program writer, advertising, and public relations. This degree requires completion of 18 units of which 15 units are in required courses. An additional 3 units must be chosen from the restricted electives listed below.

**Required Courses (15 units)**

FASH	150 F Introduction to the Fashion Industry (3)
FASH	183 F Fashion Marketing (3)
FASH	206 F Textiles (3)
FASH	250 F Fashion Promotion (3)
JOUR	101 F Reporting and Writing (3)

**Restricted Electives (3 units)**

FASH	107 F Apparel Analysis (3)
FASH	145 F Field Studies in Fashion (1)
FASH	242 F History of Costume (3)
JOUR	102 F Reporting & Writing (3)
JOUR	110 F Mass Media Survey (3)
JOUR	126 F Advertising Copy and Layout (3)
PHOT	101 F Introduction to Photography (3) or
PHOT	219 F Photojournalism (3)

## *Fashion Merchandising*

Curriculum leads to the **Associate in Arts Degree** and/or employment in ready-to-wear industry, department store, 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)**

FASH 107 F Apparel Analysis (3)  
 FASH 150 F Introduction to Fashion Industry (3)  
 FASH 152 F Ready-to-Wear Evaluation (3)  
 FASH 206 F Textiles (3)  
 FASH 220 F Retail Buying (3)

### **Restricted Electives (3 units)**

ACCT 101AF Financial Accounting (4)  
 BUS 132 F Principles of Import/Export (3)  
 BUS 266 F Human Relations in Business (3)  
 CIS 100 F Introduction to Personal Computer Applications (3)  
 CIS 111 F Information Systems and Computer Programming (3)  
 ECON 101 F Principles of Economics — Micro (3)  
 FASH 183 F Fashion Marketing (3)  
 FASH 242 F History of Costume (3)  
 FASH 250 F Fashion Promotion (3)  
 FASH 202 F Visual Merchandising (2)

The **Fashion Merchandising Certificate** requires the completion of 34 units of which 30 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 (30 units)**

BUS 162 F Business Economics (3)  
 BUS 266 F Human Relations in Business (3)  
 CIS 100 F Introduction to Personal Computers (3) or  
 CIS 111 F Information Systems and Computer Programming (3)  
 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 Buying (3)  
 FASH 250 F Fashion Promotion (3)

### **Restricted Electives (4 units)**

FASH 060 F Professional Image (2)  
 FASH 101 F Clothing (2) or  
 FASH 201 F Clothing (2)  
 FASH 145 F Field Studies in Fashion (1)  
 FASH 202 F Visual Merchandising (2)  
 FASH 242 F History of Costume (3)  
 FASH 244 F Ethnic Costume (2)  
 FASH 299 F Fashion Industry Internship (1)

## *Image Consultant Certificate*

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 self-employment. A minimum grade of "C" is required for all courses.

### **Required Courses (19 units)**

FASH 060 F Professional Image (2)  
 FASH 107 F Apparel Analysis (3)  
 FASH 150 F Introduction to Fashion Industry (3)  
 FASH 183 F Fashion Marketing (3)  
 FASH 186 F Workroom Sketching (2)  
 FASH 206 F Textiles (3)  
 FASH 250 F Fashion Promotion (3)

### **Restricted Electives (1 unit)**

BUS 266 F Human Relations in Business (3)  
 FASH 050 F Careers in Fashion (1)  
 FASH 096 F Exploring a Home Based Business (2)  
 FASH 145 F Field Studies in Fashion (1)  
 IDES 130 F Applied Color and Design Theory (4)

## *Fashion Courses*

### **FASH 010 F Clothing Construction Studio (1-1-1-1)**

Corequisite: One semester of clothing construction. Credit/no credit only.

Three hours arranged laboratory per week. A student may pursue individual clothing construction projects under staff supervision during open laboratory hours. Sign up first week of school for flexible hours. Course may be taken four times for credit. (Non-degree credit)

### **FASH 020 F Modeling (2-2-2-2)**

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. (Non-degree credit)

### **FASH 030 F Industrial Sewing (2)**

One-hour lecture and three hours laboratory per week. Students will be taught to use industrial sewing equipment for entry-level jobs in the apparel manufacturing industry. Instruction will accommodate students with limited English proficiency. (Non-degree credit)

**FASH 045 F Swim and Active Wear (1-1)**

Eight hours lecture and 24 hours laboratory. 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 credit/no credit 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 credit/no credit 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 Clothing.

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. (Non-degree credit)

**FASH 080BF Designing and Sewing Leather (2)**

Prerequisite: FASH 080AF Designing and Sewing Leather.

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. (Non-degree credit)

**FASH 085 F Bridal and Special Occasion Wear (2-2)**

Prerequisite: FASH 201 F Clothing

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 087 F Sewing for Profit (2)**

Prerequisite: FASH 101 F Clothing or two years of high school clothing construction.

One-hour lecture and three hours laboratory per week. This course provides an opportunity for the student to learn the basic principles of custom dressmaking and alterations as a business. Use of power-sewing machines will be studied. Pricing, customer relations, quality control, and professional pressing techniques will be included. (Degree credit)

**FASH 088 F CAD for Apparel (2-2)**

Advisory: FASH 108AF Flat Pattern Methods and Design, FASH 186 F Workroom Sketching, and ACG 104 F 2-D Computer Graphics and Paint for Macintosh.

One-hour lecture and three hours laboratory 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 (2-2-2-2)**

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 (2-2)**

Letter grade or credit/no credit option.

One-hour lecture and three hours laboratory 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 096 F Exploring a Home-Based Business (2)**

Two hours a week lecture. This course explores the feasibility of using skills to produce income at home, and investigates the organization and management needed for a home-based business. Personal, financial, and legal considerations are included. (Degree credit)

**FASH 101 F Clothing (2-2)**

Letter grade or credit/no credit option.

One-hour lecture and three hours laboratory 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) (CAN FCS 20)**

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 (2)**

Prerequisite: FASH 101 F Clothing or two years high school clothing construction Corequisite: FASH 050 F Careers in Fashion

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 (2)**

Prerequisite: FASH 108AF Flat Pattern Methods and Design.

One-hour lecture and three hours laboratory 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 Flat Pattern Methods and Design.

One-hour lecture and three hours laboratory 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, 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-to-wear and of price and quality indicators for selected accessories. Terminology associated with construction, production, and apparel styles will be included. (CSU) (Degree credit)

**FASH 183 F Fashion Marketing (3)**

Prerequisite: FASH 150 F Introduction to the Fashion Industry.

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 (2-2)**

Letter grade or credit/no credit option.

One-hour lecture and three hours studio/laboratory 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 Flat Pattern Methods and Design and FASH 050 F Careers in Fashion. Corequisite: FASH 297 F Fashion Design Portfolio.

One-hour lecture and three hours laboratory 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 Flat Pattern Methods and Design

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 credit/no credit 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, 1-2, 1-2)**

Prerequisite: Completion of at least one semester in the area of study.

Three hours independent laboratory 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 (2-2)**

Prerequisite: FASH 101 F Clothing with a grade of "C" or better or two years high school clothing construction.

One-hour lecture and three hours laboratory 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 laboratory 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 Clothing.

One-hour lecture and three hours laboratory 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 Tailoring.

One-hour lecture and three hours laboratory. 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)**

Prerequisite: FASH 108AF Flat Pattern Methods and Design and FASH 186 F Workroom Sketching.

One-hour lecture and three hours laboratory 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 Draping.

One-hour lecture and three hours laboratory 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)

**FASH 243 F Theatrical Costume Construction (2)**

Corequisite: FASH 209AF Draping. Recommended: FASH 242 F History of Costume.

One-hour lecture and three hours laboratory 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 Theatrical Costume in Theatre Arts.) (CSU) (UC) (Degree credit)

**FASH 244 F Ethnic Costume (2)**

Letter grade or credit/no credit 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)

**FASH 250 F Fashion Promotion (3)**

Prerequisite: FASH 150 F Introduction to the Fashion Industry.

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)**

Corequisite: FASH 108AF Flat Pattern Methods and Design and FASH 206 F Textiles and FASH 186 F Workroom Sketching.

One-hour lecture and three hours laboratory per week. The students will learn the application of design principles to contemporary fashion for ready-to-wear 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 Fashion Design.

One-hour lecture and three hours laboratory 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 Flat Pattern Methods and Design and FASH 209AF Draping. Corequisite: FASH 188 F Apparel Production

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 Flat Pattern Methods and Design and FASH 209AF Draping; FASH 188 F Apparel Production. For Merchandise Majors: FASH 150 F Introduction to Fashion; FASH 250 F Fashion Promotion; FASH 220 F Retail Buying.

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 Flat Pattern Methods and Design and FASH 209AF Draping

One-hour lecture and three hours laboratory 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 Patternmaking: Collections

One-hour lecture and three hours laboratory per week. Students continue to advance the skills learned in FASH 975 F using a variety of techniques not previously mastered. (Degree credit)

## Foods

### FOOD 060 F Foods for Fitness (2)

One-hour lecture and three hours laboratory per week. This course presents nutrition information to enhance knowledge about food choices. The principles of nutrition and food preparation are presented in a non-technical format. The students are able to apply the information to their personal fitness, diet, and health goals. The labs include the planning and preparation of meals that adhere to various dietary guidelines such as lower fat, cholesterol and sodium, calorie control and increased fiber. (Degree credit)

### FOOD 070 F Nutrition Concepts and Food Preparation for Vegetarians (2)

One-hour lecture and three hours laboratory 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 preparation of nutritious food for the lacto, lacto-ova vegetarian and vegan. (Non-degree credit)

### FOOD 101AF Foods (3) (CAN FCS 8)

One-hour lecture and six hours laboratory per week. This course is designed to provide the student with a knowledge of the fundamental scientific principles involved in food preparation, as well as practical experience in applying these principles to a wide variety of foods representative of those consumed in the U.S. Emphasis is placed on developing skills in utilizing appropriate basic scientific methodology to study the components of food and food products; and on acquiring a knowledge of as well as applying generally accepted quality standards to such foods and food products. (CSU) (Degree credit)

### FOOD 101BF Foods (3)

Prerequisite: FOOD 101AF Foods.

One-hour lecture and six hours laboratory per week. This course covers the planning and preparation of meals with emphasis upon gourmet foods, complex techniques, entertaining, and meal management. (CSU) (Degree credit)

### FOOD 130 F Cultural Aspects of Foods (2)

One-hour lecture and three hours laboratory per week. This course examines food as an expression of cultural diversity. Students will investigate regional, ethnic, and religious influences on food choices and patterns. Preparation techniques and products from a variety of traditions will be explored. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (Degree credit)

**SEE NUTRITION.**

## Foreign Language

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units chosen from the courses listed below.

### Required Courses

LANG 101 F Elementary I (5)  
 LANG 102 F Elementary II (5)  
 LANG 203 F Intermediate III (4)\*or SPAN 201 F (5)  
 LANG 204 F Intermediate IV (4)

### Select remaining units from restricted electives listed below:

LANG 200 F Conversation (2)  
 A second foreign language (any course from Level I through Level IV) (4-5)  
 HIST 110AF Western Civilization (3)  
 ENGL 102 F Introduction to Literature (3)  
 ENGL 224 F World Literature (3)  
 ENGL 225 F World Literature (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)

\*Note: Native Spanish speakers should enroll in SPAN 201 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.

## French

### FREN 101 F Elementary French I (5) (CAN FREN 2) (FREN 101 F + FREN 102 F = CAN FREN SEQ A)

Letter grade or credit/no credit 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)

**FREN 102 F Elementary French II (5) (CAN FREN 4)  
(FREN 101 F + FREN 102 F = CAN FREN SEQ A)**

Prerequisite: FREN 101 F Elementary French I with a grade of "C" or better or one year of high school French with a grade of "C" or better Letter grade or credit/no credit option

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)

**FREN 200 F Conversational French (2-2-2-2)**

Prerequisite: FREN 102 F Elementary French II with a grade of "C" or better or two years high school French with a grade of "C" or better. Letter grade or credit/no credit option.

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) (CAN FREN 8)  
(FREN 203 F + FREN 204 F = CAN FREN SEQ B)**

Prerequisite: FREN 102 F Elementary French II with a grade of "C" or better or two years high school French with a grade of "C" or better. Letter grade or credit/no credit option.

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)

**FREN 204 F Intermediate French IV (4) (CAN FREN 10)  
(FREN 203 F + FREN 204 F = CAN FREN SEQ B)**

Prerequisite: FREN 203 F Intermediate French III with a grade of "C" or better or three years high school French with a grade of "C" or better. Letter grade or credit/no credit option.

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)

**FREN 299 F French Independent Study (1-1-1)**

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

Curriculum leads to the **Associate in Arts Degree**. The Geography 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)**

- GEOG 100 F Global Geography (3)
- GEOG 102 F Physical Geography (3)
- GEOG 102LF Physical Geography Lab (1)
- GEOG 120 F Global Environmental Problems (3)
- GEOG 160 F Cultural Geography (3)
- GEOG 281AF Introduction to Geographical Information Systems (course number change from GEOG 230) (3)

**Restricted Electives (3 units)**

- ANTH 101 F Physical Anthropology (3)
- ANTH 102 F Cultural Anthropology (3)
- ENVS 105 F Environmental Biology (3)
- ESC 100 F Physical Geology (3)
- GEOG 131 F Introduction to Desktop GIS (2)
- GEOG 241 F Basic Crime Mapping (3)
- GEOG 242 F Advanced Crime Mapping (3)
- GEOG 281BF Advanced GIS Applications (3)
- GEOG 295 F GIS Internship (1-5)
- SOC 102 F Social Problems (3)

## 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)

**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)

**GEOG 102 F Physical Geography (3) (CAN GEOG 2)**

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)

**GEOG 102LF Physical Geography Laboratory (1)**

Corequisite: GEOG 102 F Physical Geography within the past three semesters.

Three hours laboratory/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)

**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)

**GEOG 131 F Introduction to Desktop GIS (2)**

This course provides an introduction to concepts and the use of a Geographic Information System (GIS), and its role in analysis and decision-making. 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) (CAN GEOG 4)**

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)

**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 187 F Hawaii: A Land of Transition (3)**

This intense regional course will examine the geographical influences that have affected the cultural development of the Hawaiian Islands. An interdisciplinary approach will be utilized. The class will span the time from early Polynesian migration to the present. Lectures, discussions, and laboratory assignments will focus on Hawaii as a microcosm of historical and cultural development and will serve as a conceptual model for other areas of the world. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**GEOG 199 F Geography Independent Study (1-1-1-1)**

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 241 F Basic Crime Mapping (3)**

This course provides an introduction to the basic concepts and use of a Geographic Information System (GIS) for crime mapping and analysis. Students will engage in hands-on training in GIS as it relates to Law Enforcement and Criminal Justice activities. Students will also be introduced to extensions of ArcView software such as Network Analyst and Tracking Analyst. These add-on modules extend the analytical capabilities of ArcView and allow input of routing and temporal map features to existing databases. Students will generate production quality maps, documents and reports for use in spatial analysis and decision-making. (CSU) (Degree Credit)

**GEOG 242 F Advanced Crime Mapping (3)**

This advanced course provides further study in crime mapping and analysis applications of Geographic Information Systems (GIS). Students will engage in expanded hands-on training in GIS as it relates to Law Enforcement and Criminal Justice activities and be introduced to 3D Analyst and Spatial Analyst add-on modules of ArcView software. These modules extend the analytical capabilities of ArcView and allow input of map features and conversion of feature themes from raster to vector. Spatial analysis will include neighborhood and zone analysis. 3D Analyst will include conversion of data to a three dimensional format for analysis of real world relationships that would be abstract in two dimensions. Students will produce professional quality documents and reports for use in spatial analysis and decision-making. (CSU) (Degree Credit)

**GEOG 260 F Economic Geography (World and National Trade Relationships) (3)**

Three hours lecture per week. The course consists of two parts. The first focuses on an analysis of resource capabilities and development of various parts of the world and the resulting trade relationships. The second part emphasizes United States resource distribution, transport networks, and internal trade ties. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**GEOG 281AF Introduction to Geographic Information Systems (3)**

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 map 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)

**GEOG 281BF Advanced GIS Applications (3)**

Prerequisite: GEOG 281AF Introduction to Geographic Information Systems

This course provides an introduction to advanced applications of Geographic Information Systems (GIS) using ArcView. The course will provide hands on training in new plug in modules and extensions of ArcView. The course will also briefly review Avenue programming for customizing ArcView. The add-on modules extend the analytical capabilities of ArcView and allow input of map features and conversion of feature themes from raster to vector. Spatial analysis will include slope and aspect maps, neighborhood and zone analysis. Network Analyst will include problem-solving techniques for geographic networks (point to point routing) or closest points. 3D Analyst will include conversion of data to a three dimensional format for analysis of real world relationships that would be abstract in two dimensions. Use of ArcView software to produce professional quality documents for use in spatial analysis and decision-making. (CSU) (Degree credit)

**GEOG 295 F GIS Internship (1-5)**

A directed field study program whereby students will apply classroom instruction to real-world Geographic Information Systems (GIS) projects in the community. The student will be under the supervision of a faculty advisor from the college while participating in a short-term internship program in a business or government agency using GIS. Students should arrange for an advisor prior to enrolling in an internship. Students in internship programs will meet periodically with their advisor, complete interim reports and present a final report. (CSU) (Degree credit)

## Geology

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units of which 8 are in required courses; an additional 10 units must be chosen from the restricted electives listed below.

**Required Courses (8 units)**

ESC 100 F Physical Geology (3)  
 ESC 100LF Physical Geology Lab (1)  
 ESC 103 F Historical Geology (4)

**Restricted Electives (10 units)**

BIOL 170 F Organismal Biology (5) or  
 BIOL 266 F General Zoology (5)  
 CHEM 111AF General Chemistry (5)  
 CHEM 111BF General Chemistry (5)  
 ENGR 101AF Surveying (4)  
 ESC 104 F Geology of National Parks and Monuments (3)  
 ESC 190 F Environmental Geology (3)  
 MATH 150AF Calculus (4)  
 MATH 150BF Calculus (4)  
 MATH 250AF Intermediate Calculus (4)  
 MATH 250BF Linear Algebra and Differential Equations (4)  
 PHYS 205 F/206 F College Physics (4, 4) or  
 PHYS 221 F/222 F/223 F General Physics (4, 4, 4)

## German

**GERM 101 F Elementary German I (5) (CAN GERM 2) (GERM 101 F + GERM 102 F = CAN GERM SEQ A)**

Letter grade or credit/no credit 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)

**GERM 102 F Elementary German II (5) (CAN GERM 4) (GERM 101 F + GERM 102 F = CAN GERM SEQ A)**

Prerequisite: GERM 101 F Elementary German I with a grade of "C" or better or one year of high school German with a grade of "C" or better. Letter grade or credit/no credit option.

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)

**GERM 200 F Conversational German (2-2-2-2)**

Prerequisite: GERM 102 F Elementary German II with a grade of "C" or better or two years high school German with a grade of "C" or better. Letter grade or credit/no credit option.

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 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)  
(GERM 203 F + GERM 204 F = CAN GERM SEQ B)**

Prerequisite: GERM 102 F Elementary German II with a grade of "C" or better or two years high school German with a grade of "C" or better. Letter grade or credit/no credit option.

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)

**GERM 204 F Intermediate German IV (4)  
(GERM 203 F + GERM 204 F = CAN GERM SEQ B)**

Letter grade or credit/no credit option. Prerequisite: GERM 203 F Intermediate German III 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)

**GERM 299 F German Independent Study (1-1-1)**

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 140 F Health Science (3)**

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)

**HED 197 F Internship in Health Education (2)**

One-hour lecture/small group discussion per week. Professionals from the biological sciences/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

Curriculum leads to the **Associate in Arts Degree**. The History AA 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)**

- HIST 110 F and 111 F Western Civilization (3, 3) (formerly HIST 110AF and 110BF) or
- HIST 110HF and 111HF Honors Western Civilization (3, 3) or
- HIST 110F and 111HF or HIST 110HF and 111 F or
- HIST 112 F and 113 F World Civilizations (3, 3) or
- HIST 112HF and 113HF Honors World Civilizations (3,3) or
- HIST 112 F and 113HF or HIST 112HF and 113 F or
- HIST 160AF Asia: Basic Heritage (3) and
- HIST 160BF Modern China and Japan (3) or
- HIST 162AF and 162BF History of the Americas (3, 3) or
- HIST 270 F and 171 F History of the United States (3, 3) or
- HIST 170HF and 171HF Honors History of the United States

**Restricted Electives (12 units)**

3 Additional units from the above sequences or

- HIST 151 F Survey of British History (3)
- HIST 152 F Survey of British History (3)
- HIST 154 F Ancient Egypt (3)
- HIST 165 F Introduction to the Middle East (3)
- HIST 170 F Women in United States History (3)
- HIST 275 F History of California and the Pacific Coast (3)

**Plus 9 additional units from:**

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	History of African Americans in the United States (3)
ETHS	141 F	Chicano/Chicana 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	165 F	Business and Professional Ethics (3)
PHIL	170 F	Logic and Critical Thinking (3)
POSC	100 F	American Government (3)
POSC	215 F	Comparative Political Systems (3)
POSC	230 F	Introduction to International Relations (3)
PSY	101 F	General Psychology (3)
SOC	101 F	Introduction to Sociology (3)

*History Courses***HIST 110F Western Civilization (3) (CAN HIST 2)  
(HIST 110F + HIST 111F = CAN HIST SEQ A)**

Letter grade or credit/no credit option.

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) (Degree credit)

**HIST 110HF Honors Western Civilization (3)  
(HIST 110F + HIST 111F = CAN HIST SEQ A)**

Three hours lecture and discussion 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. 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)

**HIST 111 F Western Civilization (3) (CAN HIST 4)  
(HIST 110F + HIST 111F = CAN HIST SEQ A)**

Three hours lecture per week. This course is a continuation of 110 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. (CSU) (UC) (Degree credit)

**HIST 111HF Honors Western Civilization (3)  
(HIST 110F + HIST 111F = CAN HIST SEQ A)**

Three hours lecture and discussion per week. This course is a continuation of HIST 110 or 110H 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. (CSU) (UC Credit Limitation) (Degree credit)

**HIST 112 F World Civilizations (3) (CANHIST 14)  
(HIST 112 F + HIST 113 F = CAN HIST SEQ C)**

Letter grade or credit/no credit option.

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. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree credit)

**HIST 112HF Honors World Civilizations (3)**

Letter grade or credit/no credit option.

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)

**HIST 113 F World Civilizations (3) (CAN HIST 16)  
(HIST 112 F + HIST 113 F = CAN HIST SEQ C)**

Letter grade or credit/no credit option.

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 AD 1550 to the present. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree credit)

**HIST 113HF Honors World Civilizations (3)**

Letter grade or credit/no credit option.

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 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)

**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. HIST 127 F combined with 170 F and HIST 171 F: maximum credit, 2 courses.) (Degree credit)

**HIST 151 F Survey of British History (3)**

Three hours lecture per week. A survey of British history from pre-historic times to 1714, emphasizing the contributions of Celts, Romans, Anglo-Saxons and Normans; the structure of society; the growth of monarchy, Common Law, Parliament and other governmental institutions; the development of architecture and literature; the role of the Church; and transformations brought by Reformation and Revolution during the Tudor-Stuart period. (CSU) (UC) (Degree credit)

**HIST 152 F Survey of British History (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)

**HIST 154 F Ancient Egypt (3)**

Letter grade or credit/no credit option.

Three hours lecture-discussion per week. This course surveys Egyptian politics, society, religion, and the arts from the Pre-dynastic period through Cleopatra. An introduction to hieroglyphs is included. (CSU) (UC) (Degree credit)

**HIST 159 F The Ascent of Man (3)**

Letter grade or credit/no credit option.

Three hours lecture per week. Students will demonstrate their knowledge of intellectual history, tracing the major events in the biological and cultural evolution of man. The course traces the development of science and art as expressions of the special gifts that characterize man and that have made him unique among the animal species. Emphasis is placed on the processes of thought and imagination that are involved in the various attempts made by man to analyze and understand the nature of the universe and of him. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**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)

**HIST 160BF Modern China and Japan (3)**

Letter grade or credit/no credit 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)

**HIST 162AF History of the Americas (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)

**HIST 162BF History of the Americas (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. HIST 162AF not a prerequisite. (CSU) (UC) (Degree credit)

**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)

**HIST 170 F History of the United States (3) (CAN HIST 8) (HIST 170 F + HIST 171 F = CAN HIST SEQ B)**

Three hours lecture per week. This course is a survey of American History from the colonial foundations to 1877. (CSU) (UC Credit Limitation; HIST 170 F or 170HF combined with HIST 127 F and HIST 171 F or HIST 171HF; maximum credit, 2 courses) (Degree credit)

**HIST 170HF Honors History of the United States (3)**

Three hours lecture per week. This course is a survey of American History from the colonial foundations to 1877. 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; HIST 170 F or HIST 170HF combined with HIST 127 F and HIST 171 F or HIST 171HF; maximum credit, 2 courses) (Degree credit)

**HIST 171 F History of the United States (3) (CAN HIST 10) (HIST 170 F + HIST 171 F = CAN HIST SEQ B)**

Three hours lecture per week. This course is a survey of American History from 1877 to the present time. (CSU) (UC Credit Limitation; HIST 171 F or HIST 171HF combined with HIST 127 F and HIST 170 F or HIST 170HF; maximum credit, 2 courses) (Degree credit)

**HIST 171HF Honors History of the United States (3)**

Three hours lecture per week. This course is a survey of American History from 1877 to the present time. 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; HIST 171 F or HIST 171HF combined with HIST 127 F and HIST 170 F or HIST 170HF; maximum credit, 2 courses) (Degree credit)

**HIST 199 F History Independent Study (1-1-1-1)**

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)

**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)

**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)

## Homemaking

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Curriculum leads to the **Associate in Arts Degree** and preparation to manage a home efficiently, economically and intelligently; to appreciate the beauty in dress and home furnishings; to understand the importance of a harmonious family life as a background for development of normal, happy child life. Most courses are transferable, but no effort has been made to include university pre-major or lower-division requirements. This degree requires completion of 18 units of which 17 units are in required courses. An additional unit must be chosen from the restricted electives listed below.

**Required Courses (17 units)**

- CDFL 120 F Human Development: Early Years (3)  
 CDFL 202 F Contemporary Family Living (3)  
 FASH 101 F Clothing (2)  
 FASH 107 F Apparel Analysis (3)  
 FOOD 101AF Foods (3)  
 IDES 100 F Fundamentals of Interior Design (3)

**Restricted Electives (1 unit)**

- CDFL 173 F Process of Parenting (3)  
 FASH 201AF Clothing (2)  
 FASH 206 F Textiles (3)  
 NUTR 210 F Nutrition Today (3)

## Horticulture

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### Greenhouse & Nursery Production Certificate

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)**

- HORT 160 F Plant Identification (Ornamental Trees) (3)  
 HORT 161 F Plant Identification (Ornamental Shrubs) (3)  
 HORT 164 F Plant Identification (Annuals, Perennials and Houseplants) (3)  
 HORT 173 F Greenhouse and Nursery Production (3)

**Restricted Electives — Group A (9 units)**

- HORT 155 F Soils (3)  
 HORT 156 F Fertilizers (3)  
 HORT 174 F Plant Propagation (3)  
 HORT 205 F Applied Entomology (3)

**Restricted Electives — Group B (9 units)**

- HORT 152 F Applied Botany (4)  
 HORT 162 F Landscaping for Dry Climates (3)  
 HORT 177 F Turfgrass Management (2)  
 HORT 200 F Landscape Design (4)  
 HORT 207 F Plant Pathology (3)

### Landscape Design/Management Certificate

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:**

- HORT 001 F Principles of Horticulture I (4)  
 HORT 002 F Principles of Horticulture II (4)  
 HORT 005 F Basic Landscape Plants (3)  
 HORT 006 F Basic Landscape Plants (3)  
 HORT 152 F Applied Botany (4) or  
 BIOL 268 F General Botany (5)  
 HORT 153 F Landscape Irrigation (3)  
 HORT 155 F Soils (3)  
 HORT 156 F Fertilizers (3)  
 HORT 160 F Plant Identification (Ornamental Trees) (3)  
 HORT 161 F Plant Identification (Ornamental Shrubs) (3)  
 HORT 162 F Landscaping for Dry Climates (3)  
 HORT 165 F Landscape Management (4)  
 HORT 168 F Landscape Construction (3)  
 HORT 177 F Turfgrass Management (3)  
 HORT 200 F Landscape Design (3)  
 HORT 215 F Diseases and Pests of Ornamental Plants (4)

The **Landscape Design/Management Certificate** Program requires completion of 30 units of which 16 units are in required courses. An additional 7 units must be chosen from restricted electives group A, and at least 7 units from restricted electives group B.

#### Required Courses (16 units)

HORT 005 F, 006 F Basic Landscape Plants (3, 3) or  
 HORT 160 F, 161 F Plant Identification (3, 3) and  
 HORT 153 F Landscape Irrigation (3)  
 HORT 165 F Landscape Management (4) and/or  
 HORT 200 F Landscape Design (3)  
 HORT 177 F Turfgrass Management (3)

If both HORT 165 F and HORT 200 F are taken, select at least 5 units from A and at least 5 units of B.

#### Restricted Electives — Group A (7 units)

HORT 155 F Soils (3)  
 HORT 156 F Fertilizers (3)  
 HORT 168 F Landscape Construction (3)  
 HORT 169LF Landscape Construction Lab (1)  
 HORT 170 F Landscape Contracting (3)  
 HORT 201 F Adv Landscape Design (3)  
 HORT 215 F Diseases and Pests of Ornamental Plants (4)

#### Restricted Electives — Group B (7 units)

HORT 162 F Landscaping for Dry Climates (4)  
 HORT 164 F Plant Identification  
 (Annuals/Perennials/Houseplants) (3)  
 HORT 185 F Arboriculture (2)  
 HORT 205 F Applied Entomology (3)  
 HORT 207 F Plant Pathology (4)

### Landscape Horticulture Certificate

The **Landscape Horticulture Certificate** of Completion Program is intended for students who desire an intermediate certification in Horticulture. This certificate can be completed within a single school year. Courses used here can be applied toward the more advanced certificate of proficiency in horticulture. The **Landscape Horticulture Certificate** of Completion Program requires 17 units of which 7 units are in required courses. An additional 10 units must be chosen from restricted electives listed below.

#### Required Courses (7 units)

HORT 001 F Principles of Horticulture I (4) or  
 HORT 002 F Principles of Horticulture II (4)

#### Plus

HORT 005 F Basic Landscape Plants (3) or  
 HORT 006 F Basic Landscape Plants (3) or  
 HORT 160 F Plant Identification (Ornamental Trees) (3) or  
 HORT 161 F Plant Identification (Ornamental Shrubs) (3) or  
 HORT 162 F Landscaping for Dry Climates (3) or  
 HORT 164 F Plant Identification (Annuals, Perennials and Houseplants) (3)

#### Restricted Electives (10 units)

HORT 008AF Landscape Pruning Practices (1)  
 HORT 008BF Basic Turf Care (1)  
 HORT 008CF Home Pest Control (1)  
 HORT 058 F Irrigation Controller Programming (2)  
 HORT 153 F Landscape Irrigation (3)  
 HORT 155 F Soils (3)  
 HORT 156 F Fertilizers (3)  
 HORT 157 F Irrigation Principles (3)  
 HORT 165 F Landscape Management (4)  
 HORT 168 F Landscape Construction (3)  
 HORT 169LF Landscape Construction Laboratory (1)  
 HORT 170 F Landscape Contracting (3)  
 HORT 173 F Greenhouse and Nursery Production (3)  
 HORT 174 F Plant Propagation (3)  
 HORT 177 F Turfgrass Management (3)  
 HORT 185 F Arboriculture (2)  
 HORT 200 F Landscape Design (3)

### Landscape Irrigation Certificate

The **Landscape Irrigation Certificate** Program requires 30 units of which 18 units are in required courses, and at least 6 additional units of restricted electives from group A, and at least 6 units of restricted electives from group B.

#### Required Courses (19 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 Climate (3)  
 HORT 218 F Landscape Hydraulics (3)

#### Restricted Electives — Group A (6 units)

ACG 100 F Introduction to Computer Graphics for  
 Macintosh (3)  
 ARCH 113 F Architectural Drawing (3)  
 CSTR 006 F Introduction to Residential Plumbing and  
 Mechanical Systems (2)  
 HORT 177 F Turfgrass Management (3)  
 HORT 200 F Landscape Design (3)  
 HORT 219 F CAD Applications in Horticulture (3)

#### Restricted Electives — Group B (6 units)

HORT 165 F Landscape Management (4)  
 HORT 168 F Landscape Construction (3)  
 HORT 169LF Landscape Construction Lab (1)  
 HORT 170 F Landscape Contracting (3)  
 HORT 201 F Adv Landscape Design (3)

## *Nursery Management*

Curriculum leads to an **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:**

- 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 155 F Soils (3)
- HORT 156 F Fertilizers (3)
- HORT 160 F 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 Identification (Annuals, Perennials and Houseplants) (3)
- HORT 173 F Greenhouse and Nursery Production (3)
- HORT 174 F Plant Propagation (3)
- HORT 200 F Landscape Design (3)
- HORT 215 F Diseases and Pests of Ornamental Plants (4)

## *Ornamental Horticulture*

Curriculum leads to the **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)**

- HORT 153 F Landscape Irrigation (3) or
- HORT 157 F Irrigation Principles (3)
- HORT 155 F Soils (3)
- HORT 160 F Plant Identification: Ornamental Trees (3) or
- HORT 161 F Plant Identification: Ornamental Shrubs (3) or
- HORT 162 F Landscaping for Dry Climates (3) or
- HORT 164 F Plant Identification: Annuals, Perennials, and Houseplants (3)

### **Restricted Electives (12 units)**

- HORT 156 F Fertilizers (3)
- HORT 165 F Landscape Management (3)
- HORT 173 F Greenhouse and Nursery Production (3)
- HORT 174 F Plant Propagation (3)
- HORT 177 F Turfgrass Management (3)
- HORT 200 F Landscape Design (3)
- HORT 201 F Adv Landscape Design (3)
- HORT 219 F CAD Application in Horticulture (3)

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)**

- HORT 005 F, 006 F Basic Landscape Plants (3, 3) or
- HORT 160 F, 161 F Plant Identification (3, 3) and
- HORT 155 F Soils (3)

### **Restricted Electives — Group A (12 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 Fertilizers (3)
- HORT 164 F Plant Identification (Annuals, Perennials, and Houseplants) (3)
- HORT 173 F Greenhouse and Nursery Production (3)
- HORT 174 F Plant Propagation (3)
- HORT 177 F Turfgrass 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 Ornamental Plants (4)

### **Restricted Electives — Group B**

- HORT 008AF Landscape Pruning Practices (1)
- HORT 008BF Basic Turf Care (1)
- HORT 008CF Home Pest Control (1)
- HORT 045 F Training Pest Control Professionals (3, 3)
- HORT 162 F Landscaping for Dry Climates (3)
- HORT 165 F Landscape Management (4)
- HORT 168 F Landscape Construction (3)
- HORT 170 F Landscape Contracting (3)
- HORT 185 F Arboriculture (2)
- HORT 201 F Advanced Landscape Design (3)

## *Pest Management Certificate*

The **Pest Management Certificate** Program requires 30 units of which 6 are in required courses. An additional 8 units must be chosen from restricted electives group A, and at least 16 units from restricted electives group A or B.

### **Required Courses (6 units)**

- HORT 205 F Applied Entomology (3)
- HORT 207 F Plant Pathology (3)

### **Restricted Electives — Group A**

- HORT 001 F Principles of Horticulture I (4)
- HORT 002 F Principles of Horticulture II (4)
- HORT 005 F Basic Landscape Plants (3)
- HORT 006 F Basic Landscape Plants (3)
- HORT 045 F Training Pest Control Professionals (3)
- HORT 152 F Applied Botany (4)
- HORT 156 F Fertilizers (3)
- 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**

HORT 155 F Soils (3)  
 HORT 165 F Landscape Management (4)  
 HORT 177 F Turfgrass Management (3)  
 HORT 185 F Arboriculture (2)  
 HORT 200 F Landscape Design (3)

*Horticulture Courses***HORT 001 F Principles of Horticulture I (4)**

Three hours lecture and three hours laboratory 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 laboratory 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 (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 (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)**

Two hours of lecture and three hours laboratory 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)**

Two hours lecture and three hours laboratory 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)**

Two hours lecture and three hours laboratory 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 045 F Training Pest Control Professionals (3,3)**

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 (2,2)**

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)**

Three hours lecture and three hours laboratory 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)**

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 Habitat Assessment and Restoration (2.5)**

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 laboratory 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 laboratory work. (CSU) (Degree credit)

**HORT 153 F Landscape Irrigation (3)**

Two hours lecture and three hours laboratory 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 Landscape Irrigation.

Two hours lecture and three hours laboratory 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 laboratory. (CSU) (Degree credit)

**HORT 155 F Soils (3) (CAN AG 14)**

Two hours lecture and three hours laboratory 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 Fertilizers (3)**

Two hours lecture and three hours laboratory 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 Landscape Irrigation.

Two hours lecture and three hours laboratory 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. Laboratory 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 and 161 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 Landscape Design

Two hours lecture and three hours laboratory 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 drought-tolerant plants. Through development of the design process the student will create landscape plans and make site analysis evaluations using an inventory of appropriate native and drought-tolerant exotic species. Field trips are integrated as part of the laboratory projects, including one weekend trip, which is required of all students. (CSU) (Degree credit)

**HORT 164 F 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 laboratory 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 Laboratory (1)**

Corequisite: HORT 168 F Landscape Construction

Three hours laboratory per week. Laboratory 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 laboratory 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 laboratory 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 Turf Grass Management (3)**

Two hours lecture and three hours laboratory per week. Production, maintenance, and management of turf grasses. Laboratory 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)**

One hour lecture and three hours laboratory 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)**

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 laboratory 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 Landscape Design.

Two hours lecture-discussion and three hours laboratory per week. A continuation of graphics, plant usage, and design theory covered in HORT 200 F Landscape Design, with emphasis on hillside developments and commercial projects. A survey of historical development of landscape. Design of landscape structures (walls, patio overheads, steps, walkways, pools) with focus placed on the basic qualities of the construction materials. Elements of perspective drawings for project presentations. Detailed site analysis and evaluation of ecological factors. Field trips are part of laboratory, including one weekend trip required of all students. (CSU) (Degree credit)

**HORT 205 F Applied Entomology (3)**

Two hours lecture and three hours laboratory 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 laboratory and field examination placing emphasis on identification and control. (CSU) (Degree credit)

**HORT 207 F Plant Pathology (3)**

Two hours lecture and three hours laboratory 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 laboratory, greenhouse, and field. (CSU) (Degree credit)

**HORT 215 F Diseases and Pests of Ornamental Plants (4)**

Prerequisite: HORT 205 F Applied Entomology or HORT 207 F Plant Pathology.

Three hours lecture and three hours laboratory 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. Laboratory 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 Landscape Irrigation and MATH 040 F Intermediate Algebra.

Two hours lecture and three hours laboratory 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)**

Prerequisite: ACG 100 F Introduction to Computer Graphics for Macintosh, HORT 200 F Landscape Design or HORT 154 F Irrigation Design.

Two hours lecture, three hours laboratory per week. This course includes the use of computer aided drafting in the creation of landscape and irrigation designs. The use of syneol 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, 3)**

Letter grade or credit/no credit option. Prerequisite: HORT 219 F CAD Applications in Horticulture

Two hours lecture and three hours laboratory 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)

## Industrial Arts

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:

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 (2)  
 WOOD 110 F Fundamentals of Woodwork (3)

## Industrial Laboratory Technician (Chemistry)

Curriculum leads to an **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 Bachelor's 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)

CHEM 111AF General Chemistry (5)  
 CHEM 111BF General Chemistry (5)

### Restricted Electives (8 units)

CHEM 200 F Elementary Organic Chemistry (3) or  
 CHEM 211AF Organic Chemistry (5) or  
 CHEM 211BF Organic Chemistry (5)  
 PHYS 205 F College Physics (4)  
 PHYS 206 F College Physics (4)

## Industrial Technology

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units from the courses listed below.

### Required Courses (18)

MATH 150AF Calculus (4)  
 PHYS 205 F/206 F College Physics (4, 4) or  
 PHYS 221 F/222 F/223 F General Physics (4, 4, 4)  
 CHEM 107 F Elementary Chemistry (5) or  
 CHEM 111AF/111BF General Chemistry (5, 5)

For specialized technical courses in construction, electronics or manufacturing, see your counselor.

## Interior Design

### Commercial Design

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)

ARCH 113 F Architectural Drawing (3)  
 ARCH 124 F Architectural CAD I (3)  
 IDES 100 F Fundamentals of Interior Design (3)  
 IDES 105 F Interior Design Studio I (2)  
 IDES 130 F Applied Color and Design Theory (4)  
 IDES 147 F Office Planning (3)  
 IDES 150 F Interior Materials and Products (4)  
 IDES 190 F History of Interior Architecture and Furnishings (3)  
 IDES 210 F Fundamentals of Lighting (3)  
 IDES 215 F Interior Design Studio II (2)  
 IDES 230 F Business and Professional Practices (3)  
 IDES 240 F Interior Design Internship (2-3)

**Restricted Electives (13 units)**

ARCH	123 F Design Studio I (4)
ARCH	112 F Architectural Rendering (3)
ARCH	924 F Architectural CAD II (3)
CSTR	030 F Construction Blueprint Reading (3)
IDES	120 F Interior Design Careers (2)
IDES	130 F Applied Color and Design Theory (4)
IDES	180 F History of Interior Architecture and Furnishings (3)
IDES	200 F Interior Illustration (2)
IDES	215 F Interior Design Studio II (2)
IDES	248AF Restaurant/Hotel Design (2)
IDES	248BF Medical/Health Design (2)
IDES	249AF Studies in International Architecture & Design (1) or
IDES	249BF Studies in International Architecture & Design (2) or
IDES	249CF Studies in International Architecture & Design (3)

*Interior Design Assistant*

Curriculum leads to the **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** (25 units) plus the following 23 units. This program does not fulfill requirements for transfer to any four-year state university.

**Completion of Interior Merchandising — Level I Certificate (25 units) Plus the following 23 units:**

ARCH	113 F Architectural Drawing I (3) (In lieu of Regional course IDES 220 Working Drawings)
IDES	170 F Space Planning (3)
IDES	180 F History of Interior Architecture and Furnishings (3)
IDES	190 F History of Interior Architecture and Furnishings (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)
IDES	250 F Codes and Specifications*

\* Part of the Regional Interior Design Program and not available at Fullerton College at this time. It is available at other schools participating in the program.

*Interior Merchandising — Level I Certificate*

The **Interior Merchandising — Level I Certificate** Program requires the completion of the 26 units listed below. This certificate is Level I of the Regional Interior Design Program.

**Required Courses (26 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 (2)
IDES	120 F Interior Design Careers (2)
IDES	130 F Applied Color and Design Theory (4)
IDES	150 F Interior Materials and Products (4)
MKT	208 F Principles of Selling (3)

*Residential Design Certificate*

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)**

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 (3)
IDES	180 F History of Interior Architecture and Furnishings (3)
IDES	190 F History of Interior Architecture and Furnishings (3)
IDES	215 F Interior Design Studio II (2)
IDES	240 F Interior Design Internship (2-3)

**Restricted Electives (17 units)**

ARCH	113 F Architectural Drawing I (3)
ARCH	123 F Design Studio I (4)
ARCH	124 F Architectural CAD I (3)
ART	112 F, 113 F or 114 F Art History (3)
ART	120 F Basic Visual Design Concepts (3)
ART	179 F Drawing for Non-Art Majors (2) or
ART	182 F Basic Drawing (3)
CSTR	006 F Introduction to Residential Plumbing & Mechanical Systems (3)
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 Practices (3)

- IDES 249AF Studies in International Architecture & Design (1) or  
 IDES 249BF Studies in International Architecture & Design (2) or  
 IDES 249CF Studies in International Architecture & Design (3)

## *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 Beginning Drafting for Interior Design.

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 laboratory per week. This studio course is designed to apply concepts and theories presented in the lecture course, IDES 100 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 laboratory 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 laboratory 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 Beginning Drafting for Interior Design or ARCH 100 F Architectural Drafting.

Two hours lecture, three hours laboratory 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)**

Prerequisite: IDES 110 F Beginning Drafting for Interior Design or ARCH 100 F Architectural Drafting.

Two hours lecture and three hours laboratory 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 (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)

### **IDES 190 F History of Interior Architecture and Furnishings (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)**

Prerequisite: IDES 100 F Fundamentals of Interior Design and IDES 130 F Applied Color and Design Theory.

One hour lecture, three hours laboratory per week. This course covers the application of the methods, techniques and tools used for illustrating interior spaces and products. (CSU) (Degree credit)

### **CDFL 205 F Planning Environments for Young Children** (see Child Development)

### **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)**

Prerequisite: IDES 100 Fundamentals of Interior Design, IDES 130 F Applied Color and Design Theory and IDES 170 F Space Planning.

One hour lecture and three hours laboratory 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. (Degree credit)

**IDES 240 F Interior Design Internship (2-3, 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 Interior Design Studio II, IDES 110 F Beginning Drafting for Interior Design or ARCH 100 F Architectural Drafting.

One hour lecture and three hours laboratory 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 Interior Design Studio II, IDES 110 F Beginning Drafting for Interior Design or ARCH 100 F Architectural Drafting.

One hour lecture and three hours laboratory 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)**

Prerequisite: IDES 215 F Interior Design Studio II, IDES 110 F Beginning Drafting for Interior Design

One hour lecture and three hours laboratory 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 101 F Elementary Italian I (5)**

Letter grade or credit/no credit 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)

**ITAL 102 F Elementary Italian II (5)**

Prerequisite: ITAL 101 F Elementary Italian I with a grade of "C" or better or one year of high school Italian with a grade of "C" or better. Letter grade or Credit/no credit option.

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)

**ITAL 203 F Intermediate Italian III (4)**

Prerequisite: ITAL 102 F Elementary Italian II with a grade of "C" or better or two years of high school Italian with a grade of "C" or better. Letter grade or Credit/no credit option.

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)

**ITAL 204 F Intermediate Italian IV (4)**

Prerequisite: ITAL 203 F Intermediate Italian III with a grade of "C" or better or three years of high school Italian with a grade of "C" or better. Letter grade or Credit/no credit option.

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)

# Japanese

## **JAPN 101 F Elementary Japanese I (5)** **(JAPN 101 F + JAPN 102 F = CAN JAPN SEQ A)**

Letter grade or credit/no credit 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)

## **JAPN 102 F Elementary Japanese II (5)** **(JAPN 101 F + JAPN 102 F = CAN JAPN SEQ A)**

Letter grade or credit/no credit option. Prerequisite: JAPN 101 F Elementary Japanese I 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)

## **JAPN 203 Intermediate Japanese III (4)** **(JAPN 101 F + JAPN 102 F = CAN JAPN SEQ A)**

Prerequisite: JAPN 102 F Elementary Japanese II with a grade of “C” or better or two years of high school Japanese with a grade of “C” or better. Letter grade or credit/no credit option.

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)

# Journalism

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)**

JOUR	101 F	Reporting and Writing (3)
JOUR	102 F	Reporting and Writing (3)
JOUR	108 F	Freelance Article Writing (3)
JOUR	110 F	Mass Media Survey (3)
JOUR	126 F	Advertising Copy and Layout (3)
JOUR	135 F	Magazine Production (3)
JOUR	140 F	Public Relations and Publicity (3)
JOUR	225 F	Newspaper Production (3)

### **Restricted Electives (6 units)**

ACG	100 F	Introduction to Computer Graphics/Macintosh (3)
JOUR	126 F	Advertising Copy and Layout (3) (Level B)
JOUR	199 F	Independent Study (1-3)
JOUR	227 F	Newspaper Management, Makeup and Editing (3)
PHOT	101 F	Introduction to Photography (3)

# Journalism Courses

## **JOUR 101 F Reporting and Writing (3) (CAN JOUR 2)**

Prerequisite: Recommended score on the English Placement test or credit in ENGL 060 F Preparation for College Writing or credit in ESL 186 F Composition for Students of American English.

Three hours seminar and lecture plus one hour laboratory 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, column sports, and press releases. (CSU) (UC) (Degree credit)

## **JOUR 102 F Reporting and Writing (3)**

Prerequisite: JOUR 101 F Reporting and Writing.

Three hours seminar/lecture per week plus one hour laboratory. Students study and practice advanced reporting techniques with emphasis upon in-depth reporting, court-trial reporting, interviewing, copy editing, layout, headline writing and photo editing. (CSU) (Degree credit)

## **JOUR 108 F Freelance Article Writing (3-3-3-3)**

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) (CAN JOUR 4)**

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)

## **JOUR 126 F Advertising Copy and Layout (3-3-3-3)**

Two hours lecture and three hours laboratory per week; course repetition up to a maximum of four semesters. An introductory course in the creation of advertising for publication concentrating on merchandising, analysis of advertising appeals, and copywriting. In order to create advertising copy, the student will be given instruction in the relationship between copy and the remainder of the advertising layout through laboratory exercises and preparation of copy for the *Homert* weekly College publication. In 126B the student becomes more extensively involved in selling, creating, and pasting up advertising for the College newspaper. Course may be taken four times for credit. (CSU) (Degree credit)

## **CRTV 129 F Broadcast News (formerly RTV 129 F)**

(see Cinema-Radio-TV)

**JOUR 135 F Magazine Production (3-3-3-3)**

Two hours lecture, three hours laboratory per week. The class creates a soft cover magazine-format periodical. Emphasis is placed on writing the longer, in-depth magazine article, the correlation of copy and art, page layout, copy editing, advertising, and editor-printer relationship. The class is of particular value to a student interested in a career in journalism, technical writing, the graphic arts, and editing. Course may be taken four times for credit. (CSU) (Degree credit)

**JOUR 140 F Public Relations and Publicity (3)**

Three hours lecture per week. Study and practice in techniques and responsibilities of corporate, governmental, and civic public relations, with special attention to publicity writing and public relations campaign development. (CSU) (Degree credit)

**JOUR 196 F Communications Seminar (.5-4, .5-4, .5-4, .5-4)**

Prerequisite: JOUR 102 F Reporting and Writing or PHOT 101 F Introduction to Photography or CRTV 235 F On-Air Radio Broadcasting.

Lecture and laboratory 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 up to a maximum of four semesters. (CSU) (Degree credit)

**JOUR 199 F Communications Independent Study (1-3, 1-3, 1-3, 1-3)**

Prerequisite: JOUR 102 F Reporting and Writing or PHOT 101 F Introduction to Photography or CRTV 122 F Broadcast Audio Operations

One hour lecture or scheduled conference or three hours independent laboratory research per week per unit of credit. This course is designed for advanced students who wish to increase their knowledge of communications through individual study. Student-instructor contracts are signed for individual projects. Course may be taken four times for credit. (CSU) (UC review required.) (Degree credit)

**JOUR 225 F Newspaper Production (3-3-3-3)**

Two hours lecture and 3 hours lab per week. This course includes the following areas of study: advanced reporting, editing, page makeup, advertising and proofreading. Circulation and production techniques are also studied and practiced in the production of the *Hornet* newspaper. Course may be taken four times for credit. (CSU) (Degree credit)

**JOUR 227 F Newspaper Management, Makeup and Editing (3-3-3-3)**

Two hours lecture and three hours lab per week. This course includes the principles and practices of copy editing, headline and caption writing. Photo evaluation, page makeup and editorial judgment are incorporated. Students will develop supervising abilities in a newspaper production setting. Course may be taken four times for credit. (CSU) (Degree credit)

**JOUR 240 F Advanced Public Relations (3)**

Prerequisite: JOUR 140 F Public Relations and Publicity, or one year of documented professional experience.

Three hours lecture per week. Principles and practices of writing style and form for public relations. Emphasis will be on accurate and well written public relations releases, public-service announcements, and more complex writing such as annual reports, brochures, and campaign proposals for agencies, businesses, and non-profit organizations. (CSU) (Degree credit)

## Latin-American Studies

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units chosen from the courses listed below.

**Required Courses (18):**

HIST	110 F	Western Civilization (3)
HIST	111 F	Western Civilization (3)
HIST	162AF	History of the Americas (3)
HIST	162BF	History of the Americas (3)
GEOG	100 F	Global Geography (3)
GEOG	160 F	Cultural Geography (3)
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)
SOC	101 F	Introduction to Sociology (3)
POSC	215 F	Comparative Political Systems (3)
SPAN	203 F	Intermediate Spanish III (4)
SPAN	204 F	Intermediate Spanish IV (4)
BUS	131 F	Principles of International Business (3)

## Liberal Studies

Curriculum leads to an **Associate in Arts Degree**. This degree requires 18 "major" units from courses meeting the California State University General Education Breadth Requirements list of courses or from the Intersegmental General Education Transfer Curriculum list of courses. Non-transferable courses (courses numbered under 100) or additional courses from the Fullerton College Associate Degree General Education list of courses may not be used to meet this 18 unit major requirement.

## Library Technology

**LIB 100 F Introduction to Research (1)**

One hour lecture per week. This class is designed to introduce students to traditional and electronic library research tools and resources including the Internet. Students 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 traditional and electronic 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)

## *Machine Technology*

### *CNC Operator*

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)**

- MACH 086 F CNC Set Up and Operation (3)
- MACH 087 F CNC Parts Programming (3)
- MACH 088 F Advanced CNC Set-Up and Operation (3)
- MACH 091 F Introduction to Machine Tools (5)

### *Computer Numerical Control (CNC) Certificate*

The **Computer Numerical Control (CNC) Certificate** Program requires the completion of 43-44 units of which 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)**

- 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 using Mastercam (3) or
- 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 (5) or
- MACH 116 F Machine Tools (2, 2)
- METL 192 F Fundamentals of Metallurgy (3)
- TECH 081 F Technical Mathematics (3)
- TECH 108 F Manufacturing Processes (3)

**Restricted Electives (9 units)**

- DRAF 145 F CAD/CAM (2)
- MACH 040 F CNC Wire EDM: Programming and Operation (3)
- MACH 052 F Adv CNC Programming using Mastercam (3) or
- MACH 062 F Adv CNC Programming using Surfcam (3)
- MACH 088 F Adv CNC Set-Up and Operation (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)

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

**Required Courses (6 units)**

- MACH 050 F CNC Programming using Mastercam (3)
- MACH 052 F Advanced CNC Programming using Mastercam (3)

### *Machine Technology — Level I*

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)**

- MACH 086 F CNC Machine Set-Up and Operation (3)
- MACH 091 F Introduction to Machine Tools (5) or
- MACH 116 F Machine Tools (2, 2)
- MACH 092 F Intermediate Machine Tools (5)
- MACH 093 F Adv Machine Tools (5)

### *Machine Technology — Level II*

The **Machine Technology — Level II Certificate** Program requires the completion of 34 units of which 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)**

- DRAF 070 F Blueprint Reading for the Metal Trades (2)
- DRAF 173 F Geometric Dimensioning and Tolerancing (2)
- MACH 086 F CNC Machine Set-Up and Operation (3)
- MACH 091 F Introduction to Machine Tools (5) or
- MACH 116 F Machine Tools (2, 2)
- MACH 092 F Intermediate Machine Tools (5)
- MACH 093 F Adv Machine Tools (5)
- TECH 081 F Technical Mathematics I (3)

**Restricted Electives (9 units)**

DRAF	171 F	Fundamentals of Drafting (2)
MACH	010 F	Machining Skills Lab (1)
MACH	040 F	CNC Wire EDM: Programming and Operation (3)
MACH	088 F	Advanced CNC Set-Up and Operation (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)

*Mastercam*

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

**Required Courses (6 units)**

MACH	050 F	CNC Programming using Mastercam (3)
MACH	052 F	Advanced CNC Programming using Mastercam (3)

*Surfcam*

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

**Required Courses (6 units)**

MACH	060 F	CNC Programming using Surfcam (3)
MACH	062 F	Advanced CNC Programming using Surfcam (3)

*Machine Technology Courses***MACH 010 F Machining Skills Lab (.5-2)**

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 laboratory participation. This course may be taken a total of four times. Open entry.

**MACH 040 F CNC Wire EDM: Programming and 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 laboratory time. (Degree credit)

**MACH 050 F CNC Programming using Mastercam (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 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 using Mastercam or industry experience using Mastercam in a 2D 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 3D wire frame models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. (Degree credit)

**MACH 060 F CNC Programming using SURFCAM (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 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 3D wire frame models, surface models, derived models, and composite surface models. Students will process programs that demonstrate the features and functions of the software. (Degree credit)

**MACH 086 F CNC Machine Set-Up 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 laboratory hours. (Degree credit)

**MACH 088 F Advanced CNC Set Up and Operation (3)**

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 set-up and operation of CNC mills and lathes. Students will build upon prior experience with CNC machines to complete set-ups on CNC mills and lathes having various control types. Students will practice set-up processes during laboratory 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 Introduction to Machine Tools or 116 F Machine Tools (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, 5)**

Prerequisite: MACH 092 F Intermediate Machine Tools 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 laboratory assignments. This course may be taken twice for credit. (Degree credit)

**MACH 116 F Machine Tools (2-2)**

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)

## Manufacturing Technology

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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.

**Complete 24 or more units from the following list:**

**Required CORE Courses (9 units)**

DRAF 171 F Fundamentals of Drafting (2)  
 MACH 116 F Machine Tools (2)  
 TECH 108 F Manufacturing Processes (3)  
 WELD 121AF Introduction to Welding (2)

**Additional (15 units)**

Drafting Courses — Any drafting courses

Machine Technology Courses — Any machine technology course

Welding Courses — Any welding courses except WELD 095 F

Welding Skills Lab

Technology-Related Courses —

METL 192 F Fundamentals of Metallurgy (3)

TECH 127 F Industrial Safety (1)

## Marketing Management

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See pages 128-129 for Marketing Management A.S. Degree and Marketing Management Certificate.

## Marketing Management Courses

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**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 including market analysis, consumer behavior, marketing mix strategies and new technology. Current issues pertaining to advertising, consumer research, international marketing and marketing on the Internet are covered. Class activities include field projects, development of a marketing plan portfolio, and hands-on computer simulations. This course lays the foundation for more advanced marketing and related subject areas. (CSU) (Degree credit)

**MKT 103 F Principles of Advertising (3)**

Three hours lecture per week. This course covers the historical, economic and social aspects of advertising. The roles of the advertising agency, the development of creative advertising copy, advertising budgets, analysis of successful advertising campaigns and the creation of advertisements for the six types of media (TV, radio, magazines, newspapers, outdoor and direct mail) are discussed. (CSU) (Degree credit)

**MKT 151 F Internet Marketing (2)**

One and one-half hour lecture and one and one-half hour lab per week. This course will introduce students to marketing communications 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 plan outline. Students will learn how to use the Internet for customer contact, customer service, order taking, and marketing research. (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 introduces the principles of relationship marketing and serving customers on the Internet. Topics include determining customer expectations; measuring success; using the Web site, e-mail, and extranets to increase customer satisfaction; and creating a relationship-based Web site. Students will develop an Internet customer service plan. (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 strategies. Its emphasis is on creating a marketing 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 skills, 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. (CSU) (Degree credit)

**MKT 208 F Principles of Selling (3)**

Three hours lecture per week. Subject matter includes opportunities in the sales field, the steps of the sale from the approach through the closing, the art of negotiation, telephone selling, effective communication, and building win-win relationships with customers. Also included are professional specialty selling, buying motives, product knowledge, all phases of the selling process, and the many and varied career opportunities in the sales field. (CSU) (Degree credit)

## Mathematics

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Curriculum leads to the **Associate in Arts Degree**. This 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 grade of "C" is required in all courses taken.

**Required Courses (12 units)**

MATH 150AF Calculus (4)  
 MATH 150BF Calculus (4)  
 MATH 250AF Intermediate Calculus (4)

**Restricted Electives (6 units)**

MATH 171 F Discrete Mathematic (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 (1.5)  
 MATH 120 F Introductory Probability & Statistics (4)  
 PHYS 221 F General Physics (4)  
 CSCI 123 F Introduction to Programming Concepts in C++ (4)

## Mathematics Courses

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**MATH 010 F Basic Mathematics (4)**

Four hours of lecture plus one hour arranged lab 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. (Non-degree credit)

**MATH 015 F Pre-Algebra (4)**

Prerequisite: MATH 010 F Basic Mathematics with a grade of "C" or better, or math skills clearance.

Four hours of lecture plus one hour arranged lab 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. (Non-degree credit)

**MATH 020 F Elementary Algebra (4)**

Prerequisite: MATH 015 F Pre-Algebra with a grade of "C" or better or math skills clearance.

Four hours of lecture plus one hour arranged lab 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. (Degree credit)

**MATH 030 F Plane Geometry (4)**

Prerequisite: MATH 020 F Elementary Algebra with a grade of "C" or better or math skills clearance.

Four hours lecture plus one hour arranged lab 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 Elementary Algebra with a grade of "C" or better or math skills clearance.

Four hours lecture plus one hour arranged lab 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)

**MATH 100 F Liberal Arts Mathematics (3)**

Prerequisite: MATH 040 F Intermediate Algebra 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 and 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)

**MATH 120 F Introductory Probability and Statistics (4) (CAN STAT 2)**

Prerequisite: MATH 040 F Intermediate Algebra 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 Chi Square 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)

**MATH 120HF Honors Introductory Probability and Statistics (4)**

Prerequisite: MATH 040 F Intermediate Algebra 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 graphing calculators will be used extensively throughout the course. Computers, utilizing MINITAB will be used for various topics. Students who receive credit for MATH 120H 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)

**MATH 129 F College Algebra for Business Calculus (4)**

Prerequisite: MATH 040 F Intermediate Algebra 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, sequences and series with financial applications, and an introduction to spreadsheets and graphing software. The course is designed for students planning to enroll in MATH 130 F Business Calculus. A graphing calculator is required. (This course does not meet requirements in the Business Division and will not substitute for BUS 151 F Business Mathematics. See Business and Computer Information Systems Division for Business requirements.) (CSU) (UC Credit Limitation; MATH 129 F combined with MATH 141 F maximum credit, one course.) (Degree Credit)

**MATH 130 F Calculus for Business (4) (CAN MATH 34)**

Prerequisite: MATH 129 F College Algebra for Business Calculus with a grade of "C" or better or math skills clearance

Four hours lecture per week. This is an introductory study, which 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. This course also includes an introduction to linear algebra. Hand calculators will be used for selected topics. Computer applications may be included. (CSU) (UC Credit Limitation; MATH 130 F combined with MATH 150AF Calculus; maximum credit, one course) (Degree credit)

**MATH 141 F College Algebra (4) (CAN MATH 10)**

Prerequisite: MATH 040 F Intermediate Algebra and MATH 030 F Plane Geometry with grades of "C" or better or math skills clearance. This course may be taken prior to or concurrently with MATH 142 F Trigonometry. Both MATH 141 F and MATH 142 F are required for enrollment in MATH 150AF Calculus.

Four hours lecture plus one hour arranged lab per week. This is a one-semester 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 arithmetical sequences and series, and miscellaneous topics. Graphing calculators will be incorporated. (CSU) (UC Credit Limitation; MATH 141 F and MATH 129 F College Algebra for Business Calculus; maximum combined credit, one course) (Degree credit)

**MATH 142 F Trigonometry (4) (CAN MATH 8)**

Prerequisite: MATH 040 F Intermediate Algebra and MATH 030 F Plane Geometry with grades of "C" or better or math skills clearance. This course may be taken prior to or concurrently with MATH 141 F College Algebra. Both MATH 141 F and MATH 142 F are required for enrollment in MATH 150AF Calculus.

Four hours lecture per week and one hour arranged lab per week. This is a one-semester course in trigonometry designed to prepare students for the study of calculus. The topics to be covered include the following: algebraic skills, measurements of angles, trigonometric functions and inverse trigonometric functions, trigonometric equations and identities, graphing of trigonometric functions, solutions of triangles, applications, complex numbers, polar coordinates, DeMoivre's theorem. Calculators will be used for selected topics. (CSU) (Degree credit)

**MATH 150AF Calculus (4) (CAN MATH 18)  
(MATH 150AF + MATH 150BF = CAN MATH SEQ B)  
(MATH 150AF + MATH 150BF + MATH 250AF =  
CAN MATH SEQ C)**

Prerequisite: MATH 141 F College Algebra and MATH 142 F Trigonometry or equivalent 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 Calculus for Business maximum credit, one course) (Degree credit)

**MATH 150BF Calculus (4) (CAN MATH 20)**  
**(MATH 150AF + MATH 150BF = CAN MATH SEQ B)**  
**(MATH 150AF + MATH 150BF + MATH 250AF =**  
**CAN MATH SEQ C)**

Prerequisite: MATH 150AF Calculus or equivalent 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)

**MATH 171 F Discrete Mathematics (4)**

Prerequisite: MATH 141 F College Algebra and MATH 142 F Trigonometry, both passed with a grade of "C" or better, or equivalent, or math skills clearance.

Four lecture hours per week. This is the first of two semesters of fundamental discrete mathematical concepts needed in computer related disciplines. The topics covered include logic, truth tables, Boolean algebra, logic circuits, elementary set theory, functions, relations, proof techniques, combinatorics, elementary probability and recurrence relations. (CSU) (UC) (Degree credit)

**MATH 172 F Graph Theory and Linear Algebra (4)**

Prerequisite: MATH 171 F Discrete Mathematics with a grade of "C" or better, or equivalent.

Four lecture hours per week. This course is the second of two semesters of 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)

**MATH 250AF Intermediate Calculus (4) (CAN MATH 22)**  
**(MATH 150AF + MATH 150BF + MATH 250AF =**  
**CAN MATH SEQ C)**

Prerequisite: MATH 150BF Calculus 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. (CSU) (UC) (Degree credit)

**MATH 250BF Linear Algebra and Differential Equations (4)**  
**(CAN MATH 24)**

Prerequisite: MATH 250AF Intermediate Calculus 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 differential equations, power series solutions, and Laplace transformations. Hand calculators will be used for selected topics. (CSU) (UC) (Degree credit)

**MATH 250CF Additional Topics in Linear Algebra (1.5)**

Corequisite: Math 250BF Linear Algebra and Differential Equations taken concurrently or completed with a grade of "C" or better

One and one-half hours lecture per week. This is a course in Linear Algebra which completes the introduction to the subject begun in Math 250BF. Topics include inner products and their properties, orthogonal bases and matrices, the Gram-Schmidt process, linear transformations and their properties, the Dimension-Sum theorem and matrices of linear transformations. These topics will be applied to Real 2-dimensional and 3-dimensional spaces as well as general vector spaces. (CSU) (UC) (Degree credit)

**MATH 299 F Mathematics and Engineering Independent Study (1-1-1-1)**

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 mathematics and engineering through individual study and small group conferences. Elective credit in mathematics and engineering. Course may be taken four times for credit. (CSU) (UC review required) (Degree credit)

## Medical Technology

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:**

ANAT	231 F	General Human Anatomy (4)
ANAT	240 F	Human Physiology
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 (5)
CHEM	111BF	General Chemistry (5)
MATH	141 F	College Algebra (4)
MATH	142 F	Trigonometry (4)
MICR	220 F	Medical Microbiology (4)
MICR	262 F	General Microbiology (5)
PHYS	205 F	College Physics (4)
PHYS	206 F	College Physics (4)

## Metallurgy

**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

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 chosen from the restricted electives listed below.

### Required Courses (9-10)

#### Choose 2 courses from the following:

BIOL	266 F	General Zoology (5)
BIOL	268 F	General Botany (5)
BIOL	272 F	Cell and Molecular Biology (4)
MICR	262 F	General Microbiology (5)

#### Select remaining units from the following:

CHEM	107 F	Elementary Chemistry (5)
CHEM	111AF	General Chemistry (5)
CHEM	111BF	General Chemistry (5)
CHEM	200 F	Elementary Organic Chemistry (3)
CHEM	211AF	Organic Chemistry (5)
CHEM	211BF	Organic Chemistry (5)
MATH	141 F	College Algebra (4)
MAT	142 F	Trigonometry (4)
PHYS	205 F	College Physics (4)
PHYS	206 F	College Physics (4)

## Microbiology Courses

### MICR 220 F Medical Microbiology (4)

Advisory: A laboratory course in biological science.

Three hours lecture and three hours laboratory per week. Includes micro-organisms that are significant in the problems of health. Special attention is given to the topics of infectious disease transmission, immunology, prophylaxis, and sanitation. Principles of applied microbiology are stressed. Recommended for students in programs of allied health science. (CSU) (Degree credit)

### MICR 262 F General Microbiology (5) (CAN BIOL 14)

Prerequisite: A biological science laboratory course with a grade of "C" or better and either high school chemistry or CHEM 101 F Introduction to Chemistry.

Three hours lecture and six hours laboratory per week. Representative examples of protozoa, fungi, bacteria, bacteria-like organisms, and viruses are studied. Aspects of classification, morphology, cultivation, metabolism, genetics, physical and chemical control mechanisms, chemotherapy, and antibiotics are considered. Infection, resistance, and immunology are also discussed. Laboratory activities include, but are not limited to, aseptic techniques, culturing, staining, isolation, metabolic identification procedures, collecting and transporting infectious material, and sensitivity testing. Course is designed for students pursuing careers in microbiology and health professions. (CSU) (UC) (Degree credit)

## Music

Curriculum leads to the **Associate in Arts Degree**. This degree requires a total of 34 units of which 27-31 units are in required courses. An additional 3-7 units must be chosen from the restricted electives listed below.

### Required Courses (27-31 units)

MUS	108 F	Introduction to Music Technology (2)
MUS	106 F	Introduction to Music Theory (3)
MUS	107AF	Harmony I (3)
MUS	107BF	Harmony II (3)
MUS	104AF	Beginning Musicianship (1)
MUS	104BF	Intermediate Musicianship (1)
MUS	204AF	Advanced Musicianship (1)
MUS	135AF	Beginning Piano (1)
MUS	135BF	Beginning Piano (1, 1, 1) or equivalent*
MUS	225 F	Applied Music – Private Study (1, 1, 1, 1) or
MUS	228 F	Advanced Voice (1, 1, 1, 1) or
MUS	237 F	Advanced Piano (1, 1, 1, 1) or
MUS	244 F	Advanced Strings (1, 1, 1, 1) or
MUS	247 F	Advanced Woodwinds (1, 1, 1, 1) or
MUS	250 F	Advanced Brass (1, 1, 1, 1) or
MUS	253 F	Advanced Percussion (1, 1, 1, 1)
MUS	120 F	Survey of Music History (3)
MUS	123 F	Concert Hour (.5, .5, .5, .5)
		Major performance group each semester (1, 1, 1, 1)

### Restricted Electives (3-7 units)

MUS	030 F	Finale Electronic Music Preparation (2)
MUS	203 F	Counterpoint (3)
MUS	204BF	Advanced 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

Curriculum leads to the **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)**

- MUS 108 F Introduction to Music Technology (2)  
 MUS 123 F Concert Hour (.5, .5, .5, .5) four semesters required  
 MUS 135BF Beginning Piano (1) third semester  
 MUS 207 F Pop/Commercial Arranging/Composing (3)  
 MUS 224 F Recording Studio II (3)  
 Performance group each semester (1, 1, 1, 1)  
 Applied music class each semester (1, 1, 1, 1) (200 level)

**Restricted Electives (3 units)**

- MUS 112 F Music Business (2)  
 MUS 113 F Jazz History — An Appreciation (3)  
 MUS 119 F History of Rock Music (3)  
 MUS 120 F Survey of Music History (3)  
 MUS 156 F Beginning Jazz Improvisation — Instrumental (1) or  
 MUS 157 F Beginning Vocal Styling and Improvisation (1)  
 MUS 208 F Music Copying and Notation (2)  
 MUS 256 F Advanced Jazz Improvisation —Instrumental (1) or  
 MUS 257 F Advanced Vocal Styling and Improvisation (1)

*Certificate in Piano Teaching*

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 24 units. MUS 021 F and MUS 022 F Teaching of Piano must be completed at Fullerton College.

**Required Courses (24 units)**

- CDFL 120 F Human Development: Early Years (3)  
 MUS 021 F Teaching of Piano I (3)  
 MUS 022 F 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, 1)  
 MUS 265 F Piano Ensemble (1, 1)

*Recording/Production Certificate*

The **Recording/Production Certificate** in Music requires the completion of the 33 units listed below with a minimum grade of “C” in each course taken.

- MUS 108 F Introduction to Music Technology (2)  
 MUS 110 F Electronic Music I (3)  
 MUS 112 F The Music Business (2)  
 MUS 113 F Jazz History — An Appreciation (3) or  
 MUS 119 F History of Rock (3)  
 MUS 116 F Music Appreciation (3)  
 MUS 124 F Recording Studio I (3)  
 MUS 135AF Beginning Piano (1)  
 MUS 135BF Beginning Piano (1) or equivalent\*  
 MUS 224 F Recording Studio II (3, 3) first and second semesters  
 MUS 910 F Electronic Music II (3, 3, 3) first, second and third semesters

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

*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.

*Music Courses***MUS 021 F The Teaching of Piano I (3)**

Prerequisite: Piano audition. Letter grade or Credit/no credit option.

Three hours lecture per week plus one hour per week in Music Lab. Presentation of materials and methods for teaching beginning and elementary piano students including a survey and comparison of piano books available today. Practical suggestions for maintaining a private piano studio. Not for beginning pianists. (Non-degree credit)

**MUS 022 F The Teaching of Piano II (3)**

Letter grade or Credit/no credit option.

Three hours lecture plus one hour per week in Music Lab. This course includes a study of keyboard performance practices and characteristics of each music period. Students will learn pedagogical methods for teaching intermediate level piano students through a hands-on study of repertoire, theory and technique as seen from a teaching standpoint. Beginning pianists may not take this class. Enrollment subject to audition. (Non-degree credit)

**MUS 025 F Keyboard Musicianship (2)**

Letter grade or Credit/no credit option.

Two hours lecture plus four hours per week in the Music Lab. This course is intended for the non-keyboard Music Major who has had a minimum of two semesters of Beginning Piano. This will prepare him/her for piano proficiency auditions required at a four-year school. Functional skills will be applied to the keyboard. This includes sight reading, transposition, harmonization, scales, arpeggios, score-reading, accompaniment styles and chord progressions. Some solo and ensemble repertoire will be studied. (Degree credit)

**MUS 030 F Finale Electronic Music Preparation (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 070 F Musical Theatre Techniques (2, 2, 2, 2)**

Credit/no credit only.

Two hours lecture per week. The student 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. (Non-degree credit)

**MUS 081 F Music Tour Practicum (.5-3)**

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. May be taken for credit four times.

**MUS 100 F Music Laboratory (1-2, 1-2, 1-2, 1-2)**

Credit/no credit only.

Forty-eight to ninety-six hours per semester in the Music Department Computer Lab, Music Listening Library, or Practice Room Suite 1114. For each 48 hours beyond the music requirements that the student spends progressing in the Music Computer Lab, listening in the Music Library, or practicing in the Practice Room Suite 1114, one unit of credit will be granted. Computer scanner sheets must verify all hours. A maximum of two units per semester, or four units total may be earned, or a maximum of four semesters. Course may be taken four times for credit. (CSU) (Degree credit)

**MUS 101 F Music Fundamentals (3)**

Three hours lecture per week plus one hour per week in the Music Lab. Study of music as a cross cultural, international societal expression. The basic elements of sound, their application and affect in musical structures. The historical evolution of music, notation, its understanding and application. Concurrent enrollment in MUS 135AF or 135BF Beginning Piano is desirable. It is open to all students but designed for the non-music major. (CSU) (UC) (Degree credit)

**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)

**MUS 104AF Beginning Musicianship (1)**

Prerequisite: MUS 106 F Introduction to Music Theory with a grade of "C" or better. Advisory: MUS 135AF Beginning Piano.

Corequisite: MUS 107AF Harmony I

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)

**MUS 104BF Intermediate Musicianship (1)**

Prerequisite: MUS 104AF Beginning Musicianship with a grade of "C" or better. Advisory: MUS 135AF Beginning Piano

Corequisite: MUS 107BF Harmony II

Two hours lecture per week plus one hour in the Rhythm/Computer Lab per week. This course is a continuation of MUS 104AF Beginning Musicianship. 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 105 F Beginning Pop Song Writing (3)**

Prerequisite: MUS 101 F Music Fundamentals or MUS 102 F Music Reading.

Three hours lecture and one hour per week in Rhythm Lab/Music Computer Lab. This course deals with the analysis of contemporary "pop" songwriting styles and techniques and the study of melody and chord writing, lyrics, and rhythmic settings with the emphasis on songwriting skills. (CSU) (Degree credit)

**MUS 106 F Introduction to Music Theory (3)**

Advisory: MUS 135AF Beginning Piano

Three hours lecture and one hour lab per week. Designed as the entry-level music theory class for music majors, the 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 Introduction to Music Theory 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. Advisory: MUS 135AF Beginning Piano.

Corequisite: MUS 104AF Beginning Musicianship

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, figures bass symbols, tonality, phrases, periods, non-harmonic tones, harmonic progressions and keyboard harmony. (CSU) (UC) (Degree credit)

**MUS 107BF Harmony II (3)**

Prerequisite: MUS 107AF Harmony I with a grade of "C" or better.

Advisory: MUS 135AF Beginning Piano

Corequisite: MUS 104BF Intermediate Musicianship

Three hours lecture per week. This course follows MUS 107AF Harmony I 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 Introduction to Music Technology.

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)

**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 principle 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)

**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)

**MUS 115 F Music Cultures of the World (3)**

Three hours lecture per week plus one hour listening in the Music Library per week. This course is a survey of the major music cultures of the world including Africa, Asia, India, Europe, South America, Mexico and indigenous Indian music from North America. The emphasis is on musical function, style and structure, instruments and performance traditions in various cultural frameworks. (CSU) (UC) (Degree credit)

**MUS 116 F Music Appreciation (3)**

Letter grade or Credit/no credit 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, chamber, and jazz works. Concert attendance is required. Open to all students. (CSU) (UC) (Degree credit)

**MUS 118 F Introduction to Opera (3)**

Letter grade or Credit/no credit 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)

**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 his 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)

**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)

**MUS 123 F Concert Hour (.5-.5-.5)**

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)

**MUS 196HF Honors Creative Arts (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 THEA 196HF. (CSU) (UC Credit Limitation) (Degree credit)

**MUS 203 F Counterpoint (3)**

Prerequisite: MUS 107BF Harmony II with a grade of "C" or better. Corequisite: MUS 204AF Advanced Musicianship. Advisory: MUS 135AF Beginning Piano

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 three-part fugue. (CSU) (UC) (Degree credit)

**MUS 204AF Advanced Musicianship (1)**

Prerequisite: MUS 104BF Intermediate Musicianship with a grade of "C" or better. Corequisite: MUS 203 F Counterpoint. Advisory: MUS 135AF Beginning Piano

Two hours lecture plus one hour in the Music Library or Rhythm Lab per week. This course is a continuation of MUS 104BF Intermediate Musicianship. 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 204BF Advanced Musicianship (1)**

Prerequisite: MUS 204AF Advanced Musicianship with a grade of "C" or better. Advisory: MUS 135AF Beginning Piano

Two hours lecture plus one hour in the Music Library or Rhythm Lab per week. This course is a continuation of MUS 204A Advanced Musicianship. 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 103BF Intermediate Music Theory, MUS 104AF Beginning Musicianship, MUS 104BF Intermediate Musicianship.

Four hours lecture per week plus one hour in the Rhythm Laboratory 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 Pop/Commercial Music Theory.

Four hours per week lecture plus one hour in the Rhythm Laboratory 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 910 F Electronic Music II (3, 3, 3)**

Prerequisite: MUS 110 F Electronic Music

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)

*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.

**MUS 080 F Steel Drum Class (1, 1, 1, 1)**

One hour lecture and one hour lab per week. The Steel Drum Class 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 097 F Intermediate Percussion: Drum Set (1, 1, 1, 1)**

Prerequisite: MUS 152 F Percussion Class 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. (Non-degree credit)

**MUS 124 F Recording Studio I (3)**

Prerequisite: MUS 108 F Introduction to Music Technology.

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 (1-1-1-1)**

Corequisite: Participation in a music performance group that is making a recording.

One hour lecture plus one hour lab per week. This course is designed for the music performer that is making an album. Course will include recording, mike set-up, instrument placement with a mike, laying primary tracks, use of click tracks, use of headphones, overdubbing techniques, solo performance on tape (selected individuals), mixing tapes, production techniques from conception to finished product. Units earned will be one unit of credit for 18 hours of time. Course may be taken four times for credit. (CSU) (Degree credit)

**MUS 126 F Beginning Voice (1-1-1-1)**

One hour lecture and one hour laboratory 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 (1-1-1-1)**

Letter grade or Credit/no credit 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 Credit/no credit option.

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Basic study of piano techniques in a class situation. Includes functional use of basic chordal and scale material, score reading of notation and rhythms, and presentation of elementary piano study as a basis for lifelong growth in music as art. Required of music majors whose piano skills are non-existent or very limited. Open to all students. (CSU) (UC) (Degree credit)

**MUS 135BF Piano (1-1-1)**

Prerequisite: MUS 135AF with a grade of "C" or better. Letter grade or Credit/no credit option.

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. Includes functional use of basic chordal and scale material. Required of music majors whose piano skills are non-existent or very limited. Open to all students. Course may be taken three times for credit. (CSU) (UC) (Degree credit)

**MUS 143 F Beginning Strings (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1)**

One hour lecture and two hours lab per week plus one and one-quarter hours in the Rhythm Laboratory, 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 (1-1)**

One hour lecture and one hour lab per week plus one and one-quarter hours in the Rhythm Laboratory, Recording Studio or Music Library per week. Designed to give vocal students training in popular and jazz song-styling techniques and to introduce students to rhythmic and melodic word manipulation (improvisation). Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**MUS 224 F Recording Studio II (3-3)**

Prerequisite: MUS 124 F Recording Studio I

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 (1-1-1-1)**

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 (1-1-1-1)**

Prerequisite: MUS 126 F Beginning Voice or audition.

One hour lecture and one hour lab per week plus one hour practice in Practice Room Suite 1114 per week. Study of vocal literature and techniques in a class situation. Emphasis on individual progress in the production, breath control, diction, and choice of song literature. Preparation for recitals. Designed for the more advanced non-voice major or the voice major who is not yet qualified for Advanced Voice. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**MUS 228 F Advanced Voice (1-1-1-1)**

Prerequisite: MUS 227 F Intermediate Voice 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 (1-1-1-1)**

Prerequisite: MUS 130 F Beginning Guitar.

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 (1-1-1-1)**

Prerequisite: MUS 231 F Intermediate Guitar.

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 (1-1-1-1)**

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 (1-1-1-1)**

Prerequisite: Audition or MUS 130 F Beginning Guitar

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 (1-1-1-1)**

Prerequisite: MUS 135AF and MUS 135BF Beginning Piano 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 execution and interpretation. Designed for the more advanced non-piano major or the piano major who is not yet qualified for Advanced Piano. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**MUS 237 F Advanced Piano (1-1-1-1)**

Prerequisite: MUS 236 F Intermediate Piano 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 piano techniques and interpretation of solo piano 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 238 F Pop/Commercial Piano (1-1-1-1)**

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 harmonies at the keyboard as applied to popular music and jazz. Emphasis upon improvisational techniques, scales, modes and application, chord voicings and substitutions. Designed for music majors but open to all students. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**MUS 244 F Advanced Strings (1-1-1-1)**

Prerequisite: MUS 143 F Beginning Strings 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 (1-1-1-1)**

Prerequisite: MUS 146 F Woodwind Class 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 (1-1-1-1)**

Prerequisite: MUS 149 F Brass Class 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 (1-1-1-1)**

Prerequisite: MUS 152 F Percussion Class 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 (1-1)**

Prerequisite: MUS 156 F Beginning Jazz Improvisation — Instrumental or audition.

One hour lecture and two hours lab per week plus one and one-quarter hours in the Rhythm Laboratory, 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 (1-1)**

Prerequisite: MUS 157 F Beginning Vocal Styling and Improvisation.

One hour lecture and one hour lab per week plus one and one-quarter hours in the Rhythm Laboratory, Recording Studio, or Music Library per week. Designed to give vocal students training in popular and jazz 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 299 F Music Independent Study (1-1-1-1)**

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)

## *Performing Groups*

### **MUS 180 F Collegiate Chorale (1-1-1-1)**

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)

### **MUS 181 F Women's Chorale (1-1-1-1)**

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 271 F Fullerton College Symphony (1-1-1-1)**

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)

### **MUS 272 F Dixie Jazz Band (Lemon St. Stompers) (1-1-1-1)**

Prerequisite: Audition

One hour lecture and two hours lab per week plus one and one-quarter hours per week in rehearsals, studio recording sessions, and concerts. This course involves the study and performance of early jazz music of the "Roaring Twenties." Guest artists, participation at major festivals and off campus engagements offer practical experience. An audition is required. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

### **MUS 273 F Concert Band (1-1-1-1)**

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)

### **MUS 274 F Fullerton College Symphonic Winds (1-1-1-1)**

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)

### **MUS 275 F Bravo Brass (1-1-1-1)**

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 (1-1-1-1)**

Prerequisite: Audition. Advisory: Concurrent enrollment in MUS 274 F Fullerton College Symphonic Winds

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 (1-1-1-1)**

Prerequisite: Audition. Advisory: Concurrent enrollment in MUS 274 F Fullerton College Symphonic Winds

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 (1-1-1-1)**

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)

### **MUS 282 F Fullerton College Master Chorale (1-1-1-1)**

Prerequisite: Singing experience.

Three hours rehearsal per week plus one and one-quarter hour 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 non-music 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)

### **MUS 285 F Chamber Singers (1-1-1-1)**

Prerequisite: Audition. Advisory: Concurrent enrollment in MUS 281 F Concert Choir

Three hours rehearsal per week plus one and one-quarter hour 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 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 (1-1-1-1)**

Prerequisite: 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 (1-1-1-1)**

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 (3-3-3-3)**

Prerequisite: Audition.

Twenty hours rehearsal per week during summer session or equivalent (two and one-half hours lecture and seven and one-half hours laboratory 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)

*Small Ensembles***MUS 258 F Jazz Guitar Reading Ensemble (1-1-1-1)**

Prerequisite: MUS 130 F Beginning Guitar or Audition. Advisory: MUS 234 F Intermediate Rock Guitar or MUS 231 F Intermediate Guitar.

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

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 (1-1-1-1)**

Prerequisite: Audition.

One hour lecture and one hour lab per week. Rehearsal and performance of standard and current duo piano and four hand literature. Open to all students by audition. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**MUS 266 F Jazz Combo (1-1-1-1)**

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 267 F Synthesizer Ensemble (1-1-1-1)**

Prerequisite: MUS 110 F Electronic Music I. Corequisite: MUS 124 F Recording Studio I

One hour lecture and two hours lab per week plus one and one-quarter hours per week to be arranged for performances. Rehearsal and performance of works suitable for electronic music and synthesizer techniques including original and published avant-garde works, classical realizations, "techno-pop," and improvised pieces. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**MUS 268 F Jazz Guitar Ensemble (1-1-1-1)**

Prerequisite: MUS 233 F Jazz Guitar.

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 (1-1-1-1)**

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)

## Nutrition and Foods

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Curriculum leads to an **Associate in Arts Degree** and/or employment in the field of nutrition and foods. This program 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 of 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)**

FOOD 101AF Foods (3)  
FOOD 101BF Foods (3)  
NUTR 210 F Nutrition Today (3)

**Restricted Electives (9 units)**

ANAT 216 F Human Anatomy and Physiology (5)  
ANAT 231 F General Human Anatomy (4)  
ANAT 240 F Human Physiology (5)  
CHEM 111AF General Chemistry (5)  
CHEM 111BF General Chemistry (5)  
CHEM 200 F Elementary Organic Chemistry (3)  
CIS 100 F Introduction to Personal Computers (3)  
MATH 142 F Trigonometry (4)  
MICR 262 F Microbiology (5)  
PHYS 130 F Elementary Physics (4)

## Nutrition and Foods Courses

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**NUTR 210 F Nutrition Today (3) (CAN H EC 2)**

Three hours lecture per week. This course is an introduction to the science of nutrition. Major principles, functions and sources of nutrients, as well as chemistry, physiology and wellness as they relate to nutrition are discussed. Application of nutrition of today's lifestyles is stressed; students will analyze their own eating and food intake. This course is transferable to most universities and satisfies the Fullerton College natural science requirement for graduation. (Degree credit)

**CDFL 215 F Food and Nutrition for Children**

(See Child Development and Family Life)

**NUTR 199 F Foods/Nutrition Independent Study (1-2, 1-2)**

Three hours independent work or research project per week per unit of credit plus scheduled conferences with instructor. Designed for advanced students who wish to increase their knowledge of catering/foods/nutrition through individual study. Project must have instructor approval prior to enrollment. At completion of project, written report is required. Course may be taken twice for credit. (CSU) (UC review required.) (Degree credit)

**SEE FOODS.**

## Office Technology

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Also see Computer Information Systems.

## Administrative Office Assistant

### A.S. Degree

Curriculum leads to the **Administrative Office Assistant Associate of Science Degree** and/or employment in an office management position. This degree requires 36 units of which 30 are in required courses; an additional 6 units must be chosen from the restricted electives listed below.

**Required Courses (30 units)**

BUS 111 F Business Communications (3)  
BUS 100 F Introduction to Business (3)  
BUS 266 F Human Relations in Business (3)  
BUS 290 F Managerial Communications (3)  
CIS 100 F Introduction to Personal Computers (3) or  
CIS 102 F Intro to Open Source Software (3)  
CIS 104 F Presentation Graphics (2)  
CIS 105 F Spreadsheet I (2)  
CIS 107 F Introduction to Operating Systems (2)  
CIS 109 F Personal Computer Security (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 (6 units)**

ACCT	100BF	Financial Accounting Principles (3) or
ACCT	101AF	Financial Accounting (4)
BUS	151 F	Business Mathematics (3)
CIS	048 F	Intro to PC Communications (2)
CIS	120AF	Project Management I (2)
CIS	120BF	Project Management II (2)
CIS	150 F	Introduction to Internet (2)
CIS	151 F	Internet Research (2)

*Administrative Office Assistant Certificate*

The **Administrative Office Assistant Certificate** requires the completion of 33-34 units of which 27-28 must be chosen from the 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 (27-28 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	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	080 F	Keyboarding Beginning (1.5)
OT	081 F	Keyboarding Speed and Accuracy (1.5)

**One of the following for a total of 3-4 units:**

ACCT	100BF	Financial Accounting Principles (3)
ACCT	101AF	Financial Accounting (4)

**One of the following for a total of 3 units:**

CIS	100 F	Introduction to Personal Computers (3)
CIS	102 F	Intro to Open Source Software (3)

**Restricted Electives (6 units)**

BUS	100 F	Introduction to Business (3)
BUS	151 F	Business Mathematics (3)
BUS	290 F	Managerial Communications (3)
CIS	107 F	Intro to Operating Systems (2)
OT	010 F	Computer Concepts (1)
OT	011 F	College Keyboard Formatting Skills (1)
OT	012 F	College Keyboard Formatting Skills (1)
OT	013 F	College Keyboard Formatting Skills (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 Skills (1)
OT	028 F	Basic Adobe Illustrator Skills (1)
OT	035 F	Basic WordPerfect Skills (1)

OT	036 F	Basic Microsoft Word Skills (1)
OT	037 F	Basic Microsoft Excel Skills (1)
OT	038 F	Basic Microsoft Access Skills (1)
OT	039 F	Basic Microsoft PowerPoint Skills (1)
OT	040 F	Basic Microsoft Publisher Skills (1)
OT	041 F	Creating Newsletters with Microsoft Word (1)
OT	042 F	Research Paper preparation with Microsoft Word (1)
OT	043 F	Creating Promotional Pieces with Microsoft Word (1)

*Legal Office Administration A.S. Degree*

Curriculum leads to the **Associate in Science Degree in Legal Office Administration** and/or employment in a legal office, governmental agency, or private industry. This degree requires 34 units of which 29 are in required courses. An additional 4 units must be chosen from the restricted electives listed below.

**Required Courses (29 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:**

CIS	100 F	Introduction to Personal Computers (3) or
CIS	102 F	Intro to Open Source Software (3)

**Restricted Electives (4 units)**

BUS	290 F	Managerial Communications (3)
CIS	104 F	Presentation Graphics (2)
CIS	105 F	Spreadsheet I (2)
CIS	109 F	Personal Computer Security (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)

## Legal Office Administration Certificate

The **Legal Office Administration Certificate** requires completion of 32 units of which 26 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 (26 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:

CIS	100 F Introduction to Personal Computers (3)
CIS	102 F Intro to Open Source Software (3)

### Restricted Electives (6 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 A.S. Degree

Curriculum leads to the **Associate in Science Degree in Word Processing** 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)

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 Internet (2)
OT	080 F Keyboarding Beginning (1.5)
OT	081 F Keyboarding Speed and Accuracy (1.5)

### One from the following for a total of 3 units:

CIS	100 F Introduction to Personal Computers (3) or
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) or
ACCT	101AF Financial Accounting (4)
BUS	290 F Managerial Communications (3)
CIS	152 F Web Page Design II (2)
CIS	205 F Spreadsheet II (2)

## Word Processing Certificate

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. 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)

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 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)

### One of the following for a total of 3-4 units:

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 (2)
CIS	205AF Spreadsheet II (2)
CIS	205BF Macro Programming (2)

## Office Technology Courses

### 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 Etiquette and Protocol (2)

Two hours lecture per week. The course covers the business etiquette and protocol skills needed to be successful in the global economy. This course will give you the skills to present yourself with confidence and authority to succeed in business. It will examine the difference between social and business etiquette skills and protocol. Topics include how to make introductions, handshakes and nametags, dining skills, dressing for success, telephone skills, electronic communication, business correspondence and appropriate gift giving. (Degree credit)

## Open Entry/Open Exit

### OT 010 F Computer Concepts (1)

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. Credit/no credit only.

### OT 011 F College Keyboarding Skills (1)

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. Credit/no credit only

### OT 012 F College Keyboarding Formatting Skills (1)

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. Credit/no credit only.

### OT 013 F College Keyboarding Speed and Accuracy (1)

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. Credit/no credit only.

### OT 020 F Business Career Success Skills (1)

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. Credit/no credit only.

### OT 021 F Business Resume Writing Skills (1)

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. Credit/no credit only

### OT 025 F Basic Internet Skills (1)

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. Credit/no credit only

### OT 026 F Basic HTML Skills (1)

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 hands-on 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. Credit/no credit only.

### OT 027 F Basic Adobe PageMaker (1)

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. Credit/no credit only

### OT 028 Basic Adobe Illustrator (1)

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. Credit/no credit only

### OT 035 F Basic WordPerfect Skills (1)

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. Credit/no credit only

### OT 036 F Basic Microsoft Word Skills (1)

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. Credit/no credit only

### OT 037 F Basic Microsoft Excel Skills (1)

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. Credit/no credit only.

**OT 038 F Basic Microsoft Access Skills (1)**

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. Credit/no credit only.

**OT 039 F Basic Microsoft PowerPoint Skills (1)**

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. Credit/no credit only.

**OT 040 F Basic Microsoft Publisher Skills (1)**

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. Credit/no credit only.

**OT 041 F Creating Newsletters with Microsoft Word 2002 (1)**

Nine hours lecture and twenty-seven hours lab per semester. This course teaches the student how to create common business newsletters by using Microsoft Word 2002. This includes newsletter layout, newsletter design, adding graphics, setting fonts, and using special effects.

**OT 042 F Research Paper Preparation with Word (1)**

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. Credit/no credit only

**OT 043 Creating Promotional Pieces (1)**

Nine hours lecture and twenty-seven hours lab per semester. This is an open-entry/open-exit course that allows students to gain the knowledge in creating promotional pieces with Microsoft Word. These documents include flyers, brochures, tri-folds and other business-related documents. Credit/no credit only

**OT 044 F Presentations and Web Pages (1)**

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. Credit/no credit only.

## *Office Skills*

**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) (formerly KEY 125 F)**

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*

### *Paralegal Studies A.S. Degree*

Curriculum leads to the **Associate in Science Degree in Paralegal Studies** 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 15 are in required courses; an additional 12 units must be chosen from the restrictive electives listed below.

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 (15 units)**

PLEG	101 F	Introduction to Paralegal Studies (3)
PLEG	104 F	Introduction to Legal Research and Terminology (3)
PLEG	105 F	Introduction to Legal Writing (3)
PLEG	201 F	Civil Litigation I (3)
PLEG	202 F	Civil Litigation II (3)

**Restrictive Electives (12 units)**

- PLEG 090 F Contemporary Issues in the Law (1-3)  
 PLEG 203 F Personal Injury (3)  
 PLEG 204 F Family Law (3)  
 PLEG 205 F Probate, Wills, and Trusts (3)  
 PLEG 206 F Bankruptcy Law 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 210 F Paralegal Internship (1-4)  
 PLEG 211 F Real Property Law and Procedure (3)  
 PLEG 212 F Medical Records Review (1.5)  
 PLEG 213 F Employment and Labor Law (3)  
 PLEG 214 F Contract Law Procedure (3)  
 PLEG 215 F Discovery in the Electronic Age (3)  
 PLEG 225 F Law Office Management (3)

*Paralegal Studies Certificate*

The **Paralegal Studies Certificate** requires the completion of 30 units of which 15 are in required courses. An additional 15 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 Bachelor's or higher degree from a regionally accredited college or university. All students with an Associate degree must have their transcripts evaluated for General Education requirements as listed in the General Education requirements for the Associate of Science degree in Paralegal Studies. The Paralegal Studies Program is approved by the American Bar Association (ABA).

**Required Courses (15 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 201 F Civil Litigation I (3)  
 PLEG 202 F Civil Litigation II (3)

**Restrictive Electives (15 units)**

- PLEG 090 F Contemporary Issues in the Law (1-3)  
 PLEG 203 F Personal Injury (3)  
 PLEG 204 F Family Law (3)  
 PLEG 205 F Probate, Wills, and Trusts (3)  
 PLEG 206 F Bankruptcy Law 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 210 F Internship Paralegal Studies (1-4)  
 PLEG 211 F Real Property Law and Procedure (3)  
 PLEG 212 F Medical Records Review (1.5)  
 PLEG 213 F Employment and Labor Law (3)  
 PLEG 214 F Contract Law Procedure (3)  
 PLEG 215 F Discovery in the Electronic Age (3)  
 PLEG 225 F Law Office Management (3)

*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)**

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 201 F Civil Litigation I (3)**

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)**

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)**

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)**

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)**

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)**

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)**

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)**

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)**

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)**

One hour lecture per week and five hours of supervised employment or volunteer work per week in a legal office. An additional five hours per week of supervised employment is required for each additional unit of credit. This course provides vocational learning opportunities for a student through employment in a legal office. (Degree credit)

**PLEG 211 F Real Property Law and Procedure (3)**

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)**

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)**

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)**

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)**

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 non-parties, index and organize documents as they are received, utilize computer-assisted litigation support programs and use documents at trial. (CSU) (Degree credit)

**PLEG 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

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)

PHIL	100 F	Introduction to Philosophy (3)
PHIL	160 F	Introduction to Ethics (3)
PHIL	170 F	Logic and Critical Thinking (3) or
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)

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 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 Asian Religions (3)

## Philosophy and Religious Studies Courses

### PHIL 100 F Introduction to Philosophy (3) (CAN PHIL 2)

Three hours 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. (CSU) (UC Credit Limitation) (Degree credit)

### 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)

### PHIL 101 F Introduction to Religious Studies (3)

Three hours lecture with discussion 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)

### PHIL 105 F World Religions (3)

Three hours lecture with discussion per week. This course provides an overview of the world religions, with major emphasis upon Judaism, Christianity, Islam, Hinduism and Buddhism. This course fulfills the Multicultural Education Requirement for graduation. (CSU) (UC Credit Limitation) (Degree credit)

### PHIL 105HF Honors World Religions (3)

Three hours lecture with discussion 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)

### 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)

### PHIL 160 F Introduction to Ethics (3) (CAN PHIL 4)

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)

### 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) (CAN PHIL 6)

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. Eligibility for English 100F recommended. (CSU) (UC) (Degree credit)

### PHIL 172 F Critical Thinking/Writing (3)

Prerequisite: ENGL 100 F College Writing with a grade of "C" or better.

Three hours lecture with discussion 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)

**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)

**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, beliefs will be examined, along with attention given to the important persons, groups, and events which have developed among the Roman, Orthodox, and Protestant communions of Christianity. (CSU) (UC) (Degree credit)

**PHIL 201 F History of Philosophy: Ancient and Medieval (3) (CAN PHIL 8) (PHIL 201 F + PHIL 202 F = CAN PHIL SEQ A)**

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: Ancient Greek and Medieval. (CSU) (UC) (Degree credit)

**PHIL 202 F History of Philosophy: Modern and Contemporary (3) (CAN PHIL 10) (PHIL 201 F + PHIL 202 F = CAN PHIL SEQ A)**

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)

**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)

**PHIL 225 F The American Religious Experience (3)**

Three hours lecture with discussion per week. This course provides an overview of the 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)

**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)

**PHIL 299 F Philosophy Independent Study (1-1-1)**

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)

## Photography

**PHOT 100 F Basic Photography (3)**

Letter grade or Credit/no credit 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)

**PHOT 101 F Introduction to Photography (3) (CAN ART 18)**

Two hours lecture and four hours lab per week. This course covers the historical, cultural and aesthetic foundations of photography. Students will acquire knowledge of the camera and related equipment, photographic materials and darkroom technique. Students will produce a variety of black-and-white enlargements in achieving technical competence leading eventually to prints of high quality. Students must provide their own 35mm camera with adjustable aperture, shutter speed and focus. (CSU) (UC) (Degree credit)

**PHOT 103 F Intermediate Photography (3)**

Prerequisite: PHOT 101 F Introduction to Photography with a grade of "C" or better.

Two hours lecture and four hours lab per week. This course is an introduction to professional photography. Use of 4" x 5" 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 35mm camera with adjustable aperture, shutter speed and focus. (CSU) (Degree credit)

**PHOT 109 F Portrait Photography (3-3-3)**

Prerequisite: PHOT 101 F Introduction to Photography with a grade of "C" or better.

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 110 F Beginning Slide/Sound Production (3)**

Letter grade or Credit/no credit option.

Three hours lecture per week. For the photographer who wants to learn how to create a professional-looking slide/sound show for a company, club, class, or friends. The course covers storyboard, photography, design, editing, titles, art work, special techniques, and sound synchronization for single or multi-projector shows. Student must know how to operate a 35mm camera and must provide camera and film. (CSU) (Degree credit)

**PHOT 196 F Communications Seminars (.5-4, .5-4, .5-4)**

Prerequisite: JOUR 102 F Reporting and Writing or PHOT 101 F Introduction to Photography or CRTV 235 F On-Air Radio Broadcasting

Lecture and laboratory 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. Course may be taken four times for credit. (CSU) (Degree credit)

**PHOT 205 F Advanced 35mm Color Slide Photography (3)**

Letter grade or Credit/no credit option. Prerequisite: PHOT 101 F Introduction to Photography or PHOT 100 F Basic Color Slide Photography.

Three hours lecture per week. Designed for the student who has a good working knowledge of the camera and the basic principles of composition, color, and lighting. Student must have a 35mm adjustable camera and some additional equipment and film. The assignments will encourage learning full use of lenses and attachments, getting special effects through color, lighting, and equipment, finding creative approaches to photographing subjects, shooting various kinds of sequences, and creating a slide presentation with audio tape synchronization. (CSU) (Degree credit)

**PHOT 213 F Basic Cinematography (3)**

Prerequisite: PHOT 101 F Introduction to Photography with a grade of "C" or better.

Two hours lecture and four hours lab per week. Designed to familiarize the advanced student of photography with the basic concepts of cinematography. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**PHOT 219 F Photojournalism (3)**

Two hours lecture and three hours lab per week. Development of basic techniques of producing black-and-white still photographs with emphasis on journalism requirements including the use of cameras, materials, and processes in darkroom procedures. (CSU) (Degree credit)

## *Physical Education*

The **Associate in Arts Degree** program requires a total of 18 units of which 18 units are in required courses.

**Required Courses (18 units)**

ANAT 231 F General Human Anatomy (4) or  
ANAT 240 F Human Physiology (5)  
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)  
PSY 101 F General Psychology (3)  
PE Activity Courses —2 or 3 different activity courses (1, 1, 1)

## *Aquatic Specialist Certificate*

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)**

PE 235 F First Aid, CPR, Safety Education (2)\*  
PE 236 F Prevention and Care of Athletic Injuries (3)  
PE 238 F Water Safety Instruction (3)  
PE 239 F Openwater I/Scuba (3)  
PE 245 F Lifesaving Basic Rescue (2)  
PE 199 F or 299 F Independent Study (2)  
PE 154 F Fitness Testing with Exercise Prescription (2)  
WELL 266 F Physical Fitness as a Lifelong Concept (2)

**Restricted Elective (1 unit)**

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*

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 with a minimum grade of "C" in each course taken.

**Required Courses (16 units)**

PE 235 F First Aid, CPR, Safety Education (2)\*  
PE 236 F Prevention and Care of Athletic Injuries (3)  
PE 240 F Sports Officiating for Men (2) or  
PE 241 F Sports Officiating for Women (2)  
PE 247 F Sports Management (3)  
PE 248 F Psychology of Sport (3)  
PE 199 F or 299 F Independent Study (2)  
PE 154 F Fitness Testing with Exercise Prescription (2)  
PE 243 F Stress Management Through Physical Activity (2)

**Restricted Electives (2 units)**

PE 152 F Fitness Training — Circuit Lab (1-2)  
PE 159 F Strength Training Lab (Olympic Weights) (1)  
PE 165 F Lifetime Fitness (1)  
PE 280 F through 285 F Professional Activities (Theory) (2)

\* American Red Cross certification can be substituted at the discretion of the Division. Student must take an additional two units from restricted electives.

## Fitness

Curriculum leads to the **Associate in Science Degree** for employment in the fitness industry.

The Fullerton College Fitness Professional Program is designed to educate students that are entering into the fitness industry or for those that are interested in coaching, exercise training, counseling and fitness training. This industry has a need for trained instructors and exercise test technicians in sports medicine clinics, health clubs, and fitness studios and in the area of coaching.

The **Physical Education — Fitness AS Degree Program** 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):**

ANAT	231 F General Human Anatomy (4)
PE	154 F Fitness Testing w/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)**

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/Body Development and Weight Lifting (1)
PE	236 F Prevention and Care of Athletic Injuries (3)
WELL	020 F Fitness Assessment (.5)
WELL	230 F Body Mind Connection (3)

One unit of physical education is required. (For information concerning physical education requirements, see "General Regulations.") Enrollment is limited to four semesters per sport or activity.

The University of California will accept a maximum of 4 units of physical education activity credit. Physical Education Majors — see counselor for transfer unit requirements.

## Group Fitness Instructor Certificate

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**

NUTR	210 F Nutrition Today (3)
PE	110 F Pilates: Alignment and Correctives (1)
PE	129 F Step Aerobics (1)
PE	130 F Advanced Fitness Training (2)
PE	150 F Rhythmic Aerobic Exercise (1)
PE	154 F Fitness Testing with Exercise Prescription (2)
PE	235 F First Aid, CPR, Safety Education (2)*
PE	236 F Prevention and Care of Athletic Injuries (3)

\*American Red Cross Certification can be substituted at the discretion of the division

### **Restricted Electives: (4 units)**

PE	102 F Yoga (1)
PE	147 F Relaxation and Flexibility (1)
PE	151 F Water Aerobics/Pool Exercise (1)
PE	161 F Body Conditioning (1)
PE	163 F Kickboxing (1)
PE	266 F Physical Fitness as a Lifelong Concept (2)
WELL	230 F The Body-Mind Connection (3)

## Outdoor Recreation and Safety Certificate

The **Outdoor Recreation and Safety Certificate** Program is designed to prepare students with necessary entry-level environmental 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 units are in required courses. An additional 2-3 units must be completed from the restricted electives listed below. A minimum of a "C" is required in all required and restricted courses.

### **Required Courses (12-13 units)**

PE	122 F Surfing (2) or
PE	253 F Bodyboarding (2)
PE	123 F Outrigger Paddling (2)
PE	124 F Kayaking (2)
PE	132 F Skiing (1) or
PE	133 F Snowboarding (1)
PE	235 F First Aid, CPR, and Safety Education (2)
PE	238 F Water Safety Instruction (3) or
PE	245 F Lifesaving/Basic Rescue/CPR (2)
REC	109 F Camping and Our Surfing Environment (1) or
REC	111 F Camping and Our Bodyboarding Environment (1)

**Restricted Electives (2-3 units)**

- PE 132 F Skiing (1) (if not taken as a required course)  
 PE 133 F Snowboarding (1) (if not taken as a required course)  
 PE 142 F Mountaineering/Rock Climbing (1)  
 PE 149 F Swim for Fitness (1)  
 PE 199 F Physical Education and Independent Study (1)  
 \*Must have approval of instructor  
 REC 105 F Survival Arts (1)  
 REC 107 F Wilderness Survival (1)  
 REC 110 F Camping and Our Kayaking Environment (1)

*Personal Trainer Certificate*

The **Personal Trainer Certificate 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 (21 Units)**

- ANAT 231 F General Human Anatomy (4) or  
 BIOL 102 F Human Biology (3)  
 BIOL 102LF Human Biology Lab (1)  
 NUTR 210 F Nutrition Today (3)  
 PE 154 F Fitness Testing with Exercise Prescription (2)  
 PE 235 F First Aid, CPR, Safety Education (2)\*  
 WELL 119 F Applied Biomechanics (2)  
 WELL 200 F Applied Exercise Physiology (2)  
 WELL 221 F Personal Training Internship (2, 2)

\* American Red Cross certification can be substituted for PE 235 First Aid, CPR, and Safety Education.

**Restricted Electives (4 Units)**

- PE 147 F Relaxation and Flexibility Fitness (1)  
 PE 152 F Fitness Training Laboratory (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 Body Mind Connection (3)

*Therapeutic and Sports Massage Therapist Level I*

The **Therapeutic and Sports Massage Therapist Level I Certificate Program** requires a total of **19-20 units** of which are all in required courses.

**Required Courses (19-20 Units)**

- PE 235 F First Aid, CPR, and Safety Education (2)\*\*  
 WELL 119 F Applied Biomechanics (2)\*  
 WELL 230 F Body-Mind Connection (3)\*  
 WELL 232 F Introduction to Massage (3)\*  
 WELL 236 F Sports Massage (3)\*  
 WELL 238 F Clinical Practicum in Massage Therapy (2)\*

\*These courses must be taken at Fullerton College.

\*\*American Red Cross Certification may be substituted for PE 235 F First Aid, CPR, and Safety Education. Current card required.

**Pick One:**

- ANAT 231 F General Human Anatomy (4) or  
 ANAT 240 F Human Physiology (5)  
 BIOL 102F Human Biology (3) and  
 BIOL 102LF Human Biology Lab (1)

*Therapeutic and Sports Massage Technician Level II*

The **Therapeutic and Sports Massage Level II Massage Therapist Certificate Program** requires a total of **16 units** of which **16 units** are in required courses.

All courses must be completed with a minimum grade of "C".

**Revised program: (16 units):****Completion of Technician Level I\* (19 - 24 units)**

- BUS 180 F Entrepreneurship Small Businesses Management (3)  
 NUTR 210 F Nutrition Today (3)  
 WELL 110 F Pathology: Massage Connection (2)\*  
 WELL 233 F Intermediate Massage (3)\*  
 WELL 234 F Advance Massage (3)\*  
 WELL 239 F Internship in Massage Therapy (1 - 4)\*

\* These courses must be taken at Fullerton College.

**Current CPR Card Required.**

## *Activities*

### **PE 083 F Fitness for Athletes (1-1-1-1)**

Two hours lab per week. This course is designed for athletes to practice in anaerobic and aerobic fitness and flexibility for competition in various intercollegiate sports. Course may be taken four times for credit. (Degree credit)

### **PE 093 F Weight Lifting for Athletes (1-1-1-1)**

Two hours lab per week. This course is designed for athletes. It is an introduction and review of weight lifting techniques that produce muscle mass and strength. Course may be taken four times for credit. (Degree credit)

### **PE 100 F Adaptive Physical Education — Weight Training (1-1-1-1)**

Two 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)

### **PE 102 F Yoga (1-1-1-1)**

Two hours lab per week. This is an overview course in yoga, an integrated study of health. It involves the investigation and 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)

### **PE 103 F Aikido (1-1-1-1)**

Two hours lab per week. Aikido is a relatively modern Japanese martial art based upon nonresistance rather than strength. It is a nonaggressive, noncompetitive art based upon a philosophy that stresses harmony with nature and control of body and mind. Harmony is demonstrated with other people through attitudes of cooperation. Self-confidence is enhanced through the study of technique. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 105 F Badminton (1-1-1-1)**

Two 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 107 F Table Tennis (1-1-1-1)**

Two hours lab per week. There will be an analysis of essential strokes with emphasis on game strategies for singles and doubles play. Rules, etiquette and tournament format will be introduced to the class. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 108 F Bowling (1-1-1-1)**

Two hours lab per week. This is a general education course designed to develop sufficient knowledge and skill for successful participation in recreational bowling. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 110 F Pilates (Alignment and Correctives) (1-1-1-1)**

Two hours lab plus one hour arranged per week. A course in alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates. The course will include "mat work" and will emphasize exercise for improved body alignment, strength, flexibility, control, coordination and breathing. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 111 F Decathlon (1-1-1-1)**

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)

### **PE 112 F Fencing (1-1-1-1)**

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)

### **PE 113 F Billiards (1-1-1-1)**

Two hours lab plus one hour arranged per week. 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. (Degree credit)

### **PE 114 F Cardiovascular Conditioning (1-1-1-1)**

Two 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)

### **PE 115 F Golf (1-1-1-1)**

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)

### **PE 117 F Gymnastics (1-2, 1-2, 1-2, 1-2)**

One hour lecture and one hour lab per week per unit. This course provides emphasis on beginning and advanced work in gymnastics and tumbling. Instruction on the horizontal bar, parallel bars, rings, buck, side horse, and trampoline. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

### **PE 120 F Mountain Biking (1-1-1-1)**

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)

### **PE 121 F Walking for Fitness (1-1-1-1)**

Two 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)

**PE 122 F Surfing (2-2-2-2)**

Advisory: Swim 50 yards and tread water for five minutes

One hour lecture, two hours lab plus one hour arranged 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)

**PE 123 F Outrigger Paddling (2-2-2-2)**

Advisory: Swim 50 yards and tread water for five minutes

One hour lecture, two hours lab plus one hour arranged per week. Outrigger Paddling is designed to introduce and examine the Polynesian tradition of canoeing. Six-person outrigger canoes, and one-person outriggers are used to introduce and develop individual and group skills. This course includes units on water safety; basic technique; equipment examination; Polynesian history and tradition of the outrigger; and roles and responsibilities with "seat" in six-person canoes. This course emphasizes a hands-on experience that may prepare students to pursue interests in paddling or other water activities. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 124 F Kayaking (2-2-2-2)**

Advisory: Swim 50 yards and tread water for five 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. (CSU) (UC Credit Limitation) (Degree credit)

**PE 126 F Beach Volleyball (1-1-1-1)**

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)

**PE 127 F Racquetball (Indoors) (1-1-1-1)**

Two hours lab per week. Instruction and practice in the techniques of racquetball. Designed to develop skills, knowledge of rules, basic strategy, and desire for future participation during leisure time. Facility use fee required. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 128 F Racquetball (Outdoors) (1-1-1-1)**

Two hours lab per week. The class is designed for the student who wants to improve his racquetball skills, knowledge of the game and physical well being. Also, for the student who might have aspirations for tournament play. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 129 F Step Aerobics (1-1-1-1)**

Two hours lab per week. This course will provide vigorous, low intensity 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)

**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 laboratory consists of practical application of exercise programming along with instructional experience. (CSU) (UC Credit Limitation) (Degree credit)

**PE 132 F Skiing (1-1-1-1)**

Two hours lab plus one hour arranged per week. One hour lecture and one hour laboratory 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)

**PE 133 F Snowboarding (1-1-1-1)**

Two hours lab plus one hour arranged per week. This course is designed to teach the basic skills of snowboarding. The skills will include correct body position, turning, speed checking, stopping, getting up, and basic jumps. Discussion on selection of equipment, care of equipment, selection of apparel, safety tips, and backcountry survival will also be included. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 134 F Swimming (1-1-1-1)**

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)

**PE 136 F Springboard Diving (1-1-1-1)**

Two hours lab per week. Instruction in forms of springboard diving which stress 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)

**PE 137 F Triathlon (1-1-1-1)**

Two hours lab plus one hour arranged 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 if you do not own your own bicycle. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 138 F Ultimate Frisbee (1-1-1-1)**

Two hours lab plus one hour arranged 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) (Degree credit)

**PE 139 F Tennis (1-1-1-1)**

Two hours lab per week. The emphasis of this course is on beginning fundamentals of forehand drive, backhand drive, serve, and volley. Instruction will be given on the rules, court strategy, and etiquette of singles and doubles play. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 141 F Tennis Workshop (.5-2, .5-2, .5-2, .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)

**PE 142 F Mountaineering/Rock Climbing (1-1-1-1)**

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)

**PE 144 F Volleyball (1-1-1-1)**

Two hours lab per week. This course provided basic instruction and strategies in fundamental skills, rules, and etiquette of volleyball. Students will experience improvement through supervised instruction and participation. Course may be taken twice for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 145 F Volleyball — Intermediate/Advanced (1-1-1-1)**

Two hours lab per week. This course is for experienced volleyball players and is designed to give instruction in advanced techniques and game strategies. Students will receive improvement through supervised instruction and participation. Course may be taken twice for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 147 F Relaxation and Flexibility Fitness (1-1-1-1)**

Two hours lab per week. Instruction in the benefits of stretching and relaxation. Various flexion exercises and relaxation techniques will be analyzed and evaluated. 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)

**PE 148 F Non-Impact Aerobics (1-1-1-1)**

Two 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)

**PE 149 F Swim for Fitness (1-1-1-1)**

Two 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)

**PE 150 F Rhythmic Aerobic Exercise (1-1-1-1)**

Two 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)

**PE 151 F Water Aerobics/Pool Exercise (1-1-1-1)**

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)

**PE 152 F ISP Fitness Training Laboratory (Circuit) (.5-2, .5-2, .5-2, .5-2)**

Letter grade or Credit/no credit option.

Flexible hours and variable units. Eighteen hours required for each 1/2 unit up to 72 hours for a maximum of two units. This course is designed as an open entry laboratory. 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 that can be accomplished in under 40 minutes. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 154 F Fitness Testing w/Exercise Prescription (2-2-2-2)**

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)

**PE 155 F Aquatic Conditioning for Seniors (1-1-1-1)**

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)

**PE 158 F Personalized Fitness (1)**

Two 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. (CSU) (UC Credit limitation) (Degree credit)

**PE 159 F ISP Strength Training (Olympic Weights) (.5-2, .5-2, .5-2, .5-2)**

Letter grade or Credit/no credit 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 laboratory 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)

**PE 160 F Basketball (1-1-1-1)**

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)

**PE 161 F Body Conditioning and Fitness (1-1-1-1)**

Two hours lab per week. This course is designed for students and applies to all aspects of physical fitness and relates these aspects to each individual's needs and requirements. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 162 F Conditioning for Athletes (1-1-1-1)**

Two hours lab per week. This course is designed to organize and implement individual conditioning programs for team and individual sport athletes. The program includes analysis and appraisal of strength, cardiovascular, and flexibility of each athlete along with program prescriptions. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 163 F Kick-Boxing (1-1-1-1)**

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 kick-boxing will be included. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 164 F Tai Chi Chuan (1-1-1-1)**

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)

**PE 165 F Lifetime Fitness (1-1-1-1)**

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)

**PE 166 F Shao-lin Kung Fu (2-2-2-2)**

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)

**PE 167 F Cardio Kick-Boxing 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 kick-boxing exercise (no physical contact) set to music. This course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 170 F Self-Defense (1-1-1-1)**

Two hours lab per week. This is a course designed to acquaint the female student with basic self-defense skills. The emphasis will be placed on weaponless-type defense skills. Time will be devoted to developing a positive self-image in relation to self-protection, home and car safety. Course may be taken four times for credit. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC Credit limitation) (Degree credit)

**PE 171 F Soccer (1-1-1-1)**

Two hours lab per week. Basic skills of soccer, including technique, tactics and rules of the game. Opportunity for interclass competition. Course may be taken four times for credit. (CSU) (UC Credit limitation) (Degree credit)

**PE 172 F Softball (1-1-1-1)**

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)

**PE 174 F Inline Skating (1-1-1-1)**

Two hours lab plus one hour arranged per week. This course is designed to teach the basic skills of inline skating. The skills will include proper skating technique, turning 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)

**PE 175 F Volleyball (1-1-1-1)**

Prerequisite: Advanced skill

Two 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 four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 176 F Tennis (1-1-1-1)**

Two hours lab per week. This course is designed for women with advanced tennis skills. Instruction will be given on methods of incorporating this skill into sound strategy. Tournaments conducted during the class period. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 179 F Pep Squad Training (2-2-2-2)**

Prerequisite: Audition

Ten hours lab per week. This course is designed for pep squad leaders. The focus is on the skills required for a successful pep squad individual and group. The class will emphasize the fundamentals of tumbling, dance technique, voice projection, leadership skills, crowd motivation. Performance at school athletic events and campus functions is mandatory. Enrollment subject to audition. Course may be taken four times for credit. (CSU) (Degree credit)

**PE 180 F Baseball (1-1-1-1)**

Two hours lab 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)

**PE 181 F Basketball (1-1-1-1)**

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)

**PE 182 F Body Building/Body Development and Weight Lifting (1-1-1-1)**

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)

**PE 183 F Conditioning for Athletes (1-1-1-1)**

Two 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. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 185 F Football — Defense (3-3-3-3)**

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 for the by the NCAA and California Commission on Athletes (COA). Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 186 F Football — Offense (3-3-3-3)**

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 offensive position. Emphasis is placed on acquiring specific position skill, while participating in a team environment. The students will be instructed on how to participate within the rules and safety procedures set for the by the NCAA and California Commission on Athletes (COA). Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 187 F Physical Fitness (1-1-1-1)**

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)

**PE 188 F Self-Defense — Boxing (1-1-1-1)**

Two hours lab per week. This course is designed to teach the student 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)

**PE 189 F Soccer (1-1-1-1)**

Two hours lab per week. Instruction will be given in the basic knowledge and understanding of the game of soccer. Technique, tactics, fitness, and rules of the game will be covered. Opportunity will be given to participate in game related competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 190 F Softball (1-1-1-1)**

Two hours lab per week. The fundamental skills of softball will be taught. There will be an emphasis on strategy, techniques, rules, and terminology. There will be an opportunity for class and interclass competition. Class is designed to meet the needs of both male and female students. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 191 F Volleyball (1-1-1-1)**

Two hours lab per week. The basic skills of volleyball are taught, with emphasis on strategy and rules. An opportunity is provided for class and interclass competition. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 192 F Water Polo (1-1-1-1)**

Prerequisite: Advanced to competitive swim skills

Two 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 (1-1-1-1)**

Two hours lab per week. This course stresses weight lifting techniques that will produce muscle tone and strength. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**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)

**PE 196 F Swimming (1-1-1-1)**

Two hours lab per week. Basic 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 Water-Safety Instruction (WSI) courses. Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 197 F Flag Football (1-1-1-1)**

Two hours lab plus one hour arranged 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, 1-2, 1-2)**

Three to seven hours lab per week in interest area plus scheduled 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. (UC review required.) (Degree credit)

**PE 253 F Bodyboarding (1-1-1-1)**

One hour lecture and three hours 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)

*Dance*

UC maximum credit allowed for dance courses is 12 units. Dance majors — see counselor for transfer requirements.

**DANC 100 F Introduction to Dance Appreciation (3)**

One and one-half hour lecture and one and one-half hour 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)

**DANC 101 F Rhythmic Fundamentals (2-2-2-2)**

One hour lecture and two hours laboratory per week. A course to introduce social, folk, and square dancing to physical education and recreation majors. The 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 techniques courses. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**DANC 102 F Conditioning for Dance (1-1-1-1)**

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) (Degree credit)

**DANC 103 F Dance Technique I (1-1)**

Two hours lab per week. The course focuses on basic movement techniques to prepare the body for dance. This course may also be taken by those interested in achieving fitness and contouring by the use of dance technique. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 104 F Dance Technique II (1-1)**

Prerequisite: Any level one dance course

Two hours lab per week. Advanced dance techniques are employed for increased flexibility, strength, balance, and coordination. Longer and more involved patterns of dance movement will be learned. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 105 F Ballet I (1-1)**

Two hours lab per week. This course is designed to teach the fundamentals of ballet technique and terminology, as well as acquaint the student with ballet as a performing art. Includes work at the barre and center floor. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 106 F Ballet II (1-1)**

Prerequisite: DANC 105 Ballet I

Two hours lab per week. The course is designed to continue the ballet training of the dance student. The class includes work on more advanced techniques at the barre and center floor and more advanced adagio and allegro. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 107 F Modern Dance I (1-1)**

Two hours lab per week. The class provides opportunities for developing a sensitivity to the use of body movement, space, and time for creative expression. Work on skill techniques, movement exploration, and beginning dance composition. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 108 F Modern Dance II (1-1)**

Prerequisite: DANC 107 Modern Dance I

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 Credit Limitation) (Degree credit)

**DANC 110 F Ballet Folklorico (1-1-1-1)**

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 (1-1)**

Two hours lab per week. This course is designed for the student who is interested in developing a jazz style in dance. It includes the contractions, rolls, isolations, turns, and combinations unique to dance to contemporary jazz music. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 112 F Jazz II (1-1)**

Prerequisite: DANC 111 Jazz I

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 (1-1)**

Two hours lab per week. This course is designed to introduce basic tap dance technique and elementary tap dances, providing an opportunity to develop good coordination and rhythm. It includes an introduction to basic tap dance including work on tap techniques, introduction to basic steps, and the learning of combinations and routines. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 114 F Tap Dance II (1-1)**

Prerequisite: DANC 113 Tap Dance I or previous tap dance training

Two hours lab per week. This course will further develop skills in tap dancing through training in intermediate level skills and dances, with some provision for student composition and the development of performance skills. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 115 F Hip Hop Dance I (1)**

Two hours lab plus one hour arranged per week. Students will learn various forms of beginning hip-hop dancing and acquire a basic history of Hip Hop dancing. May be taken four times for credit. (CSU) (UC) (Degree credit)

**DANC 116 F Social Dance (1-1-1-1)**

Two 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 new to them. Examples of dance forms that may be included are: swing, salsa (mambo, cha cha, etc.), tango, waltz, country and fox trot. The course will focus on exploring the differences and similarities among styles and techniques while also 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)

**DANC 119 F Dance for Theatre (1-1)**

Two hours lab per week. The 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 twice for credit. (CSU) (UC) (Degree credit)

**DANC 120 F Dance History (3)**

Three hours lecture per week. Students will study through readings, film, and in-class discussion dance from primitive times to present day. Students will also compare various dance techniques, theories, and personalities who have contributed to the art. (CSU) (UC) (Degree credit)

**DANC 130 F Afro Caribbean Dance (1)**

Two hours lab plus one hour arranged per week. Students will learn the dance styles and rhythms of African and Caribbean cultures. Dance as an inseparable part of the culture will be discussed. This course may be taken four times for credit. (CSU) (UC) (Degree credit)

**DANC 132 F Flamenco Dance (1)**

Two 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) (Degree credit)

**DANC 202 F Dance Composition and Choreography (2-2)**

Prerequisite: DANC 107 Modern Dance I

Two hours lecture and two hours lab per week. The class includes theory and practice in the basic elements of dance composition. It provides experience in the creation and development of dance composition. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**DANC 203 F Dance Production (2-2-2-2)**

Corequisite: Any dance class

Two hours lecture and two hours lab per week plus one hour rehearsal and performance arranged per week. The class provides opportunities for creative dance expression. The emphasis is on advanced dance techniques and choreography. Opportunities for public performance available. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**DANC 204 F Dance Rehearsal and Performance (1-4, 1-4, 1-4, 1-4)**

Corequisite: Any dance class

Two to eight hours specialized lab per week plus additional preparation time. An opportunity for a dancer to learn and perform his own or another student's, teacher's, or artist's choreography for production or concert; a practical experience in performing and directing. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**DANC 205 F Dance Ensemble (2-2)**

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 \$30.00. (CSU) (UC) (Degree credit)

**DANC 214 F Dance Repertory (2)**

Corequisite: DANC 203 Dance Production

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 Credit Limitation) (Degree credit)

## *Intercollegiate Athletics*

In order to be eligible for athletic competition, students must meet the eligibility requirements of the Mission Conference 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 (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 203 F Basketball — Men (2-2-2-2)**

Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 204 F Basketball — Women (2-2-2-2)**

Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 205 F Cross-Country — Men and Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 206 F Cross-Country — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 207 F Football (2-2-2-2)**

Course may be taken four times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 208 F Golf (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 209 F Soccer (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 210 F Softball — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 211 F Swimming — Men (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 212 F Swimming — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 213 F Tennis — Men (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 214 F Tennis — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 215 F Track — Men/Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 218 F Volleyball — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 219 F Water Polo — Men/Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

**PE 222 F Badminton — Women (2-2-2)**

Course may be taken three times for credit. (CSU) (UC Credit Limitation) (Degree credit)

## *Physical Education Theory*

**PE 060 F Student-Athlete Seminar (.5)**

Eight hours lecture per semester. This course is designed to prepare the college student-athlete for their academic-athletic experience. This course will orient the student about proper study skills, academic and athletic eligibility relating to student athletes and transfer requirements. This course will also include health education information dealing with substance abuse, safe sex, nutrition and stress management. (Degree credit)

**PE 232 F Games and Rhythms for the Elementary Schools (2)**

One hour lecture and two hours laboratory 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)

**PE 233 F Movement and Dance Education for Children (2)**

One hour lecture and two hours laboratory per week. This course provides theory and practical experience in movement education for pre-school, elementary and high school teachers. Creative movement experience using a variety of stimuli, correlation with art and music will be used. Rhythmic experiences and folk dance will also be included. (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 Credit Limitation) (Degree credit)

**PE 236 F Prevention and Care of Athletic Injuries (3)**

Two hours lecture and two hours laboratory arranged per week. The laboratory 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: Advanced Lifesaving, Red Cross Introduction to Health Service Education (IHSE)

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 life-saving. 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 Openwater I SCUBA (3-3-3-3)**

Prerequisite: PE 134 F Swimming

Two hours lecture and four hours laboratory per week. This is a course designed to instruct the novice in the skills of skin and SCUBA diving. Emphasis will be placed on safety and a pattern of survival in all phases of underwater instruction. A part of the time will be spent in classroom theory and lecture. A greater part will be spent in the pool/lab work, and openwater dive trips, both boat and beach diving will be stressed. Field trips and boat dives are required for certification. The basic SCUBA card is phased out and more openwater work is required. Facility use fee required. Course may be taken four times for credit. (CSU) (Degree credit)

**PE 240 F Sports Officiating for Men (2-2)**

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 (2-2)**

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 (2-2-2-2)**

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) (Degree credit)

**PE 245 F Lifesaving, Basic Rescue/CPR (2-2-2-2)**

Prerequisite: PE 134 F Swimming

Two hours lecture and one hour laboratory 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)**

Prerequisite: Basic SCUBA diver certification.

Two hours lecture and four hour laboratory per week. The advanced 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, and decompression. National Association of Underwater Instructors (NAUI) standards and certification will be utilized. (CSU) (Degree credit)

**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)

**PE 249 F Caribbean Diving Tour (3-3-3-3)**

Prerequisite: PE 134 F Swimming, 149 F Swim for Fitness, 245 F Lifesaving, Basic Rescue/CPR, 239 F Open Water I SCUBA or recognized certification from NAUI, PADI, SSI or other agency. Letter grade or Credit/no credit option.

Two hours lecture and four hours laboratory per week. Forty hours will be completed combining lecture and pool/lab hours prior to the tour and full certification will be completed during the tour. Both Open water II and Advanced Diving certification will be issued to successful candidates. NAUI course work and testing will be utilized, along with NAUI training standards throughout the course. Written and performance tests, along with Dive Logs to authenticate all dives will be required before students can be certified. Course may be taken four times for credit. (CSU) (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. Fulfills Multicultural Education Requirement for graduation. (CSU) (Degree credit)

**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, 2, 2, 2)**

Two hours lecture per week. Introduction and orientation to physical education as a profession and as an academic discipline. Explores sub-disciplines, opportunities in the field, philosophy, scientific foundation, and analyzes and evaluates individuals that have influenced these trends and issues in the 21st century. 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)

**PE 280 F Professional Activities — Theory of Baseball (2)**

One-hour lecture and two hours laboratory 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 (2-2)**

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, 1-2, 1-2)**

Three to seven hours lab per week in interest area plus scheduled conferences. 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 review required.) (Degree credit)

## *Recreation*

**REC 100 F Introduction to Leisure Services/Recreation (3) (CAN REC 2)**

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 101 F Principles of Community Recreation (3)**

Three hours lecture per week. This course is an introduction to a variety of recreation activities suitable for a community recreation program. It is a study of the agencies and institutions that provide leisure opportunities for the community; emphasis placed on the interrelationships of these agencies. (CSU) (Degree credit)

**REC 102 F Recreation Leadership (2)**

Two hours lecture per week. This course focuses on the theory, principles, and practice of effective leadership of various types of recreation programs. This is a required course for Recreation majors and recommended for students interested in recreation leadership. (CSU) (Degree credit)

**REC 104 F The Zen of Camping (1-1-1-1)**

One-half hour lecture, two hours lab per week. Instruction in the skills, techniques and methods necessary for a rewarding and safe camping trip involving members of all ages. Students learn how to plan a trip to maximize experiences in the wilderness for personal fulfillment and self-discovery through Zen elements relevant to the wilderness. Includes one camping trip. Course may be taken four times for credit. (CSU) (Degree credit)

**REC 105 F Survival Arts (1-1-1-1)**

One-half hour lecture, two hours lab per week. Students learn long-term survival skills and arts used by primitive peoples to live in harmony with the environment and a new perspective of the word "primitive," meaning "first people." Students develop a new appreciation of nature, as opposed to being a visitor. Students also gain an appreciation of the values inherent to other cultures. Includes one field trip. Course may be taken four times for credit. (CSU) (Degree credit)

**REC 106 F Outdoor Recreation/Camp Counseling (3)**

Three hours lecture per week. Combination of the theory and practice of camp activities. Role of the counselor in a successful camping situation; psychological aspects of camper's development from fourth grade through high school. Practical skills in camping activities. Recommended for students interested in camp counseling and related leadership activities. (Not currently being offered — if interested, contact Division Office.) (CSU) (Degree credit)

**REC 107 F Wilderness Survival (1-1-1-1)**

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)

**REC 108 F Backpacking (1-1-1-1)**

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)

**REC 109 F Camping and Our Surfing Environment (1-1-1-1)**

One hour lecture and two hours lab per week. Camping and Our Surfing Environment is a recreation course that combines surf travel and environmental issues concerning our surfing population. The course will emphasize safe camping and safe surfing techniques, camping, planning and organization, intra- and international travel, water pollution, water treatment and beach pollution and beach erosion. Facility fee required. Course may be taken four times for credit. (CSU) (Degree credit)

**REC 110 F Camping and Our Kayaking Environment (1-1-1-1)**

One hour lecture and 2 hours lab per week. Camping and Our Kayaking Environment is a recreation course that 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, intra- and international travel, water pollution, water treatment, and beach protection and beach erosion. Facility fee required. Course may be taken four times for credit. (CSU) (Degree credit)

**REC 111 F Camping and Our Bodyboarding Environment (1)**

Two hours lab plus one hour arranged per week. Camping and Our Bodyboarding Environment is a recreational course that 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. Facility fee required. Course may be taken four times for credit. (CSU) (Degree credit)

*Wellness***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 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 (2)**

Two hours lecture per week. This course is designed to meet the specific needs of massage therapy students and professionals interested in pathology. This important 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) (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 (2-2)**

Prerequisite: Completion of all courses in the Personal Trainer Certificate: ANAT 231 F; NUTR 210; F PE 154 F, PE 235 F; WELL 040 F, WELL 119 F, WELL 200 F. 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.

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)

**WELL 232 F Introduction to Massage (3)**

Two hours lecture and two hours lab per week. This course is the foundation for the entire program. It gives the students theoretical and practical experience in massage therapy. The student will master a series of Swedish massage techniques. Additionally, students practice body mechanics, centering, breathing and assessment. (CSU) (Degree credit)

**WELL 233 F Intermediate Massage (3)**

Advisory: Massage Technician Certificate (WELL 119 F, 230 F, 232 F, 236 F, 238 F, ANAT 231 F)

Two hours lecture, three hours lab per week. Intermediate massage therapy skills build on the basics learned in the introduction to massage course. Special attention is given to the development of palpatory skills and increases the student's awareness of the body-mind benefits of therapeutic massage. Students learn to integrate acupressure with western styles of massage. Additionally, the student will develop and practice the following skills: postural realignment, craniosacral motion, and side lying massage techniques. (CSU) (Degree credit)

**WELL 234 F Advanced Massage (3)**

Prerequisite: WELL 233 F Intermediate Massage

Two hours lecture and two hours lab per week. 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)**

Two hours lecture and two hours lab per week. Sports Massage Level I. This course will offer the basic principles of sports massage. This course is designed for massage students, personal trainers, and other athletic professionals. (CSU) (Degree credit)

**WELL 238 F Clinical Practicum in Massage Therapy (2-2-2-2)**

Advisory: WELL 119 F Applied Biomechanics, 230 F The Body-Mind Connection, 232 F Introduction to Massage, and 236 F Sports Massage

One hour lecture and two hour lab per week. This course develops the student's confidence and professional massage skills in working with the public while under supervision of licensed massage therapist instructor. Course may be taken four times for credit. (CSU) (Degree credit)

**WELL 239 F Internship in Massage Therapy (1-4, 1-4, 1-4)**

Advisory: WELL 234 F Advanced Massage

Five to twenty hours of internship per week. Students apply their knowledge and skills in working directly with the public in supervised settings. Students independently perform field work under supervision in various settings e.g., at community agencies, with athletic teams, spas, chiropractors or health care facilities. Course may be taken four times for credit 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)

## Physical Sciences

**PHSC 050 F Success in Science (1)**

Credit/no credit 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, 040 F, 142 F, or 150AF) listed for any science course. (Non-degree credit)

**PHSC 051 F Success in Physical Science (1)**

Credit/no credit 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, 040 F, 142 F, or 150AF) listed for any science course. (Non-degree credit)

**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)

**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 laboratory research per week. For able students who wish to increase their knowledge of the sciences through individual study and small group conferences. Independent laboratory 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

Curriculum leads to the **Associate in Arts Degree**. This degree 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)**

PHYS 221 F General Physics (4)  
PHYS 222 F General Physics (4)  
PHYS 223 F General Physics (4)

**Restricted Electives (6 units)**

MATH 150AF Calculus (4)  
MATH 150BF Calculus (4)  
MATH 250AF Intermediate Calculus (4)  
MATH 250BF Linear Algebra and Differential Equations (4)  
CHEM 111AF General Chemistry (5)  
CSCI 123 F Introduction to Programming Concepts in C++ (4)

## Physics Courses

### PHYS 130 F Elementary Physics (4)

Prerequisite: MATH 020 F Elementary Algebra. Letter grade or Credit/no credit option.

Three hours lecture, three hours laboratory 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 college-level physics course. The laboratory includes experiments in measurement, mechanics, electricity, wave phenomena, and radioactivity. (CSU) (UC Credit Limitation; no credit if taken after PHYS 205 F, 210 F or 221 F.) (Degree credit)

Physics 205 F/206 F is a two-semester sequence of lecture/laboratory courses intended for students transferring to the CSU-California State University with majors in Biology, Microbiology, and Zoology. A background in algebra and trigonometry is required.

### PHYS 205 F College Physics (4) (CAN PHYS 2) (PHYS 205 F + PHYS 206 F = CAN PHYS SEQ A)

Letter grade or Credit/no credit option. Prerequisite: MATH 142 F Trigonometry with a grade of "C" or better

Three hours lecture and three hours laboratory per week. This course covers Newtonian mechanics, conservation laws in mechanics, mechanical waves, sound, gas laws, and basic thermodynamics. The laboratory experiments investigate mechanics, waves, and heat, using techniques including graphical analysis, statistics, and computer-aided data acquisition. (CSU) (UC Credit Limitation) (Degree credit)

### PHYS 206 F College Physics (4) (CAN PHYS 4) (PHYS 205 F + PHYS 206 F = CAN PHYS SEQ A)

Letter grade or Credit/no credit option. Prerequisite: PHYS 205 F College Physics with a grade of "C" or better

Three hours lecture and three hours laboratory per week. This course covers electricity and magnetism, electromagnetic waves, special relativity, and basic atomic and nuclear physics. The laboratory experiments explore circuits, optics, and atomic physics. (CSU) (UC Credit Limitation) (Degree credit)

Physics 210 F/PHYS 211 F is a two-semester sequence of lecture/laboratory courses intended for students transferring to the UC-University of California with majors in Biological Sciences, Pre-Medicine, Dentistry, Pharmacy and Veterinary Science. A corequisite of calculus is required.

### PHYS 210 F Physics (4)

Corequisite: MATH 150AF Calculus

Three hours lecture and three hours laboratory per week. This is a calculus-based course designed for students majoring in the life sciences. The course covers Newtonian mechanics, waves and basic thermodynamics and is usually offered in the fall semester. (CSU) (UC Credit Limitation) (Degree credit)

### PHYS 211 F Physics (4)

Prerequisite: PHYS 210 F Physics. Corequisite: MATH 150BF Calculus

Three hours lecture and three hours laboratory per week. This is the second semester of a calculus-based course designed for students majoring in the life sciences. The course covers electricity and magnetism, special relativity and quantum physics and is usually offered in the spring semester. (CSU) (UC Credit Limitation) (Degree credit)

Physics 221 F, 222 F, 223 F is a three-semester sequence of lecture/laboratory courses intended for majors in Chemistry, Physics, Earth Sciences and Engineering. High school physics or PHYS 130 F is strongly recommended and students must complete one semester of calculus before beginning the sequence.

### PHYS 221 F General Physics (4) (CAN PHYS 8) (PHYS 221 F + PHYS 222 F + PHYS 223 F = CAN PHYS B)

Prerequisite: MATH 150AF Calculus with minimum grade of "C." Recommended: Concurrent enrollment in MATH 150BF Calculus and completion of high school physics.

Three hours lecture, three hours laboratory per week. Mechanics, properties of matter, fluids. Problems and derivations require knowledge of differential and integral calculus. Required of most majors in physics and engineering. Recommended for all majors in Physical and Life Sciences. (CSU) (UC Credit Limitation) (Degree credit)

### PHYS 222 F General Physics (4) (CAN PHYS 12) (PHYS 221 F + PHYS 222 F + PHYS 223 F = CAN PHYS SEQ B)

Prerequisite: PHYS 221 F General Physics with minimum grade of "C" Corequisite: MATH 150BF Calculus.

Three hours lecture, three hours laboratory per week. Electrostatics, electric and magnetic fields, simple DC and AC circuits, Maxwell's equations in integral form. The laboratory concentrates on basic electronics instrumentation and circuitry. Required for engineering students and physics students. Recommended for all majors in Physical and Life Sciences. (CSU) (UC Credit Limitation) (Degree credit)

### PHYS 223 F General Physics (4) (CAN PHYS 14) (PHYS 221 F + PHYS 222 F + PHYS 223 F = CAN PHYS SEQ B)

Prerequisite: PHYS 222 F General Physics with a minimum grade of "C" and MATH 150BF Calculus with a minimum grade of "C."

Three hours lecture, three hours laboratory per week. Thermodynamics, mechanical waves, sound waves, electro-magnetic waves, geometrical and physical optics, introduction to quantum mechanics including the photoelectric effect, line spectra, the Bohr atom, the uncertainty principle, the wave nature of matter, the nuclear physics. (CSU) (UC Credit Limitation) (Degree credit)

# Political Science

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.

## Required Courses (12 units)

### I. Required Class — 3 Units

POSC 100 F American Government (3)

### II. Category A — 6 Units from the following

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)

### III. Category B — 3 Units from the following

POSC 200 F Introduction to the Study of Politics (3)

POSC 215 F Comparative Political Systems (3)

POS 216 F Government and Politics in 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 class from each category:

### Category A

ETHS 101 F American Ethnic Studies (4)

ETHS 130 F History of African Americans in the U.S. (3)

ETHS 141 F Chicano/Chicana History (3)

HIST 270 F Women in the U.S. History (3)

SOC 225 F Sociology of Women (3)

### Category B

HIST 111 F Western Civilization from 1550 (3)

HIST 113 F World Civilizations (3)

HIST 127 F Survey of American History (3)

HIST 152 F Survey of British History (3)

HIST 160BF Modern Japan and China (3)

HIST 170 F History of the United States (3)

HIST 171 F History of the United States (3)

### Category C

ANTH 102 F Cultural Anthropology (3)

GEOG 100 F Global Geography (3)

GEOG 160 F Cultural Geography (3)

GEOG 230 F Introduction to Geographic Information Systems (3)

POSC 180 F Capital Field Trip: Sacramento Seminar (3)

### Category D

ECON 102 F Principles of Economics — Macro (3)

GEOG 260 F Economic Geography (3)

PHIL 160 F Introduction to Ethics (3)

# Political Science Courses

## POSC 100 F American Government (3) (CAN GOVT 2)

Three hours lecture and discussion per week. This course is an introductory survey of American governing institutions, federal and state, and other elements of the political system. The course is issue-oriented, inviting students to analyze critically 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 the executive, legislative, and judicial branches. Course curriculum recognizes the roles and contributions of racial and ethnic groups and women in American politics. On each of these topics comparisons will be made to the governing units and politics of California, as well as local government. (CSU) (UC Credit Limitation) (Degree credit)

## POSC 100HF Honors American Government (3)

Three hours lecture and discussion per week. Enhanced for honors students. This course is an introductory survey of American governing institutions, federal and state, and other elements of the political system. The course is issue-oriented, inviting students to analyze critically 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 the executive, legislative, and judicial branches. Course curriculum recognizes the roles and contributions of racial and ethnic groups and women in American politics. On each of these topics comparisons will be made to the governing units and politics of California, as well as local government. (CSU) (UC Credit Limitation) (Degree credit)

## 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)

## 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)

## POSC 150 F California Government and 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)

**POSC 180 F Capital Field Trip: Sacramento Seminar (3)**

This seminar class joins with student delegations from other California colleges and universities that meet in the state capitol for a four-day 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. Explore the many faces of politics all over the world, examining its relationships 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. (CSU) (UC) (Degree credit)

**POSC 215 F Comparative Political Systems (3)**

Three hours lecture and discussion 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)

**POSC 216 F Government and Politics in the Middle East (3)**

Three hours lecture and discussion 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)

**POSC 230 F Introduction to International Relations (3)**

Three hours lecture and discussion per week. This course is a study of the basic dynamics and structure of the nation-state system as it emerged in the post-World War II context, and in the aftermath of the collapse of the Soviet Bloc. Students will examine major issues of the U.S. foreign policy, and engage in an individual research project. (CSU) (UC) (Degree credit)

**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, federal-state relations, and rights of property, free expression, privacy, criminal due process, political participation, and equality under the law. Corollary topics include orientation to legal research, case briefing, development of judicial review, judicial organization and decision-making, sources and limits of judicial power, and the political impact of Supreme Court decisions. Students will participate in various simulations of court decisions. (CSU) (UC) (Degree credit)

**POSC 299 F Political Science Independent Study (1-1-1)**

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)

## Portuguese

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**PORT 101 F Elementary Portuguese I (5)**

Letter grade or Credit/no credit 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)

**PORT 102 F Elementary Portuguese II (5)**

Prerequisite: PORT 101 F Elementary Portuguese I with a grade of “C” or better or one year of high school Portuguese with a grade of “C” or better.

Letter grade or Credit/no credit option.

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)

## Pre-Nursing

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The **Pre-Nursing Associate in Arts Degree** requires a total of 18-20 units to be chosen from the courses listed below.

ANAT	231 F General Human Anatomy (4)
ANAT	240 F Human Physiology (5)
BIOL	272 F Cell and Molecular Biology (4)
CHEM	201 F Basic Concepts of Organic and Biochemistry (5)
MICR	220 F Medical Microbiology 40 or
MICR	262 F General Microbiology (5)

## *Printing Technology*

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

### **Complete 24 or more units from the following list:**

- PRNT 021 F Survey of Graphic Communication (.5-2, .5-2, .5-2)
- PRNT 056 F Digital Printing (2.5)
- PRNT 075 F Electronic and Conventional Pre-Press (6-6-6)
- PRNT 085 F Introduction to Flexography (4)
- PRNT 086 F Advanced Flexography (4)
- PRNT 101 F Introduction to Printing (3)
- PRNT 161 F Sheetfed Offset Presswork (4)
- PRNT 162 F Intermediate Sheetfed Offset Presswork (4)
- PRNT 963 F Advanced Sheetfed Offset Presswork (4)
- PRNT 070 F Quick Print/In-Plant Graphics (2-2-2-2)
- PRNT 072AF Photo-Silk Screen (2)
- PRNT 072BF Advanced Photo-Silk Screen (2)
- PRNT 072CF Advanced Photo-Silk Screen (2)
- PRNT 075 F Electronic and Conventional Pre-Press (6-6-6)
- PRNT 171 F Offset Presswork (6)
- PRNT 172 F Offset Presswork (6)
- PRNT 973 F Advanced Offset Presswork (6)
- PRNT 151 F Introduction to Pre-Press (4)
- PRNT 152 F Introduction to Electronic Pre-Press (4)
- PRNT 953 F Advanced Electronic Pre-Press (4)

## *Advanced Offset Presswork Certificate*

The **Advanced Offset Presswork Certificate** Program requires completion of 22 units of which 12-14 units are in required courses. An additional 8-10 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. This certificate provides the skills needed to operate large offset presses and enter the commercial printing industry.

### **Required Courses (12-14 units)**

- PRNT 161 F Sheet-fed Offset Presswork (4)
- PRNT 162 F Intermediate Sheet-fed Offset Presswork (4)
- PRNT 963 F Advanced Sheet-fed Offset Presswork (4) or
- PRNT 171 F Offset Presswork (6) or
- PRNT 172 F Offset Presswork (6)

### **Restricted Electives (8-10 units)**

- PRNT 070 F Quick Print/In-Plant Graphics (2,2,2,2)
- PRNT 075 F Electronic and Conventional Pre-Press (6)
- PRNT 090 F Printing Skills Lab (2)
- PRNT 101 F Introduction to Printing (3)
- PRNT 130 F Graphics (2)
- PRNT 151 F Introduction to Pre-Press (4)
- PRNT 973 F Advanced Offset Presswork (6)

## *Customer Service Training Certificate*

The **Customer Service Training Certificate** requires a total of 14-15 units in required courses. This certificate provides the skills needed to operate an offset duplicator and enter the commercial printing industry.

### **Required Courses (14-15 units)**

- PRNT 101 F Introduction to Printing (3) or
- PRNT 130 F Graphics (2)
- BUS 111 F Business Communications (3)
- BUS 151 F Business Mathematics (3)
- ART 140 F Introduction to Advertising and Graphic Design (3)
- ACG 100 F Introduction to Computer Graphics (3)

## *Digital Printing Certificate*

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)**

- PRNT 056 F Digital Printing (2.5)
- PRNT 070 F Quick Print/In-plant Graphics (2, 2) (first and second semesters)
- PRNT 101 F Introduction to Printing (3)

### **Restricted Electives (10 units)**

- PRNT 070 F Quick Print/In-plant Graphics (2, 2) (third and fourth semesters)
- PRNT 075 F Electronic and Conventional Pre-Press (6) (first semester) or
- PRNT 151 F Introduction to Pre-Press (4)
- PRNT 161 F Sheet-fed Offset Presswork (4) or
- PRNT 171 F Offset Presswork (6)

## *Electronic Imaging Certificate*

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)**

- PRNT 075 F Electronic and Conventional Pre-Press (6-6) (first and second semesters) or
- PRNT 151 F Introduction to Pre-Press (4) and
- PRNT 152 F Introduction to Electronic Pre-Press (4) and
- PRNT 953 F Advanced Electronic Pre-Press (4)

**Restricted Electives (10 units)**

- PRNT 075 F Electronic and Conventional Pre-Press (6) (third semester)  
 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 Sheet-fed Offset Presswork (4)  
 PRNT 171 F Offset Presswork (6)

*Flexography Certificate*

The **Flexography Certificate** requires a total of 11 units in required courses. This certificate provides the skills needed to operate an offset duplicator and enter the commercial printing industry.

**Required Courses (11 units)**

- PRNT 101 F Introduction to Printing (3)  
 PRNT 085 F Introduction to Flexography (4)  
 PRNT 086 F Advanced Flexography (4)

*Graphic Communications Certificate*

The **Graphic Communications Certificate** Program requires a total of 14-15 units in required courses. This certificate provides the skills needed to enter the graphic communications industry.

**Required Courses (14-15 units)**

- ART 140 F Introduction to Advertising and Graphic Design (3)  
 ACG 100 F Introduction to Computer Graphics for Mac (3)  
 PRNT 101 F Introduction to Printing (3) or  
 PRNT 130 F Graphics (2)  
 BUS 111 F Business Communications (3)  
 BUS 151 F Business Mathematics (3)

*Offset Duplicator Training Certificate*

The **Offset Duplicator Training Certificate** requires a total of 11 units in required courses. This certificate provides the skills needed to operate an offset duplicator and enter the commercial printing industry.

**Required Courses (11 units)**

- PRNT 101 F Introduction to Printing (3)  
 PRNT 070 F Quick Print/In-Plant Graphics (2)  
 BUS 055 F Business English (3)  
 BUS 051 F Basic Business Mathematics (3)

*Printing Technology Certificate (General)*

The Printing Technology (General) Certificate Program requires the completion of 26 units of which 16 are in required courses. An additional 10 units must be chosen from the restricted electives listed below. A 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. This certificate provides the student with a basic overall understanding of the printing industry and its allied fields.

**Required Courses (16 units)**

- PRNT 085 F Introduction to Flexography (4)  
 PRNT 070 F Quick-Print/In-Plant Graphics (2)  
 PRNT 072AF Photo-Silk Screen (2)  
 PRNT 075 F Electronic and Conventional Pre-Press (6) or  
 PRNT 151 F Introduction to Pre-Press (4)  
 PRNT 161 F Sheet-fed Offset Presswork (4) or  
 PRNT 171 F Offset Presswork (6)

**Restricted Electives (10 units)**

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

*Quick Print/In-Plant Graphics Certificate*

The **Quick Print/In-Plant Graphics Certificate** Program 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. At least one half of the units toward the certificate must be completed at Fullerton College. This certificate provides the skills needed to enter the small commercial printing industry.

**Required Courses (8 units)**

- PRNT 070 F Quick Print/In-Plant Graphics (2-2-2-2) (four semesters)

**Restricted Electives (14 units)**

- PRNT 075 F Electronic and Conventional Pre-Press (6) (first semester)  
 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 151 F Introduction to Pre-Press (4)  
 PRNT 161 F Sheetfed Offset Presswork (4)  
 PRNT 171 F Offset Presswork (6)

## *Screen Printing Certificate*

The **Screen Printing Certificate** Program requires the completion of 24 units of which 12 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. This certificate provides the skills needed to enter the screen-printing industry.

### **Required Courses (12) units**

- PRNT 072AF Photo-Silk Screen (2)
- PRNT 072BF Adv Photo-Silk Screen (2)
- PRNT 072CF Adv Photo-Silk Screen (2)
- PRNT 075 F Electronic and Conventional Pre-Press (6) (first semester) or
- PRNT 151 F Introduction to Pre-Press (4) and
- PRNT 152 F Introduction to Electronic Pre-Press (4)

### **Restricted Electives (12) units**

- PRNT 056 F Digital Printing (2.5)
- PRNT 070 F Quick Print/In-Plant Graphics (2)
- PRNT 075 F Electronic and Conventional Pre-Press (6) (second semester)
- PRNT 101 F Introduction to Printing (3)
- PRNT 130 F Graphics (2)
- PRNT 151 F Introduction to Pre-Press (4) (if not used as required course above)
- PRNT 161 F Sheet-fed Offset Presswork (4)
- PRNT 171 F Offset Presswork (6)

## *Printing Technology Courses*

### **PRNT 021 F Survey of Graphic Communications (.5-2, .5-2, .5-2, .5-2)**

This course is an open entry/variable unit lab and is designed to introduce the student to the basic terminology, equipment and processes used in the printing industry. Completion of 24 hours of laboratory equals .5 units. The course may be taken four times for credit to a maximum of 8 units.

### **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 to 8)**

Sixty-four hours lecture and lab required for each two units of credit. Theory and practical experience in quick print and in-plant printing. Areas covered are: estimating, small press, camera, bindery, and related subjects necessary for day to day production. This class is offered on an open-entry, variable unit open-exit basis. Course may be taken four times for credit. (Degree credit)

### **PRNT 072AF Photo-Silk Screen (2)**

One hour lecture and three hours lab per week. Principles, basic methods, and techniques of preparing designs, and placing direct 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 frame, equipment, and supplies. (Degree credit)

### **PRNT 072BF Advanced Photo-Silk Screen (2)**

Prerequisite: PRNT 072AF Photo-Silk Screen. Corequisite: PRNT 064 F Camera for Graphic Arts

One hour lecture and three hours lab per week. Vocational copy preparation techniques for multi-color reproduction, register and color matching. Instruction to include ink composition, modifiers, proper ink, and estimating cost analysis for production. Emphasis on new synthetic inks and curing procedures. (Degree credit)

### **PRNT 072CF Advanced Photo-Silk Screen (2)**

Prerequisite: PRNT 072BF Advanced Photo-Silk Screen. Corequisite: PRNT 064 F Camera for Graphic Arts

One hour lecture and three hours lab per week. Industrial camera techniques with emphasis on special-effect screen, tint screens, and halftones. (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 sheeted 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)**

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 Introduction to Flexography

This advanced course will provide the student with advanced technical aspects of flexographic press operation for multiple color printing. Students will practice pre-press techniques and develop advanced flexographic press skills on a narrow web label press. Advanced applications of flexographic processes, design, multi-color prints, plate materials, bar codes, inks, substrates, presses and press equipment, pressroom practices, environmental concerns, and related safety will be discussed. (Degree credit)

**PRNT 090 F Printing Skills Lab (.5-6, .5-6, .5-6, .5-6)**

Corequisite: Any printing technology class, except screen printing classes.

One-half to six hours lab per week. This advanced course will provide students with an opportunity to practice various printing skills they have developed from completing other printing courses. Students can improve skills in the operation of the Xerox Docutech digital printing machine, electronic pre-press, large offset press operation, small offset press operation, bindery operations, paper specifications, and machine maintenance. 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 QuarkXPress 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 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 Introduction to Printing or one year of industrial experience or two years of high school graphic arts

A basic course, which covers the technical aspects of conventional pre-press. The use of a horizontal process camera, including units of litho chemistry, quality control of line and halftone negatives, contacting techniques, film assembly for large offset presses using pin registration, photo mechanical proofing and making of 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 Introduction to Pre-Press, 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 953 F Advanced Electronic Pre-Press (4)**

Prerequisite: PRNT 152 F Introduction to Electronic Pre-Press

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 161 F Sheeted Offset Presswork (4)**

Advisory: PRNT 101 F Introduction to Printing or PRNT 070 F Quick Printing and In-Plant Graphics, or one year industrial experience, or two semesters of articulated high school graphics.

This course is designed to introduce the technical aspects of lithographic sheeted 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 an exposure to make-ready and production techniques. (Graphic Arts Technical Foundation — GATF — Certification) (CSU) (Degree credit)

**PRNT 162 F Intermediate Sheeted Offset Presswork (4)**

Prerequisite: PRNT 161 F Sheeted Offset Presswork

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. GATF/PIA-SC, Fullerton College examination. This is the completion of the Sheeted Offset Press Certification initiated in the PRNT 161 F prerequisite. (Graphic Arts Technical Foundation — GATF — Certification) (CSU) (Degree credit)

**PRNT 963 F Advanced Sheeted Offset Presswork (4)**

Prerequisite: PRNT 162 F Intermediate Sheeted Offset Presswork

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) (Degree credit)

**PRNT 171 F Offset Presswork (6)**

Advisory: PRNT 101 F Introduction to Printing or PRNT 070 F Quick Printing and In-Plant Graphics or one year industrial experience or two semesters of articulated high school graphics

A basic course, which introduces the technical aspects of lithographic, sheeted 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, the printing units, inking and dampening systems, press feeders, 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 Offset Presswork

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, multi-color 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 973 F Advanced Offset Presswork (6)**

Prerequisite: PRNT 172 F Offset Presswork

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. (Graphic Arts Technical Foundation — GATF — Certification) (Degree credit)

**PRNT 190 F Basic Printing Estimating (2)**

Corequisite: PRNT 101 F Introduction to Printing 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)

## Psychology

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The **Psychology Associate in Arts Degree** program requires a total of 18 units of which 9 units are in required courses. An additional 9 units must be chosen from the restricted units listed below.

**Required Courses (9 units)**

- PSY 101 F General Psychology (3)  
 PSY 161 F Elementary Statistics for Behavioral Sciences (3)  
 PSY 202 F Research Methods in Psychology (3)

**Restricted Electives (9 units)**

Select three of the following categories and choose one from each category:

Category A:

- PSY 139 F Developmental Psychology: Life Cycle (3)  
 PSY 145 F Child Psychology (3)

Category B:

- PSY 143 F Developmental Psychology: Practicum (3)  
 PSY 219 F The Human Services (3)

Category C:

- PSY 222 F Abnormal Psychology (3)  
 PSY 251 F Social Psychology (3)

Category D:

- PSY 110 F Introduction to Applied Psychology (3)  
 PSY 120 F Human Sexuality (3)  
 PSY 131 F Cross-Cultural Psychology (3)

## Psychology Courses

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**PSY 101 F General Psychology (3) (CAN PSY 2)**

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)

**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)

**PSY 110 F Introduction to Applied Psychology (3)**

Three hours of lecture-discussion per week. In this course, students apply the principles of psychology and the research in psychology to common "everyday" situations. Psychological principles will be applied to situations that might occur during college life, during personal and social experiences, and at work and in one's career. Students will learn how psychology applies to adjustment, health, stress, and psychological disorders. Applied Psychology is not the same as PSY 101 F General Psychology; it has less of a focus on technical terms and theories than does General Psychology, and cannot be taken in place of PSY 101 F General Psychology. (CSU) (Degree credit)

**PSY 120 F Human Sexuality (3)**

Three hours lecture per week. Human Sexuality is 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)

**PSY 121 F Computer Applications in Social and Behavioral Sciences (1)**

Corequisite: PSY 161 F Elementary Statistics in Behavioral Sciences or MATH 120 F Introductory Probability and Statistics.

One hour lecture per week. This course acquaints the student with computer package programs, which are used for statistical analysis of data gathered in the social and behavioral sciences. Interactive computer work with micro and mainframe large computers using the Minitab, DBSP, and SPSS computer packages will be emphasized. The course content supplements the statistical concepts presented in PSY 161 F and MATH 120 F. (Not currently being offered — if interested, contact Division Office.) (CSU) (UC) (Degree credit)

**PSY 131 F Cross-Cultural Psychology (3)**

Prerequisite: PSY 101 F General Psychology

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 non-judgmental understanding of how culture influences human behavior, this course will make them more equipped to interact in a world where there is increasing contact among different cultures. In addition, students will gain knowledge in cross-cultural research methodology. Eligibility for ENGL100 is recommended. (CSU) (UC) (Degree Credit)

**PSY 139 F Developmental Psychology: Life Cycle (3)**

Prerequisite: PSY 101 F General Psychology

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)

**PSY 143 F Developmental Psychology: Practicum (3)**

Prerequisite: PSY 101 F General Psychology or PSY 110 F Introduction to Applied Psychology

Three hours lecture per week plus field experiences. This course will emphasize the applied study of the major principles and theories of human behavior throughout the life stages from infancy to old age and death. The course will stress field observations, volunteer participation, as well as opportunities for exploring professional fields in the area of human services in both private and public facilities. (Not currently being offered — if interested, contact Division Office.) (CSU) (Degree credit)

**PSY 145 F Child Psychology (3)**

Corequisite: PSY 101 F General Psychology or PSY 110 F Introduction to Applied Psychology

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)

**PSY 161 F Elementary Statistics in Behavioral Sciences (3) (CAN PSY 6)**

Prerequisite: Two years of high school algebra or MATH 040 F Intermediate Algebra

Three hours lecture per week. This course introduces psychology and behavioral science majors 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 are provided using statistical packages such as MiniTab and SPSS. (CSU) (UC Credit Limitation; PSY 161 F and MATH 120 F combined, maximum credit one course.) (Degree credit)

**PSY 199 F Psychology Independent Study (1-1-1)**

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)

**PSY 202 F Research Methods in Psychology (3) (CAN PSY 8)**

Prerequisite: PSY 101 F General Psychology. Corequisite: PSY 161 F Elementary Statistics in Behavioral Sciences

Two hours lecture and three hours laboratory 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)

**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 222 F Abnormal Psychology (3)**

Corequisite: PSY 101 F General Psychology or PSY 110 F Introduction to Applied Psychology with a grade of "C" or better.

Three hours of lecture per week. This course presents a scientific field that seeks to understand the nature and causes of "deviant" or "unusual" behavior in human beings both within and across culture. This course surveys types of abnormal behavior and their causes using current clinical DSM criteria used by professional clinical psychologists and major organizing theories selected from among those represented by humanism, behaviorism, psychoanalytic theory, and the psychobiological models. Methods of research, assessment, and treatment are explored. (CSU) (UC) (Degree credit)

**PSY 251 F Social Psychology (3)**

Corequisite: PSY 101 F General Psychology or PSY 110 F Introduction to Applied Psychology with a grade of "C" or better.

Three hours lecture per week. This course presents a scientific field that seeks to understand the nature, causes and influences of social group situations upon the individual and of the individual upon the group. In this survey course students will be exposed to basic theories, concepts and empirical findings in such areas as social perception, social cognition, prejudice and discrimination, interpersonal attraction, conformity and obedience, bystander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. New material is integrated with respect to materials already learned in general psychology. (CSU) (UC Credit Limitation) (Degree credit)

**PSY 251HF Honors Social Psychology (3)**

Corequisite: PSY 101 F General Psychology or PSY 110 F Introduction to Applied Psychology with a grade of "C" or better.

Three hours lecture per week. This course, enriched for honors students, presents a scientific field that seeks to understand the nature, causes and influences of social group situations upon the individual and of the individual upon the group. In this survey course students will be exposed to basic theories, concepts and empirical findings in such areas as social perception, social cognition, prejudice and discrimination, interpersonal attraction, conformity and obedience, by-stander effects, social aggression, group dynamics, attribution theory, and development of self in the social setting. New material is integrated with respect to materials already learned in general psychology. (CSU) (UC Credit Limitation) (Degree credit)

**PSY 299 F Psychology Independent Study (1-1-1)**

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)

## Public Relations

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The **Public Relations Certificate** Program requires the completion of 24 units of which 18 units are in required courses. An additional 6 units must be selected from the restricted electives. A minimum grade of "C" is required in each course taken.

**Required Courses (18 units)**

- JOUR 101 F Reporting and Writing (3)
- JOUR 102 F Reporting and Writing (3)
- JOUR 108 F Freelance Article Writing (3)
- JOUR 126 F Advertising Copy and Layout (3)
- JOUR 135 F Magazine Production (3)
- JOUR 140 F Public Relations and Publicity (3)

**Restricted Electives (6 units)**

- ACG 100 F Introduction to Computer Graphics/Macintosh (3)
- BUS 270 F Management Communications (3)
- JOUR 225 F Newspaper Production (3)
- MKT 100 F Introduction to Marketing (3)
- MKT 103 F Principles of Advertising (3)
- MKT 208 F Principles of Selling (3)
- PHOT 101 F Introduction to Photography (3)
- PRNT 130 F Graphics (2)

## Reading

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**READ 027 F Basic Study Skills (3)**

Credit/no credit 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. (Non-degree credit)

**READ 036 F Basic Reading (3)**

Credit/no credit only.

Three hours lecture and one hour 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. (Non-degree credit)

**READ 056 F Developmental Reading (3)**

Prerequisite: READ 036 F Basic Reading or recommended score on the reading placement test. Credit/no credit only

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. (Non-degree credit)

**READ 096 F Preparation for College Reading (3)**

Prerequisite: READ 056 F Developmental Reading or recommended score on the reading placement test. Letter grade or Credit/no credit option

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. (Degree credit)

**READ 127 F College Study Skills (2)**

Prerequisite: Concurrent Enrollment in READ 096 F Preparation for College Reading or recommended score on the reading placement test. Letter grade or Credit/no credit option.

Two hours lecture and one hour arranged 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 text-book reading, test preparation and test-taking skills are developed. (CSU) (Degree credit)

**READ 133 F Rapid Reading (3)**

Prerequisite: READ 096 F Preparation for College Reading with a grade of "C" or better or recommended score on the reading placement test. Letter grade or Credit/no credit option.

Three hours lecture. 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)**

Prerequisite: READ 096 F Preparation for College Reading with a grade of "C" or better or recommended score on the reading placement test. Letter grade or Credit/no credit option.

Three hours lecture and one hour arranged 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)

**READ 165 F Advanced Vocabulary for Power Reading (3)**

Prerequisite: READ 096 F Preparation for College Reading with a grade of "C" or better or recommended score on the reading placement test. Letter grade or Credit/no credit option.

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

## Real Estate Management A.S. Degree

Curriculum leads to the **Associate in Science Degree in Real Estate Management** and prepares students for the real estate salesperson's license test and the practice of real estate. This degree requires 35-36 units chosen from the required courses listed below.

**Required Courses (18 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:**

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 (3)
BUS	211 F Writing for Business (3)

**One course from the following for a total of 3 units:**

BUS	100 F Introduction to Business (3)
BUS	180 F Small Business Management (3)

**One course from the following for a total of 3 units:**

(See counselor for determination of correct course)	
BUS	240 F Legal Environment of Business (3)
BUS	241AF Business Law (3)

**One course from the following for a total of 2 units:**

CIS	150 F Introduction to the Internet (2)
MKT	151 F Internet Marketing (2)

**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)
RE	206 F Real Estate Economics (3)

## Real Estate Management Certificate

The **Real Estate Management 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. By completing the **Real Estate Management Certificate**, the student will meet the educational requirements for the Real Estate Brokers' Licensure.

### Required Courses (18 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:

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 (3)
BUS	211 F Writing for Business (3)

### One course from the following for a total of 3 units:

BUS	100 F Introduction to Business (3)
BUS	180 F Small Business Management (3)

### One course from the following for a total of 3 units:

(See counselor for determination of correct course)	
BUS	240 F Legal Environment of Business (3)
BUS	241AF Business Law (3)

### One course from the following for a total of 2 units:

CIS	150 F Introduction to Internet (2)
MKT	151 F Internet Marketing (2)

### One course from the following for a total of 3 units:

BUS	162 F Business Economics (3) or
ECON	101 F Principles of Economics — Micro (3)
RE	206 F Real Estate Economics (3)

## Real Estate Sales Certificate

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

By completing the **Real Estate Sales Certificate**, the student will meet the educational requirements for the Renewable Salesperson Licensure.

### Required Courses (13-14 units)

ACCT	001 F Accounting for Small Business (3) or
ACCT	100BF Financial Accounting Principles (3) or
ACCT	101AF Financial Accounting (4)
CIS	050 F Web Page Design I (2)
CIS	150 F Introduction to the Internet (2) or
MKT	151 F Internet Marketing (2)
RE	101 F Principles of Real Estate (3)
RE	102 F Legal Aspects of Real Estate (3)

### Restricted Electives (3 units)

BUS	162 F Business Economics (3)
ECON	101 F Principles of Economics — Micro (3)
RE	090 F Current Issues in Real Estate (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)

## Real Estate Courses

### RE 090 F Current Issues in Real Estate (3)

One to three hours lecture plus 1-9 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. May be taken for credit four times. (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 covers professional aspects of the real estate business. Topics include an overview of the real estate industry, ethics and licensing requirements; hands-on completion of contracts, forms, and disclosure documents; prospecting strategies for obtaining clients; listing properties and servicing those listings; marketing techniques; strategies for showing property; obtaining and handling offers; closing sales transactions; financing, escrow, title and taxation issues; and 1031 exchange requirements for investment property. NOTE: Course qualifies for continuing education for real estate licensees. (CSU) (Degree credit)

**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 finance 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 used in establishing real estate market values, and develop the knowledge and skills necessary for application or interpretation of appraisal information. Topics include the uniform standards of professional appraisal practice, location analysis and site evaluation, the appraisal process, reproduction cost estimating, depreciation, market data and interpretation, cost, income approaches to value, and the appraisal report. **NOTE:** Course qualifies for continuing education for real estate licensees. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree credit)

**RE 204 F Appraisal — Income (3)**

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 the single-family residence. The income approach and capitalization techniques are emphasized. Also included is an in-depth study of the following: discounted cash flow, valuation of partial and leasehold interests, and uniform standards of professional appraisal practice, interpretation, cost and income approaches to value, and the appraisal report. (May not be offered each semester. If interested, please contact the Business and CIS Division Office.) (CSU) (Degree credit)

**RE 205 F Property Management (3)**

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)

## Religious Studies

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Curriculum leads to the **Associate in Arts Degree**. This degree 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)**

PHIL	101 F	Introduction to Religious Studies (3)
PHIL	105 F	World Religions (3)
PHIL	105HF	Honors World Religions (3)
PHIL	200 F	Introduction to Christianity (3)
PHIL	201 F	History of Philosophy: Ancient and Medieval (3)
PHIL	210 F	Introduction to Judaism (3)
PHIL	250 F	The Religion of Islam (3)
PHIL	270 F	Introduction to Asian Religions (3)

**Restricted Electives (6 units)**

ENGL	243 F	Folklore and Mythology (3)
GEOG	160 F	Cultural Geography (3)
HIST	110 F	Western Civilization (3)
HIST	111 F	Western Civilization (3)
HIST	112 F	World Civilizations (3)
HIST	113 F	World Civilizations (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 (3)
PHIL	160 F	Introduction to Ethics (3)
PHIL	170 F	Logic and Critical Thinking (3)
PHIL	172 F	Critical Thinking/Writing (3)
PHIL	202 F	History of Philosophy: Modern (3)
PHIL	225 F	The American Religious Experience (3)

## Social Science

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Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units chosen from the courses listed below.

**Required Courses (18 units)**

ANTH	102 F	Cultural Anthropology (3)
ECON	101 F	Principles of Economics — Micro (3)
GEOG	100 F	Global Geography (3)
HIST	112 F	World Civilizations (3)
HIST	113 F	World Civilizations (3)
POSC	100 F	American Government (3)

## *Social Science Courses*

### **SOSC 115 F Interdisciplinary Teaching Internship in Elementary or Secondary Schools (3)**

The purpose of this course is to provide students interested in elementary and secondary teaching; an introduction to teaching and learning; an overview of the scope and sequence of curriculum planning; weekly observation and participation experiences in elementary or secondary classrooms; experience in the development, presentation, and evaluation of learning activities. Intern placement of four hours per week is included in the preparation hours. (CSU) (Degree credit)

### **SOSC 120 F Introduction to Probability and Statistics (4)**

Prerequisite: MATH 040 F Intermediate Algebra with a grade of "C" or better.

Four 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)

### **SOSC 121 F Introduction to Probability and Statistics (4)**

Prerequisite: SOSC 120 F Introduction to Probability and Statistics with a grade of "C" or better.

Four hours lecture per week. A continuation of SOSC 120 F Introduction to Probability and Statistics. This course covers descriptive and inferential statistics, as well as the probabilistic basis for statistical inference. Computers and calculators will be utilized. Data sets and problems will be from anthropology, economics, geography, political science, psychology and sociology. (CSU) (UC Credit Limitation) (Degree credit)

### **SOSC 198AF Sacramento Seminar (2)**

This seminar class is an on-site multidimensional study of state politics, history, women's studies, contemporary social problems and an examination of the unique physical landscape of the Sacramento delta region. Students will attend the Sacramento seminar at the Capitol, the State Commission on the Status of Women. In addition, they will explore Old Town, museums, historic neighborhoods and the unique physical environment of the Sacramento area. (Degree credit)

## *Sociology*

The **Sociology Associate in Arts Degree** program requires a total of 18 units of which 16 units are in required courses. An additional 2 units must be chosen from the restricted units listed below.

### **Required Courses (16 units)**

ANTH	102 F Cultural Anthropology (3) or
PSY	101 F General Psychology (3)
SOC	101 F Introduction to Sociology (3) or
SOC	101HF Honors Introduction to Sociology (3)
SOC	102 F Social Problems (3)
SOSC	120 F Introduction to Probability and Statistics (4)
SOC	133 F Introduction to Gerontology (3) or
SOC	225 F Sociology of Women (3) or
SOC	275 F Marriage and Family (3)

### **Restricted Electives (2 units)**

ANT	102 F Cultural Anthropology (3)
ETHS	101 F American Ethnic Studies (4)
GEOG	160 F Cultural Geography (3)
PSY	101 F General Psychology (3) or
PSY	251 F Social Psychology (3) or
SOC	102 F Social Problems (3)
SOC	133 F Introduction to Gerontology (3) or
SOC	225 F Sociology of Women (3) or
SOC	275 F Marriage and Family (3) or
SOSC	120 F Introduction to Probability and Statistics (4)

(If course was used to satisfy major requirements)

## *Sociology Courses*

### **SOC 101 F Introduction to Sociology (3) (CAN SOC 2)**

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)

### **SOC 101H 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. (CSU) (UC) (Degree Credit)

**SOC 102 F Social Problems (3) (CAN SOC 4)**

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)

**SOC 133 F Introduction to Gerontology (3)**

Three hours lecture per week. This course is a multidisciplinary review of the characteristics, strengths and problems of older persons. Exploration includes basic theories, concepts, demographic trends, cross-cultural aspects, social policies, political and economic issues. Emphasis upon available services for older adults. The course will focus on various care settings, including the familial caregiver level. Education for careers in gerontology will be highlighted. (CSU) (Degree credit)

**SOC 199 F Sociology Independent Study (1-1-1-1)**

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)

**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 — Same as Women's Studies 225) (Degree credit)

**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. (CSU) (UC) (Degree credit)

**SOC 299 F Sociology Independent Study (1-1-1-1)**

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 review required) (Degree credit)

# Spanish

**SPAN 050AF Public-Service Spanish (3)**

Letter grade or Credit/no credit 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. (Non-degree credit)

**SPAN 050BF Public-Service Spanish (3)**

Prerequisite: SPAN 050A Public-Service Spanish or previous experience with Spanish. Letter grade or Credit/no credit option.

Three hours of lecture per week. Continuation of 050A Public-Service Spanish. (Non-degree credit)

**SPAN 101 F Elementary Spanish I (5) (CAN SPAN 2)****(SPAN 101 F + SPAN 102 F = CAN SPAN SEQ A)**

Letter grade or Credit/no credit 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) (Degree credit)

**SPAN 101HF 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)

**SPAN 102 F Elementary Spanish II (5) (CAN SPAN 4)****(SPAN 101 F + SPAN 102 F = CAN SPAN SEQ A)**

Prerequisite: SPAN 101 F Elementary Spanish I with a grade of "C" or better or one year of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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) (Degree credit)

**SPAN 102HF Honors Elementary Spanish II (5)**

Prerequisite: SPAN 101 F Elementary Spanish I 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)

**SPAN 130 F Spanish History and Culture (3)**

Letter grade or Credit/no credit option. Prerequisite: SPAN 101 F Elementary Spanish I

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. (Not currently being offered — if interested, contact Division Office.) (CSU) (Degree credit)

**SPAN 200 F Conversational Spanish (2-2-2-2)**

Prerequisite: SPAN 102 F Elementary Spanish II with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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 Spanish 203 F, 204 F, 205 F, and 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)**

Prerequisite: A native-speaking knowledge of Spanish for those who have had little or no education in a Spanish-speaking country. Recommended: two years of high school Spanish. Letter grade or Credit/no credit option.

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 Spanish 101 F/102 F and Spanish for the Spanish Speaker 201 F. (CSU, UC Credit Limitation: SPAN 201 and 203 combined; maximum credit one course.) (Degree credit)

**SPAN 203 F Intermediate Spanish III (4) (CAN SPAN 8) (SPAN 203 F + SPAN 204 F = CAN SPAN SEQ B)**

Prerequisite: SPAN 102 F Elementary Spanish II with a grade of "C" or better or two years of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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 201 F combined; maximum credit, one course) (Degree credit)

**SPAN 204 F Intermediate Spanish IV (4) (CAN SPAN 10) (SPAN 203 F + SPAN 204 F = CAN SPAN SEQ B)**

Prerequisite: SPAN 201 F Spanish for Spanish Speakers or 203 F Intermediate Spanish III with a grade of "C" or better or three years of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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)

**SPAN 205 F Introduction to Spanish Literature (3)**

Prerequisite: SPAN 204 F Intermediate Spanish IV or four years of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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)

**SPAN 206 F Introduction to Latin-American Literature (3)**

Prerequisite: SPAN 204 F Intermediate Spanish IV or four years of high school Spanish with a grade of "C" or better. Letter grade or Credit/no credit option.

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. (CSU) (UC) (Degree credit)

**SPAN 207 F Children's Literature in Spanish (3)**

Prerequisite: SPAN 203 F Intermediate Spanish III. Letter grade or Credit/no credit option.

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)

**SPAN 299 F Spanish Independent Study (1-1-1)**

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

Curriculum leads to the **Associate in Arts Degree**. This degree requires 18 units of which 13-15 is in required courses. An additional 3-5 units must be chosen from the restricted electives listed below.

## Required Courses (13-15 units)

SPCH 100 F Public Speaking (4)  
 SPCH 105 F Interpersonal Communication (3)  
 PHIL 170 F Logic and Critical Thinking (3)

## 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 (1)  
 THEA 127 F Oral Interpretation (3)  
 THEA 129 F Beginning Voice for Actors (3)  
 CRTV 135 F Radio Announcing (3)

## Restricted Electives (3-5 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, Television and Film (3)  
 Foreign Language (Level I through Level IV) (4-5)

## Speech Courses

### SPCH 100 F Public Speaking (4) (CAN SPCH 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)

### SPCH 105 F Interpersonal Communication (3) (CAN SPCH 8)

Advisory: College level reading and completion of ENGL 060 F Preparation for College Writing.

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)

### SPCH 120 F Intercultural Communication (3)

Advisory: College level reading and completion of ENGL 060 F Preparation for College Writing.

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)

### SPCH 124 F Small Group Communication (3)

Advisory: College level reading and completion of ENGL 060 F Preparation for College Writing.

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)

### SPCH 135 F Essentials of Argumentation (4) (CAN SPCH 6)

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)

### SPCH 138 F Forensics (1-1)

Advisory: College level reading.

Two hours 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 interpretation, and debate. Field trips and involvement in student activities will be required. Course may be taken twice for credit. (CSU) (Degree credit)

## Student Support Services

### STSV 071 F Adaptive Computer Access: Word Processing (.5-2, .5-2, .5-2, .5-2)

Advisory: Eligibility for services from Adaptive Services Center. Credit/no credit only.

One and one-half to six hours of guided instruction, dependent on units attempted, and flexible hours by arrangement. Open entry/open exit. 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. (Non-degree credit)

**STSV 072 F Learning Assessment (.5)**

Advisory: Eligibility for services from Adaptive Services Center. Credit/no credit 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 education contract (SEC) outlining long term goals/short term objectives for identified eligible students with learning disabilities will be developed. This is an open entry/open exit course with arranged hours. (Non-degree credit)

**STSV 075 F Adaptive Computer: Learning Strategies (.5-2)**

Advisory: Eligibility for services from Adaptive Services Center. Credit/no credit only.

One and one-half to six hours of guided instruction per week dependent on units attempted and flexible hours by arrangement. Open entry/open exit. Students will receive computer-assisted instruction to improve learning strategies, problem solving and cognitive skills, and proficiency in basic skills areas. (Non-degree credit)

**STSV 215 F Tutoring Techniques (1)**

Two hours lecture per week for nine weeks. A practical introduction to the knowledge and skills that enable students to serve as tutors. Students will be involved in developing and applying techniques for tutoring. The course is recommended for those students interested in paraprofessional or instructional aide programs, teacher education programs, or tutoring for the EOPS program. (Not currently being offered.) (CSU) (Degree credit)

**STSV 220 F Tutoring Techniques Laboratory (1)**

Three hours of supervised laboratory tutoring per week. The student will have the opportunity to apply developed techniques and operation of hardware and software used in the EOPS Tutorial Center. The laboratory may be taken concurrent with 215 Tutoring Techniques. (Not currently being offered.) (CSU) (Degree credit)

**STSV 223 F Helping Skills in Human Services (3)**

Three hours lecture per week. This course is designed for students interested in pursuing a career in a human service area (counseling, probation work, social work, nursing, etc.). It provides students with an opportunity to begin to develop basic counseling/human relations skills. An experiential approach will be utilized in learning listening skills, communication skills, crisis-intervention techniques, all others, as well as developing the theoretical knowledge necessary in providing services in a helping relationship. (CSU) (Degree credit)

**STSV 299 F EOPS Independent Study (1-1-1)**

One hour of scheduled conference per week. Designed for students who wish to extend their knowledge in human services related topics. Course may be taken three times for credit. (CSU) (UC review required) (Degree credit)

## Technology-Related Courses

**TECH 081 F Technical Mathematics I (3)**

Prerequisite: Math clearance or MATH 010 F College Arithmetic

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)

**TECH 082 F Technical Mathematics II (3)**

Prerequisite: TECH 081 F Technical Mathematics

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)

**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, 1-3, 1-3, 1-3,)**

Prerequisite: Introductory course in appropriate subject area.

One hour lecture of scheduled conference or three hours independent laboratory research per week per unit of credit. Designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent laboratory 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, 1-3, 1-3, 1-3)**

Prerequisite: Introductory course in appropriate subject area.

One hour lecture of scheduled conference or three hours independent laboratory research per week per unit of credit. Designed for advanced students who wish to increase their knowledge of technical areas through individual study. Independent laboratory 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)

## *Textiles and Clothing*

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:

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

## *Theatre Arts Drama (Acting)*

This curriculum leads to **Associate in Arts Degree** and/or employment. A minimum of 18 units is required. This program is not necessarily designed to transfer to a four-year institution.

### Required Courses: (15-17) units

THEA	100 F Introduction to the Theatre (3) or
THEA	104 F Introduction to Theatre Appreciation (3) or
THEA	108 F Multicultural Perspectives in American Theatre (3)
THEA	120BF** Principles of Acting (3)
THEA	130ABCDF* Acting Workshop (3) or
THEA	133ABCDF* Theatre Practicum (2) or
THEA	135ABCDF Resident Theatre Company (3)
THEA	136 F Touring Theatre Productions
THEA	142ABCDF Theatre Crafts Lab (1-2)
THEA	143 F Stagecraft (3) or
THEA	144ABF* Lighting (3) or
THEA	145ABF* Theatrical Costuming (3) or
THEA	146 F* Scene Painting (3) or
THEA	147AF* Stage Makeup (3)
THEA	149 F Stage Crew Activity (0.5-3)

### Restricted Electives (1-3) units

THEA	105 F Musical Theatre History (3)
THEA	106ABF Principles of Playwriting (2)
THEA	109 F Modern Dramatic Literature (3)
THEA	120CF** Advanced Acting (3)
THEA	121ABF Movement for Actors (3)
THEA	122 Improvisation for Television, Film, and Theatre
THEA	125ABCDF Musical Theater Performance Techniques (2)
THEA	127 F Oral Interpretation (3)
THEA	129ABCDF Beginning Voice for Actors (3)
THEA	222ABF*** Acting for the Camera (2)
THEA	225 F Directing (3)

THEA	235 F* Experimental Theatre (2)
THEA	255ABCDF Theatrical Costume Construction (2)
THEA	265 F Theatre Management (2)
THEA	900 F Stage Management (2)

\*Co-requisite of THEA 149 F Stage Crew Activity required  
 \*\*Prerequisite and co-requisite (Technical Theatre class) required  
 \*\*\*Prerequisite required

## *Musical Theatre Certificate*

The **Musical Theatre Certificate** Program totals 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)

DANC	105 F Ballet I (1)
DANC	111 F Jazz I (1)
DANC	113 F Tap Dance (1)
MUS	103AF and 103BF Beg Music Theory (3 + 3)
MUS	104AF and 104BF Beg Musicianship (1)
MUS	135AF and 135BF Beg Piano or equivalent units in MUS 236 F or 237 F if qualified (1-1) (2 semesters)
MUS	126 F Beg Voice or equivalent units in MUS 227 F Intermediate Voice or
MUS	228 F Advanced Voice if qualified (1-1) (two semesters)
THEA	120AF and 120BF Principles of Acting (3-3)
THEA	121 F Movement for Actors (3)
THEA	125 F Musical Theatre Acting Techniques (2)
THEA	133 F Theatre Practicum (2)

### Restricted Courses (2 units)

MUS	180 F Collegiate Chorale (1)
MUS	281 F Concert Choir (1)
MUS	282 F Master Chorale (1)

## *Advanced Musical Theatre Certificate*

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

DANC	119 F Dance for Theatre; 105 F Ballet; 111 F Jazz I; 113 F Tap Dance or 117 F Gymnastics (1 + 1)
MUS	135AF and 135BF Beg Piano, 236 F Intermediate Piano, 237F Advanced Piano (1 + 1)
MUS	126 F Beginning Voice, 227 F Intermediate Voice, 228 F Advanced Voice (1 + 1)
MUS	288 F Singing/Dance Ensemble (1 + 1)
THEA	105 F Musical Theatre History (3)
THEA	120BF 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 Lab (2)
THEA	225 F Musical Theatre Acting Techniques (2)

## *Theatrical Costumer Certificate*

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)**

FASH	101 F Clothing (2)
FASH	108AF Flat Pattern Methods and Design (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 Theatre (3)
THEA	145 F Theatrical Costuming (3) Level A
THEA	149 F Stage Crew Activity (1)
THEA	255 F Theatrical Costume Construction (2 + 2) first and second semesters
ART	139 F Fashion Sketching (2)

### **Restricted Electives (6 units)**

FASH	085 F Bridal and Special Occasion (2)
FASH	107 F Apparel Analysis (3)
FASH	108BF Flat Pattern Methods and Design (2)
FASH	186 F Workroom Sketching (2)
FASH	205AF Tailoring (2)
FASH	244 F Ethnic Costume (2)
THEA	145 F Theatrical Costuming (3) second semester
THEA	147AF Stage Makeup (3)

## *Advanced Theatrical Costumer Certificate*

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)**

FASH	107 F Apparel Analysis (3)
FASH	108BF Flat Pattern Methods and Design (2)
THEA	147AF Stage Makeup (3)
FASH	085 F Bridal and Special Occasion (2)
FASH	244 F Ethnic Costume (2)
FASH	297 F Fashion Design Portfolio (1)

### **Restricted Electives (6 units)**

FASH	186 F Workroom Sketching (2)
FASH	201 F Clothing (2)
FASH	205AF Tailoring (2)
THEA	255 F Theatrical Costume Construction (2) (third semester)

Participation in at least one production is required of each theatre arts major each semester. During residency at Fullerton College, all theatre arts majors are required to perform in as many areas of production as possible. Recommendations by staff for the theatre arts major will be based upon the satisfactory fulfillment of above requirements.

**Cost of Classes:** Most Theatre Art classes require that equipment and supplies be purchased or supplied by students. The cost of basic materials necessary to begin a class, if the student has none to begin with, is between \$5 and \$50 unless otherwise specified in the course description. Equipment can usually be used in several related classes and need not be duplicated for each class.

## *Theater Arts Courses*

### **THEA 072 F Movement and Performance Skills for Musical Theatre (1, 1, 1, 1)**

One hour lecture and one hour laboratory 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. (Non-degree credit)

### **THEA 100 F Introduction to the Theatre (3) (CAN DRAM 18)**

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, laboratory 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 Stage Crew Activity is strongly recommended. (CSU) (UC) (Degree credit)

### **THEA 101 F Theatre Hour (.5-.5-.5-.5)**

One hour lecture per week. Presents a variety of guest speakers, staff presentations, and performance situations for theatre majors and interested non-majors. Topics change each semester and include resume preparation, auditioning techniques, directing and acting, costume, makeup, lighting and scene design, theatre management, and scenes from student actors. Required of all theatre majors. Course may be taken four times for credit. (CSU) (Degree credit)

### **THEA 104 F Introduction to Theatre Appreciation (3)**

Letter grade or Credit/no credit option.

Two hours lecture and three hours laboratory 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)

**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)

**THEA 106 F Principles of Playwriting (2-3)**

Two hours lecture per week. Beginning playwriting as a creative approach to writing dramatic material for stage, screen, and television. Course may be taken twice for credit. (CSU) (Degree credit)

**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 multi-ethnic and multi-cultural society. This course will explore traditional and cultural backgrounds from which theatre springs, the genre or movement to which a particular play belongs, and the cultural, sociological and political climate in which these plays were created.

**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)

**THEA 120AF Principles of Acting (3)**

Corequisite: THEA 149 F Stage Crew Activity (.5 units)

Two hours lecture plus four hours 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 Principles of Acting (3) (CAN DRAM 8)**

Prerequisite: THEA 120AF Principles of Acting. Concurrent enrollment: 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 Strassberg, 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 Acting (3)**

Prerequisite: THEA 120BF Principles of Acting. Concurrent enrollment: 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 Acting (3)**

Prerequisite: THEA 120BF Principles of Acting. Concurrent enrollment: 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 (3-3)**

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 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.

**THEA 123 F Acting Techniques (3-3)**

One and one-half hour lecture plus one and one-half hour 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 (2-2-2-2)**

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 and 126 (both semesters) combined — maximum credit 6 units.) (Degree credit)

**THEA 129 F Beginning Voice for Actors (3-3)**

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 (3-3-3-3)**

Corequisite: THEA 120AF Principles of Acting.

Three hours lecture and six hours laboratory 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 (2-2-2-2)**

Advisory: Admission by audition or interview only.

Twelve hours lab per week for nine weeks. This course provides the study and laboratory 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 (3-3-3-3)**

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)**

Two hours lecture plus three 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. This course may be repeated three times for credit.

**THEA 137 F Summer Theatre Workshop (3-3-3-3)**

Advisory: Admission by audition or interview only

Five hours lecture plus fifteen hours lab per week. Offered during the summer session, this course involves the study and laboratory 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. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**THEA 140AF Theatre Crafts (3)**

Advisory: Admission by audition or interview only

Two hours lecture plus four hours lab per week. This course introduces the student to the study and execution of theatrical stage mechanics, scenery, lighting, sound, costumes, makeup, properties and scene painting. Through project based learning, students will learn theatrical design principles and gain practical experience in each technical theatre area. (CSU) (UC) (Degree credit)

**THEA 140BF Theatre Crafts (3)**

Prerequisite: THEA 140AF Theatre Crafts.

Three hours lecture per week. Continuation of THEA 140AF Theatre Crafts with emphasis placed on specialty and design areas of technical theatre. Students enrolled in this course will execute in-class designs for scenery, costumes, lighting, and sound. (CSU) (UC) (Degree credit)

**THEA 142 F Theatre Crafts Laboratory (1-2, 1-2, 1-2, 1-2)**

One Unit Class: One hour lecture and two hours laboratory per week arranged. Two Unit Class: Two hours lecture and four hours laboratory per week arranged. 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) (CAN DRAM 12)**

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 (3-3)**

Corequisite: THEA 149 F Stage Crew Activity ½ unit (1½ hours per week)

Two hours lecture and three hours laboratory per week, plus one and one-half hours per week in Stage Crew Activity (THEA 149). 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 (3-3)**

Corequisite: THEA 149 F Stage Crew Activity ½ unit (1½ hours per week)

Two hours lecture and two hours laboratory per week. Introduction to basic theatrical costuming including design, history, use of sewing machines, pattern making and fabric selection culminating in a final project that reflects the student's creativity. Course may be taken twice for credit. (CSU) (UC) (Degree credit)

**THEA 146 F Scene Painting (3)**

Corequisite: THEA 149 F Stage Crew Activity ½ unit (1½ hours per week)

Two hours lecture plus three hours lab per week. Introduction to the development of professional scenic artist techniques as they apply to the painting of scenery for the performing arts. Techniques used will include use of brush, roller, spray gun, texturing, rock background, wood graining, wallpaper, masonry, scenic drops and other techniques. The course may be taken twice for credit. Concurrent enrollment: THEA 149 F Stage Crew Activity .5 unit (1.5 hours per week) is required. (CSU) (UC) (Degree credit)

**THEA 147AF Stage Makeup (3) (CAN DRAM 14)**

Corequisite: Concurrent enrollment: THEA 149 F Stage Crew Activity ½ unit (1½ hours per week)

Two hours lecture and three hours laboratory per week. This course will include instruction and laboratory experience in all phases of theatrical makeup. Age, look-alike, stylized, historical period styles, facial hair, corrective makeup and color theory are covered in detail. (CSU) (UC) (Degree credit)

**THEA 147BF Advanced Theatrical Makeup (3)**

Prerequisite: THEA 147AF Stage Makeup.

Two hours lecture and three hours lab per week. This course is a continuation of THEA 147AF Stage Makeup with special emphasis placed upon masks, prosthesis (foam and liquid latex), hair ventilation, and its use in legitimate stage and television production. Students enrolled in this course are responsible for the coordination of the makeup requirements for the Theatre Arts Department productions. (CSU) (UC) (Degree credit)

**THEA 149 F Stage Crew Activity (0.5-3, 0.5-3, 0.5-3, 0.5-3)**

Practical lab experience in the technical aspects of theatre resulting in public performances of theatrical productions. Students may chose from such diverse areas as scenery construction, scene painting, costume construction, lighting, audio, property construction, make-up, management, audience development and promotion. Enrolling in .5 units required 27 hours per semester; 1 unit requires 54 hours per semester; 2 units requires 108 hours; and 3 units requires 162 hours per semester. Course may be taken four times for credit. (CSU) (UC) (Degree credit)

**THEA 150 F Performance LAB (1-1-1-1)**

Corequisite: Concurrent enrollment: MUS 288 F BRAVO Song/Dance Ensemble

Six hours rehearsal per week plus two and one-half hours per week arranged in rehearsals, studio recording and concerts. Rehearsal and performance of standard and current commercial music for singers who dance. Accompanied by a small instrumental group, the class includes choreography, staging and microphone techniques. Student compositions and arrangements are encouraged. Course may be taken four times for credit. (CSU) (Degree credit)

**THEA 196HF Honors Creative Arts (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)

**THEA 222 F Acting for the Camera (2-2)**

Prerequisite: THEA 120AF Principles of Acting

One hour lecture and three 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 Principles of Acting. Corequisite: Technical theatre class

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 (2-2-2-2)**

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, 2)**

Prerequisite: THEA 145 F Theatrical Costuming

Two hours lecture and two hours lab per week. 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. Course may be taken twice 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, 1-3, 1-3, 1-3)**

Lecture/laboratory hours may vary with credit given. Various classes designed to meet the interest and needs of students and faculty may be offered from semester to semester. Course may be taken four times for credit. (CSU) (UC Credit Limit depending on content) (Degree credit)

**THEA 299 F Theatre Arts Independent Study (.5-2, .5-2, .5-2, .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 ½ 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 post-production. The course is required of all students who are interested in stage management positions for the Theatre Arts Department productions. (Degree credit)

## University Transfer Studies

The University Transfer Studies **Associate of Arts Degree** is designed to enable students to complete the requirements for the Associate of Arts Degree and transfer to the California State University, the University of California or an independent institution with lower division general education requirements met. The University Transfer Studies A.A. Degree program requires a total of 60 units, all transferable of which 37-40 units are in required courses. An additional 20-23 units must be chosen from the restricted units listed.

**Program:** Total # of units:

Required Courses:      # of Units:                      37-40

To meet the requirements for this degree program students must complete an approved general education pattern from one of the following:

- A. California State University (CSU) General Education Breadth pattern for the California State University system (a minimum of 39 units) OR
- B. Intersegmental General Education Transfer Curriculum (IGETC) for either the University of California or the California State University system (37-40 semester units).

Restricted Electives:      # of Units:                      20-23

Complete 20-23 transferable semester units of preparation for the major, or electives, taken from the University of California transfer Course Agreement and/or the California State University Baccalaureate List (designated as UC, CSU transferable in the Fullerton College catalog or schedule) to meet the required total 60 semester units for the Associate of Arts degree with a cumulative grade point average of 2.0 or higher. Complete Fullerton College graduation requirements for Physical Education and Multicultural Education as part of the 60 transferable units.

**NOTE:** In order to satisfy the minimum eligibility requirements for the University of California (UC) students must complete 60 UC transferable semester units with a 2.40 grade point average (GPA). Completion of the above requirements does not guarantee admission to any specific school, campus, or major. (Consult with a counselor for further information).

## Vietnamese

**VIET 050AF Vietnamese for Public Personnel (3)**

Letter grade or Credit/no credit 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. (Not currently being offered.) (Non-degree credit)

**VIET 050BF Vietnamese for Public Personnel (3)**

Prerequisite: VIET 050AF or previous experience with Vietnamese. Letter grade or Credit/no credit option.

Three hours lecture per week. Continuation of 50AF Vietnamese for Public Personnel. (Not currently being offered.) (Non-degree credit)

## Welding

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)**

WELD 091AF Industrial Welding Fundamentals (5) or  
 WELD 121AF Introduction to Welding (2) and  
 WELD 121BF Fundamentals of Inert Gas Welding (2)  
 WELD 091BF Semi-Automatic Welding Applications (5)  
 WELD 091CF Manual Arc Welding Fundamentals (5)  
 WELD 091DF Structural Welding Certification (5)

**Restricted Electives (5 units)**

DRAF 070 F Blueprint Reading for the Metal Trades (2)  
 DRAF 171 F Fundamentals of Drafting (2)  
 MACH 116 F Machine Tools (2)  
 METL 192 F Fundamentals of Metallurgy (3)  
 TECH 081 F Technical Mathematics (3)  
 TECH 108 F Manufacturing Processes (3)  
 TECH 127 F Industrial Safety (1)

## Welding Courses

### WELD 121AF 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 121BF Fundamentals of Inert Gas Welding (2)

Prerequisite: WELD 121AF Introduction to Welding

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)

### 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 Industrial Welding Fundamentals or WELD 121AF Introduction to Welding and 121BF Fundamentals of Inert Gas Welding.

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 Semi-Automatic Welding Applications.

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 non-ferrous metals. (Degree credit)

### WELD 091DF Structural Welding Certification (5)

Prerequisite: WELD 091CF Manual Arc Welding Fundamentals

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 laboratory 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 095F Welding Skills Laboratory (.5-2, .5-2, .5-2, .5-2)

Corequisite: WELD 121AF/121BF Welding, 091AF, 091BF, 091CF, 091DF Welding, 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)

## Women's Studies

### WMNS 100 F Introduction to Women's Studies (3)

Three hours lecture per week. An interdisciplinary introduction to feminist topics. Designed to provide a foundation for Women's Studies with an examination of sex role socialization, feminist theory, and feminist themes in literature, philosophy, psychology, the arts, economics and politics. (CSU) (UC)

## Wood Technology

### Cabinetmaking and Millwork Technology Certificate

The **Cabinetmaking and Millwork Technology Certificate** requires the completion of 34 units of which 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 (25 units)

CSTR	102 F Residential Finish Construction (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 Adv Machine Woodworking/Furniture (4)
WOOD	025 F Cabinet Vision (2) or
WOOD	026 F Computer Applications for Cabinetmaking (2)
WOOD	110 F Fundamentals of Woodwork (3)

**Restricted Electives (9 units)**

PE	235 F First Aid, CPR and Safety Education (2) or Red Cross Equivalent
BUS	241AF Business Law (3)
BUS	180 F Small Business Management (3)
CSTR	110 F Residential Estimating (3)
IDES	110 F Beginning Drafting for Interior Design (3)
IDES	180 F History of Interior Architecture and Furnishings (3)
IDES	190 F History of Interior Architecture and Furnishings (3)
PHOT	101 F Introduction to Photography (3)
TECH	127 F Industrial Safety (1)
WOOD	013 F Introduction to 32mm Cabinetmaking (3)
WOOD	032 F Advanced Skills Lab (2 maximum)

*Cabinetmaking Specialist Certificate*

The **Wood Technology: Cabinetmaking Specialist Certificate** requires a total of 16 units. All 16 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 cabinetmaking.

**Required Courses (16 units)**

WOOD	110AF Fundamentals of Woodwork (3)
WOOD	012 F Cabinetmaking/Millwork (4)
WOOD	013 F Introduction to 32mm Cabinetmaking (3)
WOOD	014 F Cabinetmaking/Millwork (House Project) (4)
WOOD	026 F Computer Applications for Cabinetmaking (2)

*Furniture Making Specialist Certificate*

The **Wood Technology: Furniture Making Specialist Certificate** requires a total of 17 units. All 17 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 furniture making.

**Required Courses (17 units)**

WOOD	110AF Fundamentals of Woodwork (3)
WOOD	016 F Machine Woodworking/Furniture (4)
WOOD	017 F Table and Chair Construction (4)
WOOD	018 F Advanced Machine Woodworking/Furniture (4)
WOOD	021 F Tool and Jig Production (2)

*Woodcarving Specialist Certificate*

The **Wood Technology: Woodcarving Specialist Certificate** 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)**

WOOD	041 F Introduction to Woodcarving (2)
WOOD	042 F Intermediate Woodcarving (2)
WOOD	043 F Advanced Woodcarving (2)
WOOD	044 F In-the-Round Woodcarving (2)

*Wood Technology Courses***WOOD 110 F Fundamentals of Woodwork (3)**

One and one-half hour lecture and four and one-half 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)

**WOOD 012 F Cabinetmaking/Millwork (4)**

Prerequisite: WOOD 110 F Fundamentals of Woodwork or one year woodworking experience.

Two hours lecture and six hours shop practice per week. The study of operations commonly performed in cabinet shops. Instruction in the safe use and proper care of woodworking machinery. This course will include design layout, blueprints, mill lists, construction estimating, bid preparation, and material analysis. Students will be involved in a project consisting of carcass construction techniques, face frames, drawer frame partitions, and the construction of doors and drawers. Various aspects of finish carpentry, including interior millwork, installation, hardware, and finishing techniques used in the mill cabinet trade will be studied. (Degree credit)

**WOOD 013 F Introduction to 32mm Cabinetmaking (3, 3)**

Prerequisite: WOOD 110 F Fundamentals of Woodwork with a grade of “C” or better

This is an introduction to the European style of cabinetmaking based on a system of holes drilled at 32mm 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. Course may be taken twice for credit. (Degree credit)

**WOOD 014 F Cabinetmaking/Millwork (House Project) (4)**

Prerequisite: WOOD 110 F Fundamentals of Woodwork or one year woodworking experience.

Two hours lecture and six hours shop practice per week. This course provides the students with on-site cabinetmaking 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, bathroom vanities, base moldings, and mill all interior trim. PHASE III: Surface preparation staining, finishing, hardware, and installation of cabinets, millwork, and interior finish carpentry. (Degree credit)

**WOOD 016 F Machine Woodworking/Furniture (4)**

Prerequisite: WOOD 110 F Fundamentals of Woodwork or one year woodworking experience.

Two hours lecture and six hours shop practice per week. A three-phase study of advanced 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 mill-work 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. (Degree credit)

**WOOD 017 F Table and Chair Construction (4-4)**

Prerequisite: WOOD 110 F Fundamentals of Woodworking with a grade of "C" or better

This is an intermediate course that covers the history, design, and construction of tables and 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 table or chair of the student's own design. Course may be taken twice for credit. (Degree credit)

**WOOD 018 F Advanced Machine Woodworking/Furniture (4)**

Prerequisite: WOOD 016 F Machine Woodworking/Furniture.

Two hours lecture and six hours shop practice per week. Emphasis on more advanced furniture design and joinery, employing more sophisticated and advanced hand and machine tool operation. (Degree credit)

**WOOD 021 F Tool and Jig Production (2)**

Prerequisite: WOOD 110 F Fundamentals of Woodworking or Corequisite: concurrent enrollment in any woodworking class.

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. (Degree credit)

**WOOD 025 F Cabinet Vision (2, 2)**

One and one-half hours lecture and two and one-half hours laboratory per week. This course will include the use of the popular software program for creating room layouts and designing cabinets. Students will work with 2D and 3D CAD to produce bids, estimates and presentations. Course may be taken twice for credit. (Degree credit)

**WOOD 026 F Computer Applications for Cabinetmaking (2)**

This is an introductory course to CAD software used in the cabinet-making industry. Students will learn the terminology used in traditional cabinetry and the corresponding terms that apply in using the software. Students will learn how to use the software to input the field measurements and other critical measurements to create custom cabinetry for kitchens, bathrooms, and other residential rooms. In addition, students will create cutting lists of materials, bid estimates for the project, and CAD drawings and renderings that might be presented to a customer. Students will work on individual PC computers in a networked lab setting. (Degree credit)

**WOOD 031 F Woodworking Skills LAB (0.5-8)**

Corequisite: any Fullerton College credit woodworking class.

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 twenty-four hours of laboratory participation. Open Entry, variable units.

**WOOD 032 F: Advanced Skills Lab (0.5-4)**

Corequisite: Concurrent enrollment in any Wood Technology course

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. This course may be taken a total of four times. Open Entry.

**WOOD 041 F Introduction to Woodcarving (2-2)**

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 applications. Course may be taken twice for credit. Lab Fee: \$15 (Degree credit)

**WOOD 042 F Intermediate Woodcarving (2-2)**

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. Course may be taken twice for credit. Lab Fee: \$15 (Degree credit)

**WOOD 043 F Advanced Woodcarving (2-2)**

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 twice for credit. Lab Fee: \$15 (Degree credit)

**WOOD 044 F In-the-Round Woodcarving (2-2)**

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-the-round 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 twice for credit. (Degree credit)

## *Work Experience*

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### **WKEX 091 F Work Experience/Vocational (1-4, 1-4, 1-4, 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, 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)

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**Faculty  
and  
Administration**

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# Faculty and Administration

**AGUILERA, FLOR** — Counseling/Student Development

Counseling  
B.A., M.S., California State University, Long Beach

**ALLEN, MAALA K.** — Natural Science

Biology  
B.Sc., University of St. Andrews, United Kingdom  
M.S., Yale University

**ALMODOVAR-SOLE, LAURA C.** — Counseling

B.A., University of Puerto Rico  
M.A., California State University, Dominguez Hills

**ANDRUS, ANGIE** — Social Science

Sociology  
A.A., Fullerton College  
B.A., M.A., California State University, Fullerton

**ANSARI, MOHD** — Natural Science

Chemistry  
Ph.D., Indian Institute of Technology, India

**ARCEO, ROSA** — Humanities

Foreign Language  
M.A., University of California, Los Angeles

**ARCHER-HETLAND, BERNADETTE** — Counseling

A.A., Mt. San Antonio College  
B.A., M.S., California State University, Fullerton

**ARMANI, BEHNOOSH** — Counseling

A.A., Whatcom Community College  
B.S., National University  
M.S., California State University, Los Angeles

**ARNDT, NADINE E.** — Humanities

English  
B.A., M.A., California State University, Fullerton

**ATWELL, HOWARD W.** — Technology and Engineering

Electronics  
A.A., Fullerton College  
A.S., B.S., West Coast University

**AYALA, JOHN L.** — Dean, Library and Study Abroad

B.A., California State University, Long Beach  
M.L.S., Immaculate Heart College, Los Angeles  
M.P.A., California State University, Long Beach

**BABAD, BRUCE** — Fine Arts

Music  
M.M., California State University, Long Beach

**BALMA, JODI JENKIN** — Social Science

Political Science  
B.A., M.P.A., California State University, Fullerton

**BANDA, SERGIO A.** — Social Science

Sociology  
M.A., California State University, Fullerton

**BANGERTER, RENEE** — Humanities

English  
B.A., M.A., Brigham Young University

**BARABAS, LILIANA** — Natural Science

Physics and Astronomy  
B.S., University of Bucharest, Romania  
M.S., California State University, Long Beach

**BASSI, LISA** — Physical Education

B.S., California State Polytechnic University, Pomona  
M.A., California State University, Dominguez Hills

**BEERS, SUSAN** — Dean, Physical Education

B.A., Chapman University  
M.A., California State University, Long Beach  
Ed.D., Pepperdine University

**BEILKE, INES T.** — Counseling

A.A., American Junior College  
B.A., California State University, Los Angeles  
M.S., California State University, Sacramento

**BERGER, MARGARET W.** — Cinema-Radio-TV

B.A., University of Hawaii  
M.B.A., California Institute of Technology

**BERRYHILL, ROBERT E.** — Technology and Engineering

Automotive Technology  
A.A., Pasadena City College  
B.V.E., California State University, Long Beach  
M.A.E., Pepperdine University

**BEVEC, GINA, M.** — Physical Education

A.A., Fullerton College  
B.S., California State University, Fullerton  
M.Ed., Azusa Pacific University

**BIANCHINO, ANNIE** — Natural Science

Chemistry  
B.S., Brooklyn College  
M.S., University of California, San Diego  
Ph.D., University of California, Los Angeles

**BJORKLUND, NANCY B.** — Social Science

History  
B.A., M.A., University of California, Los Angeles  
Ph.D., University of California, Irvine

**BLANCHE, GISELLE** — Social Science

Sociology  
B.S., Louisiana State University, Baton Rouge  
M.A., California State University, Fullerton

**BLANK, JESSIE** — Coordinator, International Students Center

B.A., University of California, Los Angeles

**BLACKLEY, TERRENCE J.** — Interim Dean, Fine Arts

B.M.E., Millikin University  
M.M.E., University of Michigan

- BLASCHKE, LILLIAN A.** — Natural Science  
Anatomy/Physiology/Microbiology  
B.S., Queens College  
M.A., Columbia University  
Ph.D., University of California, Irvine
- BOLL, JACQUELINE** — Learning Resources and Library  
Library Technology  
A.A., Long Beach City College  
B.A., University of California, Los Angeles  
M.S.L.S., University of Southern California
- BOUZAR, PETE** — Mathematics/Computer Science  
A.A., Long Beach City College  
B.A., M.A., California State University, Fullerton
- BOWERS, ROBERT J.** — Business and CIS  
Real Estate  
B.S., Villanova University  
M.B.A., University of Pittsburgh  
J.D., Western State University
- BRANNOCK, JO ANN C.** — Social Science  
Psychology  
A.A., Fullerton College  
B.A., M.A., California State University, Fullerton  
Ph.D., The Claremont Graduate University; Clinical License
- BRAULT, LORAIN** — Director, College Health Services  
B.S., M.S., California State University, Long Beach
- BROWN, FLORA** — Humanities  
Reading  
B.A., M.S., Ph.D., University of Southern California
- BUI, MINH** — Mathematics/Computer Science  
B. A., University of California, Los Angeles  
M. A., University of California, Irvine
- BURNS, KRISTEEN L.** — Registrar  
A.A., Fullerton College
- BURNS, MICHAEL J.** — Dean, Technology and Engineering  
A.A., Fullerton College  
B.A., M.A., California State University, Long Beach
- BUTLER, ANGELA** — Distance Learning and Media  
Production  
M.A., Wayne State University, Michigan  
Ed.D., Pepperdine University
- BYDE, ROBERT W.** — Social Science  
Psychology  
B.S., Ph.D., University of California, Irvine
- BYRNES, TIMOTHY** — Physical Education  
M.Ed., Azusa Pacific University
- CAIRELLA, MICHELE** — Fine Arts  
Art  
B.A., B.A., California State University, Fullerton  
M.F.A., California State University, Fullerton
- CAMPBELL, LISA** — Learning Disabilities Specialist  
Adaptive Services Center  
B.S., M.S., California State University, Fullerton  
M.P.A., California State University, Long Beach
- CANTRELL, CANDICE L.** — Business and CIS  
Computer Information Systems  
B.S., M.A., California State University, Los Angeles
- CARRITHERS, JOE** — Humanities  
English  
B.A., B.A., M.A., Mississippi State University  
M.A., Ph.D., University of Southern California
- CARROLL, CONNIE J.** — Physical Education  
A.A., Fullerton College  
B.A., California State University, San Diego  
M.S., California State University, Fullerton  
M.A., University of Santa Monica
- CASILLAS, LUPE L.** — Counseling  
M.S., California State University, Los Angeles
- CAUDILL, ARNOLD D.** — Humanities  
Foreign Language  
B.A., University of California, Berkeley  
M.A., University of New Mexico
- CEBRIAN, GAYLE** — Academic Services  
Cosmetology  
B.A., Union Institute and University
- CHADWICK, JANICE E.** — Natural Science  
Chemistry  
B.S., University of Utah  
M.S., Ph.D., University of California, Riverside
- CHAMBERLIN, W. SEAN** — Natural Science  
Oceanography  
Ph.D., University of Southern California
- CHIANG-SCHULTHEISS, DARREN** — Humanities  
English  
B.A., California State University, Fullerton  
M.A., University of Nebraska, Lincoln
- CHIAROMONTE, THOMAS** — Social Science  
Child Development  
B.A., California State University, Long Beach  
M.S., Iowa State University  
Ph.D., The Claremont Graduate University
- CHO, LEONARD Y.** — Mathematics/Computer Science  
B.S., University of California, Los Angeles  
M.S., University of Southern California  
M.A., California State University, Fullerton
- CIMA, ALEX** — Fine Arts  
Music  
B.A., California State University, Northridge  
M.A., California State University, Fullerton
- CLAASSAN, MAREIKE** — Mathematics/Computer Science  
Technology and Engineering — Engineering  
Ph.D., University of California, Berkeley

**CLAHANE, DANA D.** — Mathematics/Computer Science  
B.S., Biola University  
M.A., California State University, Long Beach  
Ph.D., University of California, Irvine

**CLIFFORD, SUSAN B.** — Dean, Academic Services  
B.S., University of Southern California  
M.A., California State University, Long Beach  
Ed.D., Pepperdine University

**COHN, IRENE H.** — Counseling  
B.A., M.A., University of Northern Colorado  
M.S., California State University, Fullerton

**COLLINS, KENNETH P.** — Natural Science  
Biology  
B.S., M.S., Brigham Young University  
Ph.D., North Carolina State University

**COMBS, JENNIFER** — Counseling  
B.A., University of Michigan  
M.A., Ph.D., University of California, Santa Barbara

**CONFORTI, DANIEL A.** — Social Science  
Political Science  
B.A., M.A., California State University, Fullerton  
J.D., Western State University College of Law

**COOPER, DAVID** — Business and CIS  
Business Management  
B.A., Loyola Marymount University  
J.D., University of San Diego School of Law

**CORSI, SANDRO** — Fine Arts  
Computer Graphics  
M.F.A., School of the Art Institute of Chicago

**COSTELLO, JEANNE** — Humanities  
English  
B.A., University of California, Los Angeles  
M.A., University of California, Santa Barbara

**COURCHAINE, JEFFREY H.** — Business and CIS  
Computer Information Systems  
B.S., University of California, Los Angeles  
M.S., Azusa Pacific University

**COURON, BRIAN L.** — Counseling  
A.A., Santa Ana College  
B.A., M.A., California State University, Fullerton  
Ph.D., United States International University, San Diego

**CRABBS, HEIDRUN I.** — Humanities  
Foreign Language  
B.S., Mankato State University  
M.A., California State University, Fullerton

**CRAIG, DALE** — Business and CIS  
Computer Information Systems  
B.A., M.A., California State University, Long Beach

**CREDIDIO, STEVEN** — Counseling Articulation Officer  
B.S., Fordham University  
M.A., Ph.D., University of Detroit

**CROCOLL, ALLAN B.** — Mathematics/Computer Science  
B.S., Ohio State University  
M.A., University of Montana; University of California

**CROWELL, BENJAMIN** — Natural Science  
Physics  
B.A., University of California, Berkeley  
Ph.D., Yale University

**CUSAAC, JR., JOHNNIE W.** — Business and CIS  
Computer Information Systems  
A.A., Orange Coast College  
B.S., University of La Verne  
M.B.A., Pepperdine University

**DAHI, NAJI J.** — Social Science  
Political Science  
B.A., American University of Beirut  
M.A., Ph.D., University of Southern California

**DAVIDSON, DEBORAH J.** — Fine Arts  
Art  
M.F.A., California State University, Long Beach

**DAWSON, BRADLEY** — Natural Science  
Biology/Microbiology/Health  
B.A., Luther College  
Ph.D., University of California, Irvine

**DAYTON, STEVEN A.** — Business and CIS  
Paralegal Studies  
A.A., Orange Coast College  
B.A., B.A., California State University, Fullerton  
J.D., Western State University

**DE LEON, SHARON** — Social Science  
Child Development  
B.A., Long Beach State University  
M.A., California State University, Long Beach

**DECKER, CARMEN MALDONADO** — Humanities  
English  
B.A., University of Kansas  
M.A., University of Missouri  
Ph.D., University of California, Riverside

**DO, VY TRAC** — Counseling  
M.A., California State University, Fullerton  
Ph.D., The Claremont Graduate University

**DOMINGUEZ JR., ELIAS G.** — Counseling  
B.A., University of California, Irvine  
M.S., University of La Verne

**DONLEY, ELISE** — Mathematics/Computer Science  
M.A., California State University, Fullerton  
J.D., Western State University

**DONOVAN, LEXI** — Manager, Campus Accounting  
B.S., California State Polytechnic University, Pomona

**DORADO, DAVID** — Natural Science

**DUHME, CHERYL** — Mathematics/Computer Science  
B.A., M.A., California State University, Fullerton

**EDWARDS, SCOTT W.** — Mathematics/Computer Science  
Computer Science  
B.M., M.M., M.S., California State University, Fullerton

**EGGERS, CONNIE** — Humanities  
English  
M.A., Western Washington University

**EGIGIAN, RUTH** — Humanities  
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A.A., East Los Angeles College  
B.A., Azusa Pacific University  
M.A., California State University, Fullerton

**EICHERS, R. TIMOTHY** — Business and CIS  
Computer Information Systems  
B.S., George Mason University  
M.S., Johns Hopkins University

**EISNER, DOUGLAS** — Humanities  
English  
A.B., Washington University  
M.A., University of Wisconsin, Madison  
Ph.D., University of California, Riverside

**ENGSTROM, KATHLEEN J.** — Humanities  
Reading  
B.S., Illinois State University  
M.S., California State University, Fullerton  
T.E.S.L. Certificate, University of California, Irvine

**FACER, CAROLYN** — Mathematics/Computer Science  
B.S., M.A., Central Michigan University

**FARNHAM II, PAUL T.** — Mathematics/Computer Science  
A.S., Long Beach City College  
B.S., California State University, Long Beach  
M.A., California State University, Fullerton

**FEASTER, JEFFREY** — Natural Science

**FELENDER, JULIE** — Social Science  
Psychology  
B.A., California State University, San Diego  
Ph.D., University of California, Santa Barbara

**FERNANDEZ, CRISTINA** — Director, Marketing/Outreach  
B.A., M.A., University of California, Los Angeles

**FIGHERA, CHRISTINE** — Facilities  
Maintenance and Operations  
B.S., B.M., University of Phoenix

**FITZSIMMONS, MICHELE C.** — Learning Resources/  
Library Technology  
A.A., Fullerton College  
B.A., University of California, Santa Barbara  
M.A., University of California, Irvine  
M.S.L.S., California State University, Fullerton

**FLORES, CHRISTY** — Humanities  
English  
B.A., University of California, Los Angeles  
M.A., Ph.D., University of Washington, Seattle

**FROEHMER, RENE** — Mathematics/Computer Science  
B.S., M.S., California State University, Long Beach

**FONG, PETER S.** — Dean, Admissions and Records  
B.A., University of California, Los Angeles  
M.A., California State University, Dominguez Hills

**FOSTER, SAMUEL** — Natural Sciences  
Chemistry  
B.S., Andrews University  
Ph.D., University of California, Irvine

**FOUQUETTE, DANIELLE** — Humanities  
English  
B.A., M.A., California State University, Fullerton

**FUSCARDO JR., NICHOLAS P.** — Physical Education  
A.B., West Liberty College, West Virginia  
M.Ed.Ad., California State University, Fullerton

**GAITATJIS, ELIZABETH B.** — Humanities  
English as a Second Language (ESL)  
B.A., Rutgers University, New Jersey  
M.A., Northeastern Illinois University

**GERMOND, JEANNE R.** — Humanities  
Foreign Language  
B.A., M.A., California State University, Fullerton  
J.D., Western State University of Law

**GILBERT, NOEL** — Humanities  
Speech  
B.A., LaVerne College  
M.A., University of Illinois

**GILES, SCOTT** — Physical Education  
M.S., Brigham Young University

**GLASSMAN, BILL** — Humanities  
Reading  
A.A., Santa Ana College  
B.A., M.A., California State University, San Francisco

**GLEN, TODD V.** — Fine Arts  
Computer Graphics  
B.A., Middlebury College  
M.F.A., Yale University

**GOLDSTEIN, JAY** — Technology and Engineering  
Communications  
A.A., Orange Coast College  
B.A., California State University, Fullerton

**GORDON, KENT A.** — Natural Sciences  
Horticulture  
B.S., University of California, Davis  
M.A., California State University, Sacramento

**GORDON, ROBERT S.** — Technology and Engineering  
Automotive Technology  
B.A., California State University, Fullerton  
B.A., California State University, Los Angeles

**GRABIEL, SUSAN A.** — Social Science  
Geography  
M.A., California State University, Fullerton

**GREEN, PATRICIA** — Social Science  
Child Development  
A.A., Fullerton College  
B.S., California State University, Fullerton  
M.S., Azusa Pacific University

**GREENHALGH, MARK** — Mathematics/Computer Science  
B.A., M.A., California State University, Fullerton

**GREENING, ALICE R.** — Technology and Engineering  
Drafting Technology  
A.A., Orange Coast College  
B.A., California State University, Long Beach

**GREGG, JANET** — Technology and Engineering  
Fashion Careers  
B.A., California State University, Long Beach

**GUSS, HEIDI** — Humanities  
English  
M.A., California State University, Fullerton

**HALVERSON, HEATHER** — Counseling  
B.A., California State Polytechnic University, Pomona  
M.S., California State University, Fullerton

**HANSON, BRUCE** — Social Science  
Philosophy/Religious Studies  
M.A., Ph.D., The Claremont Graduate University

**HANSTEIN, ANDREA** — Admin. Assistant, Public Information  
B.A., University of Southern California

**HARRISON, TIM** — Technology and Engineering  
Construction Technology  
B.S., University of California, Irvine  
M.A., California State University, Long Beach

**HAYNER, WILLIAM G. (BILL)** — Fine Arts  
Art  
B.F.A., University of Texas, Arlington  
M.F.A., California State University, Long Beach

**HEATH, CAROLYN** — Natural Science  
Earth Science and Biological Science  
Ph.D., University of California, Santa Cruz

**HENDERSON, ANGELA** — Humanities  
Reading  
M.A., California State University, Fullerton

**HENDERSON, BRUCE R.** — Humanities  
English  
B.A., Oberlin College, Ohio  
M.A., University of Washington  
Ph.D., State University of New York, Albany

**HITCHMAN, LEE ANN** — Business and CIS  
Computer Information Systems  
M.B.A., University of Southern California

**HODGE, Kathleen O'Connell**  
B.A., California State University, Fullerton  
M.S., California State University, Fullerton  
Ed.D., University of Southern California

**HOLDEN, MICHAEL D.** — Social Science  
Philosophy  
A.A., Grossmont College  
B.A., University of California, San Diego  
M.Div., Southwestern Baptist Theological Seminary  
Ph.D., The Claremont Graduate University

**HORTON, DIETER** — Physical Education  
B.A., California State University, Fullerton  
M.A., Azusa Pacific University

**HOWEY, DENNIS** — Technology and Engineering  
Printing Technology  
M.A., California State University, Long Beach

**HOYT-HEYDON, MELA** — Fine Arts  
Theatre Arts  
B.A., University of Redlands  
M.F.A., University of California, Irvine

**HUCK, BETTY S.** — Natural Science  
Chemistry  
B.A., University of California, Berkeley  
M.S., California State University, Long Beach

**HUERTA, NICOLAS** — Mathematics/Computer Science

**HUGHES, DEIDRE** — Humanities  
English  
B.A., Scripps College  
M.A., Northern Arizona University

**HUI, ARTHUR** — Humanities  
English as a Second Language (ESL)  
B.A., University of California, San Diego  
M.A., California State University, San Francisco

**HUMBLE, JOHN** — Technology and Engineering  
Communications  
B.A., University of Maryland  
M.F.A., San Francisco Art Institute

**IKEDA, NANCY** — Mathematics/Computer Science  
B.S., University of California, Irvine  
M.A., California State University, Fullerton

**INMAN, LOREEN DEMETRO** — Humanities  
Reading  
B.A., Long Island University  
M.A., University of Wisconsin  
M.S., California State University, Fullerton

**ISON, JOHN** — Humanities

English  
 B.A., University of California, Los Angeles  
 M.A., California State University, Los Angeles  
 Ph.D., University of California, Riverside

**JAUREQUI, ROBERT** — Counseling

M.A., M.A., California State University, Los Angeles  
 M.S., University of La Verne  
 Ed.D., Nova Southeastern University

**JENSEN, DARLENE** — Student Affairs

B.A., California State University, Fullerton  
 M.A., California State University, Long Beach

**JENSEN, ROBERT R.** — Fine Arts

Theatre 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.Mus., Syracuse University  
 M.Mus., Ithaca College  
 D.M., 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

**JOHNSON, KATE** — Fine Arts

Art  
 A.A., Fullerton College  
 B.A., M.A., California State University, Long Beach

**JONES, IRENE O.L.** — Mathematics/Computer Science

A.A., Fullerton College  
 B.A., M.A., California State University, Fullerton

**JUDY, R. MICHAEL** — Mathematics/Computer Science

B.A., Beloit College  
 M.A., Loyola University, Chicago

**KANE, LENA T.** — Technology and Engineering

Communications  
 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

**KELLY-MANDICH, LINDA.** — Counseling

B.A., Loyola Marymount University  
 M.S., California State University, Los Angeles

**KETTER, CHARLES D.** — Fine Arts

Theatre Arts  
 B.A., California State Polytechnic University, Pomona  
 M.F.A., California State University, Fullerton

**KIEFER, JAMES C.** — Physical Education

A.A., Pasadena City College  
 B.A., University of California, Berkeley  
 M.Ed., Azusa Pacific University

**KIRKHAM, RICHARD A.** — Humanities

Speech  
 B.A., M.A., University of Southern California

**KISZELY, LIZ** — Humanities

Comparative Literature  
 B.A., University of Wisconsin  
 M.A., University of California, Irvine

**KITCHELL, DARRELL E.** — Technology and Engineering

Communications  
 A.A., Long Beach City College  
 B.A., California State University, Long Beach

**KLASSEN, KELLY** — Mathematics/Computer Science

M.S., San Diego State University

**KLENTOS, GUS** — Mathematics/Computer Science

B.A., University of Tulsa  
 M.A.T., Tulane University

**KNOERNSCHILD, MARK A.** — Humanities

English  
 B.A., M.A., California State University, Long Beach

**KONG, WEI-PING** — Humanities

English as a Second Language (ESL)  
 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

**KYLE, DIANA** — Social Science

Psychology  
 B.A., M.A., California State University, San Marcos

**LAMM, CHRISTINE** — Social Science

Child Development  
 B.S., Maryville College  
 M.A., Pacific Oaks College  
 Ph.D., The Claremont Graduate University

**LANDRY, ERIN** — Physical Education

Dance  
 B.F.A., California Institute of the Arts  
 M.F.A., University of California, Irvine

**LANGRELL, JENNY L.** — Learning Resources

Library Technology  
 B.S., Southern Illinois University  
 M.L.S., California State University, San Jose

**LARSEN, CHRIS** — Mathematics/Computer Science

B.A., 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 Science

Chemistry  
 B.A., Immaculate Heart College  
 M.S., Washington State University

**LEE, CALLISTA M.** — Social Science

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., Northwestern 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

**LEWIS, M. KENNETH** — Technology and Engineering

Machine Shop  
 A.S., Citrus College  
 B.V.E., California State University, Los Angeles  
 M.S., California State University, Fullerton

**LEYSON, ELISABETH B.** — Dean, Humanities

B.A., M.A., University of Wisconsin, Madison  
 M.A., California State University, Fullerton

**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

**LLERENA, LINA** — Humanities

Foreign Language  
 B.S., M.A., California State University, Long Beach

**LOCKHARDT, HEIDI** — Director, Cadena/Transfer Center

Counseling  
 A.A., Crafton Hills College  
 B.A., M.A., California State University, San Bernadino

**LONG, GAY M.** — Humanities

Reading  
 A.B., University of Illinois  
 M.S., Northern Illinois University  
 Ph.D., University of Southern California

**LOPEZ, ADELA G.** — Social Science

Ethnic Studies  
 B.A., M.A., California State University, Long Beach

**LOPEZ, CONNIE** — Academic Services

Cosmetology  
 B.S., Southern Illinois University, Carbondale

**LOPEZ, DAVID** — Technology and Engineering**LOWE, CLAUDIA** — Social Science

Geography  
 A.A., Fullerton College  
 B.A., M.A., California State University, Fullerton

**LOZINSKY, RICHARD** — Natural Science

Earth Science  
 B.S./B.A., Humboldt State University  
 M.S., University of New Mexico  
 Ph.D., New Mexico Institute of Mining and Technology

**LUDFORD, DEBORAH** — Dean, Business and CIS

B.S., M.S., University of Southern California

**LUNDERGAN, ROBERT** — Humanities

English  
 B.A., M.A., California State University, Chico  
 Ph.D., University of Wisconsin, Milwaukee

**MAGEE, D. B.** — Humanities

English  
 B.B.A., University of Louisiana, Monroe  
 M.A., University of Alabama  
 Ph.D., Texas Christian University

**MAJORS, GENE W.** — Mathematics/Computer Science

A.A., Long Beach City College  
 B.A., M.A., California State University, Long Beach

**MALLOY, SCOTT** — Math and Computer Science

Mathematics  
 B.A., University of California, Los Angeles  
 M.S., California State University, Northridge

**MARKLEY, KAREN** — Social Science

Anthropology  
 B.A., M.A., California State University, Fullerton

**MARTINEZ, MARCIANO** — Fine Arts

Art  
 B.A., California College of Arts and Crafts  
 M.F.A., The Claremont Graduate School

**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
- MAZZOTTA, CASEY** — Physical Education  
B.S., Brigham Young University  
M.Ed., Azusa Pacific University
- McALLISTER, G. ALAN** — Business and CIS  
Accounting and Information Management  
B.S., M.B.A., California State University, San Bernardino
- McCLOUD, EDWARD** — Business and CIS  
Accounting  
B.A., M.S., California State University, Fullerton
- McCORMAC, DAVID B.** — Technology and Engineering  
Printing Technology  
A.A., Los Angeles Trade-Technical  
B.A., California State University, Los Angeles
- McGOWAN, JOUMANA** — Business and CIS  
Management  
A.A., Mount San Antonio College  
B.A., M.B.A., California State Polytechnic University, Pomona  
Ph.D., University of Southern California
- McGREW, PATRICK A.** — Technology and Engineering  
Construction Technology  
A.A., A.A., San Diego Mesa College  
A.S., Fullerton College  
B.S., University of Phoenix
- McKENZIE, SCOTT V.** — Technology and Engineering  
Machine Tools  
A.A., Fullerton College  
B.A., M.A., California State University, Long Beach
- McKINLEY, PAUL** — Student Services  
Adaptive Services Center  
M.S., California State University, Fullerton
- McMILLAN, RICHARD** — Fine Arts  
Art and Graphic Design  
B.A., University of Central England, Birmingham, U.K.
- McQUEEN, DEBORAH** — Mathematics/Computer Science  
A.A., Fullerton College  
B.A., M.A., California State University, Fullerton
- McROBERTS, KERIN D.** — Social Science  
Sociology  
A.A., A.A., Fullerton College  
B.A., B.A., M.A., University of California, Irvine
- 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  
A.A., Orange Coast College  
B.S., California State University, Fullerton  
M.S., University of Southern California
- MELELLA, LAURA** — Business and CIS  
Computer Information Systems  
B.S., California State University, Fresno  
M.A., Pepperdine University
- MILLER, BRUCE** — Fine Arts  
Music  
B.M., University of Hartford  
M.M., University of Cincinnati  
Ph.D., University of California, Los Angeles
- MILLER, ROBERT R.** — Fine Arts  
Art  
B.A., M.A., California State University, Long Beach
- 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** — Director, Financial Aid/Veteran Svcs.  
A.A., Cerritos College  
B.A., M.P.A., California State University, Dominguez Hills
- MOLINA, ROSA** — Academic Services  
Cosmetology  
A.A., Riverside Community College  
B.S., California State University, San Bernardino
- MONTANO, DIANE O.** — Manager, Child Development  
A.A., Fullerton College
- MOORE, MICHAEL** — Technology and Engineering  
Communications  
A.A., Fullerton College  
B.A., Antioch University  
M.Ed., University of La Verne
- MOORE, SALLY** — Business and CIS  
Computer Information Systems  
B.A., California State University, Chico  
A.B.A., University of San Diego
- 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 Science  
Economics  
A.S., Cypress College  
B.A., M.A., M.B.A., California State University, Fullerton
- MURPHY, EUGENE VINCENT** — Physical Education  
B.S., M.S., M.Ed., University of North Dakota

**NACK, SUSAN** — Mathematics/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

**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., Ohio University

**NELSON-WRIGHT, KELLY** — Social Science  
Sociology  
B.A., M.A., California State University, Fullerton

**NETTLESHIP, LOIS** — Social Sciences  
History  
B.A., Sarah Lawrence College  
M.A., Columbia University  
Ph.D., University of Sussex

**NGUYEN, KARYN** — Counseling  
B.A., M.A., University of San Diego

**NICCOLAI, NILO** — Director, Academic Computing Technology  
B.S., Carnegie Institute of Technology  
M.S., Ph.D., Carnegie Mellon University

**NOLAN-RIEGLE, MARY C.** — Natural Science  
Biology  
B.A., Montclair State University  
M.A., Ph.D., Rutgers University

**O'CONNOR, ADAM M.** — Director, Budget and Finance  
A.A., Orange Coast College  
B.S., 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

**ORR, JOHN C.** — Director, Academic Support  
B.A., Amherst College, Massachusetts  
M.A., The Claremont Graduate University

**PADILLA, GERALD M.** — Social Science  
Ethnic Studies/History  
B.A., California State University, Fullerton  
M.A., University of California, Los Angeles

**PARKER, JOHN E.** — Fine Arts  
Art  
A.A., Fullerton College  
B.A., M.F.A., University of California, Santa Barbara

**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, MARIE L.** — Technology and Engineering  
Radio-Television  
B.A., University of North Carolina, Chapel Hill  
M.A., California State Polytechnic University, Pomona

**PEREZ, RICARDO E.** — Dean, Counseling/Student Dev.  
B.A., University of California, Los Angeles  
M.A., California State University, Dominguez Hills  
Ed.D., University of California, Los Angeles

**PETERSON, QUEEN** — Counseling  
M.A., Chapman University

**PHELAN, ROBERT S.** — Humanities  
Speech  
B.A., University of California  
M.A., San Francisco State University

**PIMENTEL, SYLVIA** — Student Services  
EOPS  
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/Computer Science  
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
- PORTOLAN, JANET S.** — Vice President, Educational Support and Planning  
B.A., M.A., San Francisco State University  
Ed.D., University of California, Los Angeles
- POWERS, MIGUEL** — Humanities  
English  
B.A., University of San Diego  
M.A., Ph.D. (ABD), Indiana University
- PRICE, RHETT J.** — Physical Education  
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
- PURKISS, CHRISTINA** — Humanities  
English as a Second Language (ESL)  
B.A., M.S., California State University, Fullerton
- QUIRK, SHAWN C.** — Humanities  
English  
B.A., University of Wisconsin  
M.A., University of Connecticut
- RAMIREZ, RICHARD M.** — Dean, Student Services  
A.A., Fullerton College  
B.A., M.A., California State University, Fullerton  
Ed.D., Nova University; Center for Leadership Education
- RAMSEY, PEGGY M.** — Natural Science  
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 Science  
History; Political Science  
B.A., M.A., University of California, Los Angeles
- REYES, JR., JOE S.** — 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
- RILEY, DAVID G.** — Mathematics/Computer Science  
A.A., Rancho Santiago College  
B.A., M.S., California State University, Fullerton  
M.S., National University
- RITTER, WALLACE** — Business and CIS  
Business Management
- ROBINSON, KAREN** — Natural Science  
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
- ROOT, NEVA L.** — Social Sciences  
Child Development  
B.A., LaVerne College  
M.S., University of Southern California  
Ph.D., The Claremont Graduate University
- 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
- ROUNDY, VIRGINIA C.** — Natural Science  
Physics and Astronomy  
A.B., California State University, San Diego  
M.A., Ph.D., University of California, Irvine
- RUIZ, ROSALINDA M.** — Humanities  
English  
B.A., M.A., California State University, Fullerton
- RUNDUS, KATHARIN** — Fine Arts  
Music  
B.M., Coe College  
M.M., Westminster Choir College  
D.M.A., Claremont Graduate University
- SALAS, RICARDO** — Social Science  
Political Science  
M.A., University of California, Santa Barbara
- SAMPSON, KEVIN** — Technology and Engineering  
Administration of Justice  
A.A., Fullerton College  
B.A., California State University, Long Beach  
M.S., M.Ed., University of La Verne

**SANABRIA, ROLANDO** — Counseling

B.S., California State University, Fullerton  
M.S., California State University, Long Beach

**SANCHEZ, VIRGINIA** — Student Support Services (EOPS)

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, ERIN** — Fine Arts

Art  
M.F.A., California State University, Fullerton

**SEATON, DERRY D.** — Social Science

Philosophy and Religious Studies  
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# **Index**

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# Index

## A

3D Animation . . . . .	113
Absences . . . . .	27
Academic Honors . . . . .	27
Academic Renewal Policy . . . . .	36
Academic Support Center . . . . .	47
ACCOUNTING . . . . .	100
Accreditation . . . . .	11
Adaptive Services Center . . . . .	47
Adding or Dropping a Class . . . . .	27
Administration . . . . .	6,7
Administrative Office Assistant . . . . .	225
ADMINISTRATION OF JUSTICE . . . . .	103
Admission Requirements . . . . .	17
Admission to the College . . . . .	17
Advanced Placement . . . . .	20
Advertising and Graphic Design . . . . .	111, 114
ANATOMY AND PHYSIOLOGY . . . . .	109
ANTHROPOLOGY . . . . .	109
Aquatic Specialist . . . . .	234
ARCHITECTURE . . . . .	110
ART . . . . .	111
Art Design . . . . .	114
Art History . . . . .	113
Associate in Science Degree, Program of Study . . . . .	92
Associate of Arts Degree, Programs of Study . . . . .	91
Associated Students . . . . .	53
Associate Teacher . . . . .	134
Astronomy (see Earth Sciences) . . . . .	166
Athletes, Aid to . . . . .	59
Athletic Coach . . . . .	234
Athletic Events, Admission to . . . . .	59
Athletics . . . . .	58
Athletics, Intercollegiate . . . . .	59
ATM . . . . .	24
Attendance . . . . .	27
Audit Policy . . . . .	28
AutoCAD . . . . .	164
Automatic Transmission . . . . .	119
Automotive Chassis . . . . .	118
AUTOMOTIVE TECHNOLOGY . . . . .	118

## B

Benefits for A.S. Members . . . . .	53
BIOLOGY . . . . .	122
Board of Trustees . . . . .	6
Bookstore . . . . .	47
Bursar's Office . . . . .	24
BUSINESS . . . . .	125
Business Administration . . . . .	125
Business and Technology . . . . .	125
Business, International . . . . .	130
Business Management . . . . .	129

## C

Cabinetmaking and Millwork . . . . .	273
Cadena/Transfer Center . . . . .	48
Calendar, College . . . . .	4,5
CalWORKs . . . . .	49
Campus Security Act . . . . .	39
CAN (California Articulation Number) . . . . .	98
CARE Services . . . . .	59
Career and Life Planning Center . . . . .	48, 49
CARPENTRY . . . . .	132
Catalog Rights . . . . .	63
Center for Careers in Education (Apple Courses) . . . . .	59
Ceramics . . . . .	115
CHEMISTRY . . . . .	132
CHILD DEVELOPMENT . . . . .	134
CHILD DEVELOPMENT AND FAMILY LIFE . . . . .	134
Child Development Lab School . . . . .	48
CHINESE . . . . .	139
CINEMA-RADIO-TELEVISION (formerly Radio-TV) . . . . .	140
CIVIL ENGINEERING TECHNOLOGY . . . . .	144
Class Load . . . . .	28
Clothing and Textiles . . . . .	267
CNC Operator . . . . .	210
Commercial Design . . . . .	204
COMMUNICATIONS . . . . .	144
Communications, Managerial . . . . .	128
Complaint Procedure, Student . . . . .	43
Computer Animation/Multi-Media . . . . .	145
Computer Graphics . . . . .	145
Computer Graphics, Basic . . . . .	112
COMPUTER INFORMATION SYSTEMS (CIS) . . . . .	148
Computer Numerical Control (CNC) . . . . .	210
COMPUTER SCIENCE . . . . .	157
Conduct and Discipline Policy, Standards of Student . . . . .	44
Conduct, Student . . . . .	35
CONSTRUCTION . . . . .	158
Continuing Education . . . . .	53
COSMETOLOGY . . . . .	161
COUNSELING AND GUIDANCE . . . . .	163
COUNSELING AND STUDENT DEVELOPMENT . . . . .	48
Counseling Center . . . . .	48
Counseling Services . . . . .	60
Course Descriptions . . . . .	97
Course List, Approved . . . . .	80
Course Numbering System (Defined) . . . . .	97
Course Prefixes . . . . .	99
Course Progression . . . . .	29
Course Repetition . . . . .	29
Credit by Examination . . . . .	29
Credit for Foreign Colleges and Universities . . . . .	20
Credit for Military Experience . . . . .	20
Credit for Non-Collegiate Sponsored Instruction . . . . .	20
Credit Values . . . . .	98
Credit/No Credit Policy . . . . .	31
Crime Analysis . . . . .	104
Crime Scene Investigation . . . . .	104
Crime Statistics, Campus Safety Security Policies . . . . .	40
Customer Service . . . . .	252

**D**

DANCE . . . . .	164, 242
Database Applications . . . . .	150
Delta Kappa Gamma Scholarship . . . . .	15
Desktop Publishing . . . . .	112
Digital Electronics. . . . .	170
Digital Printing . . . . .	252
Dining, Campus . . . . .	13
Disabilities, Academic Accommodations . . . . .	21
Distance Learning – Online, Hybrid, TeleWeb. . . . .	60
Divisions and Departments. . . . .	8
Drafting Technology: Industrial . . . . .	164
Drawing . . . . .	116
Dressmaking-Alterations . . . . .	185
Drug-Free and Alcohol-Free District Policy . . . . .	42

**E**

E-Business Development . . . . .	126
E-Commerce Programming . . . . .	150
Early Childhood Education. . . . .	135
EARTH SCIENCES . . . . .	166
ECONOMICS . . . . .	169
Educational Objective – Transfer . . . . .	84
Electronic Imaging . . . . .	252
ELECTRONICS AND COMPUTER TECHNOLOGY . . . . .	169
Emission Control . . . . .	120
Engine Performance . . . . .	120
ENGINEERING . . . . .	173
ENGLISH . . . . .	174
ENGLISH-AS-A-SECOND-LANGUAGE (ESL) . . . . .	178
Enterprise Database . . . . .	150
Entrepreneurship . . . . .	126
ENVIRONMENTAL SCIENCES AND TECHNOLOGY . . . . .	180
EOPS (Extended Opportunities Program/Services). . . . .	60
Escort Service . . . . .	49
Esthetician. . . . .	161
Ethics, Statement of . . . . .	12
ETHNIC STUDIES . . . . .	183
Evening and Weekend College . . . . .	61

**F**

Fabrication . . . . .	120
Family Child Care . . . . .	136
FAMILY STUDIES . . . . .	184
FASHION CAREERS . . . . .	185
Fees, Student . . . . .	23
Financial Aid . . . . .	49
Financial Aid Information . . . . .	60
Fitness. . . . .	235
Flexography. . . . .	253
FOODS . . . . .	191
FOREIGN LANGUAGE . . . . .	191
Foundation Inc., Fullerton College . . . . .	13
FRENCH . . . . .	191
Fullerton Kiwanis Scholarship Foundation. . . . .	15
Furniture Making . . . . .	274

**G**

Gallery and Business Practices . . . . .	114
General Education Breadth Requirements . . . . .	75
General Education Certification. . . . .	75
General Education – Paralegal Studies . . . . .	68
GEOGRAPHY . . . . .	192
GEOLOGY . . . . .	194
GERMAN . . . . .	194
Goals and Objectives, College . . . . .	11
Grade Appeal Request Procedure . . . . .	43
Grades, Assignment of . . . . .	31
Grades, Non-Evaluative . . . . .	31
Grading System . . . . .	30
Graduation Requirements. . . . .	63
Graphic Communications . . . . .	253
Grants, Institutional . . . . .	15
Greenhouse and Nursery Production . . . . .	198

**H**

HEALTH EDUCATION . . . . .	195
Health Services . . . . .	51
HISTORY . . . . .	195
History of College . . . . .	11
HOMEMAKING . . . . .	198
Honesty, Academic. . . . .	35
Honors Program . . . . .	61
HORTICULTURE . . . . .	198
Housing . . . . .	51

**I**

Image Consultant. . . . .	187
Independent Studies and Creative Arts. . . . .	118
Infant/Toddler Caregiver . . . . .	136
INDUSTRIAL ARTS . . . . .	204
Industrial Technology. . . . .	204
INTERIOR DESIGN . . . . .	204, 205
Interior Merchandising . . . . .	205
International Business . . . . .	127
International Students . . . . .	17
Internet . . . . .	150
Intersegmental General Education Transfer Curriculum (IGETC) . . . . .	76
ITALIAN . . . . .	207

**J**

JAPANESE . . . . .	208
Jewelry/Crafts . . . . .	116
JOURNALISM . . . . .	208

**L**

Landscape Design . . . . .	198
Landscape Horticulture, Irrigation. . . . .	199
LATIN-AMERICAN STUDIES . . . . .	209
Learning Communities Program . . . . .	61
Legal Clinic, Associated Students . . . . .	55
Legal Office Administration . . . . .	226
LIBERAL STUDIES. . . . .	209

Library Services . . . . .	12	PHOTOGRAPHY . . . . .	233
LIBRARY TECHNOLOGY . . . . .	209	PHYSICAL EDUCATION . . . . .	234
Light Repair . . . . .	120	PHYSICAL SCIENCES . . . . .	248
Location of College . . . . .	11	PHYSICS . . . . .	248
Lost and Found . . . . .	15	Piano Teaching . . . . .	217
<b>M</b>		POLITICAL SCIENCE . . . . .	250
MACHINE TECHNOLOGY . . . . .	210	PORTUGUESE . . . . .	251
Maintenance, Automotive . . . . .	119	PRE-NURSING . . . . .	251
Manual Drive Train . . . . .	120	Prerequisites, Course . . . . .	98
MANUFACTURING TECHNOLOGY . . . . .	212	Print Making . . . . .	117
MARKETING MANAGEMENT . . . . .	212	PRINTING TECHNOLOGY . . . . .	252
Mastercam . . . . .	211	Probation and Dismissal Policy . . . . .	35
MATHEMATICS . . . . .	213	Programming . . . . .	151
Mathematics Proficiency Testing . . . . .	65	Project Management . . . . .	129
Matriculation . . . . .	21	PSYCHOLOGY . . . . .	256
MEDICAL TECHNOLOGY . . . . .	215	PUBLIC RELATIONS . . . . .	258
Men and Women of Distinction . . . . .	54	Publications, Student . . . . .	56
MESA . . . . .	62	Puente Project . . . . .	62
METALLURGY . . . . .	215	<b>Q</b>	
MICROBIOLOGY . . . . .	216	Quick Print/In-Plant Graphics . . . . .	253
Microcomputer Technology . . . . .	170	<b>R</b>	
MUSIC . . . . .	216	Radio Broadcasting . . . . .	140
Music, Applied . . . . .	220	Radio and Television/Video Production . . . . .	140
Music Major . . . . .	217	READING . . . . .	258
Music Theater . . . . .	267	Re-Admission . . . . .	36
<b>N</b>		REAL ESTATE . . . . .	259
Networking . . . . .	150	Recording/Production . . . . .	217
Non-Degree Credit Courses . . . . .	31	RECREATION . . . . .	246
Non-Discrimination and Sexual Harassment Statement . . . . .	41	Refunds . . . . .	24
Nursery Management . . . . .	200	Registration . . . . .	23
NUTRITION AND FOODS . . . . .	225	RELIGIOUS STUDIES . . . . .	261
<b>O</b>		Remedial Limitation . . . . .	32
Office Skills . . . . .	229	Repeatable Activity Courses . . . . .	98
OFFICE TECHNOLOGY . . . . .	225	Residential Design . . . . .	205
Offset Duplicator Training . . . . .	253	Review and Release of Information . . . . .	32
Offset Presswork . . . . .	252	ROTC . . . . .	62
Open Enrollment Policy . . . . .	19	Rules, Campus . . . . .	39
Orientation for New Students . . . . .	27	<b>S</b>	
Ornamental Horticulture . . . . .	200	Safety for the Fullerton College Community . . . . .	40
Outdoor Recreation and Safety . . . . .	235	Scholarships, California State . . . . .	15
Outreach Services . . . . .	60	School Honor Societies . . . . .	62
<b>P</b>		Screen Printing . . . . .	254
PC Application . . . . .	151	Sculpture . . . . .	115
PARALEGAL STUDIES . . . . .	229	Semester Abroad Program – International Education . . . . .	61
Parking . . . . .	13	Service Advisor, Automotive . . . . .	119
Painting . . . . .	117	Smoking Areas . . . . .	13
Pep Squad . . . . .	59	SOCIAL SCIENCE . . . . .	261
Performing Groups/Small Ensembles . . . . .	223, 224	SOCIOLOGY . . . . .	262
Personal Trainer . . . . .	236	SPANISH . . . . .	263
Pest Management . . . . .	200	Special Admit Students (formerly Bridge Program) . . . . .	17
Petitions and Appeals . . . . .	37	SPEECH . . . . .	265
PHILOSOPHY AND RELIGIOUS STUDIES . . . . .	232	Sports Broadcasting . . . . .	140
Photo Identification Card, Campus . . . . .	54	Spreadsheet Applications . . . . .	151
		Statement of College Vision, Mission and Core Values . . . . .	12
		Statement of Philosophy of General Education . . . . .	64







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